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# DGAPbericht

Forschungsinstitut der Deutschen Gesellschaft für Auswärtige Politik

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David Bosold, Kathrin Brockmann (eds.)

## Anticipating the Future

### Scenarios and Strategic Options for a New Global Order

2nd Alumni Reunion and Conference

21–23 November 2008, Berlin, Germany

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The DGAP contributes to the assessment of international developments and the discussion of these issues by providing scholarly studies and publications. The opinions expressed in these publications are those of the authors.

#### Introduction

#### Anticipating the Future

How can global climate change be mitigated and what roles do international negotiations, businesses, cities and consumers play? In what ways could the EU and its member states constructively engage with China, India and Russia? Will organizations such as the UN, NATO and the EU succeed in adapting their strategies to the changing nature of crises? How can global energy security be achieved? Will the G8 soon be a G20? Or, summing it up differently: what will our globe look like in 2020?

Answering these questions is both a risky and simultaneously fruitful endeavor. It is commonsensical to note that the pressing problems of the coming decades can no longer be solved by individual states alone. To successfully tackle them, we have to understand regional and global realities in order to find effective ways of burden-sharing and pooling capacities and strengths. Against this background, the DGAP's 2nd Alumni Conference "Anticipating the Future" saw the gathering of some 80 Alumni from the Forum's international network of young leaders in Berlin in November 2008. During the conference, participants discussed future scenarios and strategic options in the fields of European security, energy, climate change and global trade. The conference promoted mutual understanding of shared problems and was therefore an important step in the right direction of finding joint solutions.

Six of the eight presentations that were given in one of the four panels can be found in an updated version in the following pages. Claudia Major's article starts off the set of chapters with her contribution which was presented in the panel on the future European security architecture. She assesses the crisis management capacities of the EU, NATO and the UN with regard to the comprehensive approach and comes to the conclusion that the current situation is characterized by two competing ends, namely effectiveness and legitimacy.

Based on the lectures in the panel on energy security, the second part of the conference proceedings features the findings of Stephan Renner and Dmitry Udalov. Renner discusses the prospects of the European Union's policies to increase energy savings and energy efficiency. In doing so, he provides crucial insights into a policy field that is largely characterized by discussions of diversification of energy flows and an increase in renewable energies. The 20-20-20 target of the EU, according to Renner, is a case in point because the former seeks to address the

area of energy security from different angles. More specifically, the EU's approach seeks a 20% reduction in greenhouse gas emissions, a 20% share of renewables in energy consumption and a 20% saving in future energy demand by 2020. That energy security on a European but also global level will still significantly depend on the supply of fossil fuels is then highlighted by Udalov. As of today, Russian natural gas accounts for more than 40 per cent of European gas imports. These figures are expected to increase in the coming years in the light of decreased gas production in the EU. Contrary to most Western media reports this will, however, not inevitably make Europe more vulnerable, says Udalov. According to his assessment not only does Russia need European technology and investment in upstream technologies in order to increase production, it will also be able to increase gas exports to the EU, if it curbs consumption at home. Given that energy efficiency in Russia is still more than twice as low as in the EU there is a considerable potential to benefit from investment in energy-saving measures.

Closely linked to energy security in Europe as well as on a global level is the complex of climate change. As Meade Harris demonstrates in her analysis, the European Union and its member states have the unique chance of combining climate change efforts with a quantum leap in green technologies, thereby creating a truly low carbon economy. Drawing on the example of the United Kingdom, she points out that neither a significant increase in renewable energy nor the investment in technologies such as Carbon Capture and Storage (CCS) will alone suffice to achieve the EU's climate change goals. According to her, only a combination of CCS, renewable energies and atomic energy will be able to successfully realize a viable climate protection policy.

The two remaining contributions by Esra Pakin and Robert Mudida address the issue of the future economic order by looking at the prospects of the Gulf states and Sub-Saharan Africa, respectively. Critically revisiting the media hype of the United Arab Emirates and its neighbors, Pakin points to the fragility of today's economic success in the Gulf states. She not only highlights the fact that the economic success of these states is largely based on energy exports but also addresses related problems. Following her findings, the pace of economic diversification is still too low, the local currencies too fragile and dependent on the US-Dollar and the productivity too reliant on the import of skilled workers. To sustain current growth levels it will therefore be crucial for the affected states to invest into the education of their citizens rather than relying on foreign labor.

In his study of Sub-Saharan Africa, Robert Mudida points to the dire economic situation in most African countries where large parts of the population still live in

abject poverty. Besides forced macro-economic reforms based on the Washington Consensus, Mudida lists the absence of institutional reform as one of the key reasons for the poor economic record of African countries over the last two decades. Against the background of the low level of integration into the global marketplace, the author suggests to increase efforts to initiate a 'regionalism from below' which would allow for increased economic integration in Sub-Saharan Africa.

Besides the presentations in the panels, the Alumni Conference celebrated the 3rd anniversary of DGAP's "International Forum on Strategic Thinking". With the Robert Bosch Stiftung as its main patron, the Forum is currently DGAP's main instrument for promoting young professionals and scholars in the area of foreign and security policy. During the last three years the Forum has succeeded in increasingly focusing on "soft security risks" in its work, i. e. by addressing issues such as global climate change, demography, migration and epidemics. Furthermore, the program's activities have been successfully expanded to include participants from strategically important regions such as the Middle East, Asia and Africa. The Forum's main goal is bringing together future decision-makers from different regions and cultural backgrounds to exchange perspectives, promote innovative ways of thinking and to jointly develop common solutions to global challenges.

The present conference proceedings summarize the main findings and results of DGAP's 2nd Alumni Conference "Anticipating the Future." We hope that they will provide the reader with some fresh ideas and insights which are based on the results of three days of intense debate and networking as well as meeting old and new friends.

David Bosold and Kathrin Brockmann

# Panel I: Scenarios and Strategic Options for a European Security Architecture

**Rapporteur:** Björn Seibert, Massachusetts Institute of Technology (MIT) / Royal United Services Institute for Defence and Security Studies (RUSI)

**Chair:** Henning Riecke, Head, Program European Foreign and Security Policy, DGAP

Claudia Major (Germany), Center for Security Studies, ETH Zurich Comprehensive Approaches of the EU, NATO and the UN—Remedy to Address the New Challenges in International Crisis Management?

Saponti Baroowa (India), International SOS & Control Risks
Effective Partnerships: EU, Regional Leaders and Regional Organizations

Christian Mölling (Germany), Center for Security Studies, ETH Zurich Discussant

Oleg Kozlovsky (Russia), Oborona Youth Movement Discussant

#### Summary

Björn Seibert

The period since the end of the Cold War has seen both change and continuity in the European Security Architecture. The architecture remains unchanged in that Europe still lacks a hegemonic power. European security thus continues to be strongly dominated by regional organizations. What did however change since the end of the Cold War is that Europeans increasingly started organizing themselves around a solely European organization – the European Union (EU) – as opposed to a transatlantic alliance in the institutional form of NATO. The EU, while already dominating most other political spheres – from economics to justice affairs – has increasingly developed an interest in including military security in its task. This is posing a growing challenge to NATO, which dominated the European security architecture during the Cold War, largely unopposed. Unsurprisingly, this has caused increasing competition and rivalry between the two organizations, as both organizations are now assigned to undertake similar military tasks.

While the tasking of both organizations has caused both friction and inefficiencies, it also allowed for comparing both organizations' approaches to similar military tasks. This was the starting point of the first paper presented in the panel. Looking at crisis management operations, Claudia Major's paper sought to compare the different approaches the European Union, NATO and the United Nations (UN) take to crisis management operations. Outlining that the changing characteristics of crises require new answers, the paper highlighted that crisis management operations have changed in three dimensions. First, the spectrum of tasks has broadened compared to traditional peacekeeping. Second, the periods of engagement have been extended and finally the number of actors involved has significantly increased. As a result, crisis management operations have become more complex, a problem that all three organizations have to deal with. Given this complexity, there is no single model used to achieve a comprehensive approach to crisis management operations. In addition, all three organizations face different challenges inherent to their organizational setting. The European Union, which has at its disposal a broad range of civilian and military instruments, faces challenges pertaining to the coherence between the instruments of the different pillars (e.g. first pillar vs. second pillar) and between civilian and military instruments. Thus, the author finds, the EU is unable to make full use of its potential for crisis management operations. For NATO, the challenges are different according to the author. As a military organization, NATO does not have civilian means at its disposal. It thus needs to rely on external cooperation with civilian actors, including international organizations, making it more difficult for NATO to develop the necessary concepts. The United Nations has sought to adapt to the new challenges since the late 1980s. Its operations have thus increasingly become multidimensional. Yet the size of the organization, as well as parallel structure and institutional rivalry has made the implementation of the comprehensive approach in crisis management operations difficult. The author concludes by arguing that the three institutions' performance in a comprehensive approach in crisis management operations has thus far been mixed. However, given that there is no alternative to the comprehensive approach in crisis management, so the author argues, failure to manage complex crises risks undermining the legitimacy of the individual organizations.

The second paper presented by Saponti Baroowa sought to take a look at the potential for a strategic partnership between the European Union and three major international actors – India, China and Russia. The author points out that while the EU has been successful in establishing summit-level dialogues, it has achieved very little tangible results beyond joint statements. This is partly caused by the perception that the EU is an economic power rather than a security actor. Yet the

author sees increasing potential for upgrading the existing relationships, especially the relationship of the European Union with India. Importantly, such a relationship could also increasingly focus on security matters. The EU's relationship with China will continue to become more important, believes the author, but it remains to be seen whether it will focus more on non-trade related subjects including security affairs. Finally, the EU's relationship with Russia will remain difficult, especially after the recent war in Georgia, but the author does not anticipate major upsets in the relations given mutual interests. The author concludes by arguing that despite the difference in strategic interests, priorities and threat assessments, it remains important for the EU to co-opt all regional powers to work together towards a more rule-based international order.

While the papers and the subsequent discussion focused on a wide range of important matters related to the European security structure, neither fully addressed the increasingly difficult and evolving relationship between the EU and NATO. Yet, the panel provided an important overview over certain aspects of the European security structure.

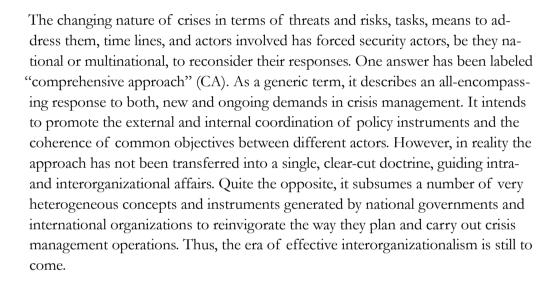


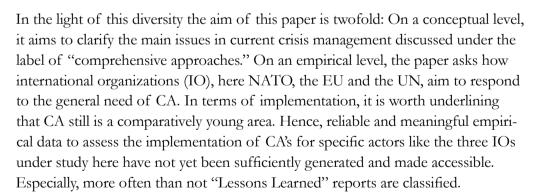
Participants of the first panel in DGAP's Hans Dohnanyi Room

## Comprehensive Approaches of the EU, NATO and the UN— Remedy to Address the New Challenges in International Crisis Management?

Claudia Major

Introduction<sup>1</sup>







#### I.1. The Changing Character of Crises

The changing character of crises has forced security actors to refine their way to address them. As a result, international crisis management has changed in three dimensions over the past years. First, the spectrum of tasks has expanded. If tradi-



Claudia Major

<sup>1</sup> This article is deduced from a larger study: Christian Mölling/Claudia Major, Research Note: International Organisations in Crisis Management—Comprehensive approaches towards coordination and coherence? Textbook Contribution to the Workshop "Inter-ministerial Cooperation," 1–3 July 2008, Federal College for Security Studies, Berlin.

tional peacekeeping focused on containment and reduction of military escalation, contemporary crisis management aims at a social, political, and economic transformation to reach a comprehensive conflict resolution.<sup>2</sup> Consequently, the range of tasks today comprises humanitarian aid, physical protection of individuals, and ensuring the rule of law and functioning of political institutions to the establishment of stable and self-sustainable social and economic structures.

Secondly, this increasing set of tasks coincides with expanding timelines of crisis management. In conceptual and practical terms crisis management spans today from the initial phase of conflict prevention, the actual crisis management encompassing humanitarian intervention, peace building and peacekeeping to post-conflict management. Depending on the phase, the challenges involved in dealing with the conflict vary. The management is further complicated by the need to manage the junction between the different phases, which moreover often overlap.

Third, not only the tasks, but also the number of actors involved has increased significantly.<sup>3</sup> This is partly due to the broadened spectrum of tasks involved. In various phases of crisis management, specific instruments and expertise are required that no single actor is able to supply on its own.<sup>4</sup> Additionally, by involving various state and non-state actors, the political legitimacy of an international engagement increases. Finally, actors from the crisis region itself become increasingly involved. Their ownership or influence related to the resolution of a conflict is key to ensure its sustainability. In addition to the local government and administration, this applies to political, religious, ethnic, and other social groups, as well as the private sector, the media, militias, organized crime, and relevant forces from neighboring regions.

Due to this expansion of tasks, timelines and actors, as well as the enhanced interaction of actors and tasks, the complexity of crisis management has increased tremendously. Thus, crisis management has become foremost complexity management. The internal and external coordination of all available instruments and actors, their timely and appropriate deployment in the various conflict phases, and the specification of common mission objectives have become of paramount importance to allow for a successful crisis response. Put differently, what is needed is a common, multidimensional strategy that coordinates the wide range of international responses to crises.

<sup>2</sup> In Larger Freedom, Report of the UNSG, 2005, but also European Council: The European Security Strategy, Brussels, 2003

<sup>3</sup> Cedric H. de Coning, Coherence and Coordination in United Nations Peacebuilding and Integrated Missions (Security in Practice no. 5, NUPI report), Oslo 2007, p. 5.

<sup>4</sup> See European Council, European Security Strategy, Brussels 2003.

As a conceptual answer to this daunting challenge, the so called "Comprehensive Approach" has been promoted by both national and international actors. They increasingly favor the approach as a blueprint to reinvigorate the way crisis response should be planned and carried out. It is expected to enhance both the efficiency and the legitimacy of crisis management by harmonizing the interaction and interdependence of tasks and actors involved.

#### I.2. Diverging Concepts

However, both at the conceptual level and in the implementation, the Comprehensive Approach poses challenges that tend to be underestimated. First of all, there is no single and coherent model. Instead, a multitude of different and partly contradictory concepts for a Comprehensive Approach have emerged in recent years. While most actors today acknowledge the necessity for better coordination and collective efforts, their approaches diverge significantly regarding priorities, means and suggested end-states of crisis management. Therefore it may be appropriate to speak in plural about Comprehensive Approaches. Moreover, strategies and models can signify de facto a comprehensive approach without explicitly using the term. This points towards terminological variations that risk causing confusion and create difficulties when attempting to link or compare particular approaches.

# I.3. The Comprehensive Approach and the Problems Ahead This fragmentation along several lines also points to the prospects of common



The panel on a future European Security Architecture

terms. Instead, diverging objectives and interests give rise to conflicting interaction between actors and tasks.<sup>5</sup> This can be categorized along the lines of interaction:

Horizontal interaction describes the interaction of different tasks or actors at the same level of hierarchy, be it in the field or at the strategic level. The most prominent example is the strained relationship between the civilian and military approaches of crises response. Civilian-military cooperation is further complicated by the different objectives and organizational cultures of the actors involved which are often only difficult to reconcile. However, there are also discernible tensions within these two supposedly homogeneous domains. For the military, the differences between national rules of engagement in peacekeeping operations, but also in military cultures underline the limitations of multinational or multiservice interoperability. In the civilian sphere, the interacting activities but diverging goals related to human rights protection, political reform, and economic development frequently spur conflicts over responsibilities, resources and relevance ranking.

Vertical interaction refers to the interaction between the field level and the strategic level of a crisis response mission. There are usually different perspectives on problems depending on whether they are seen from the point of view of the mission operating in the field or the institutions in the capital or headquarters that exercise political control and strategic guidance. This may result, for example, in unrealistic orders, delayed decision-making, or inadequate allocation of resources.<sup>7</sup>

Furthermore, at both the vertical and the horizontal levels of interaction, problems arise not only out of functional or cultural differences, but also from particular interests and competition between the various entities for resources and influence.

#### II. Comprehensive Approaches Applied: the EU, UN and NATO

Comprehensive approaches have developed at the international and domestic levels. At the international level, on which this paper focuses, the UN, the EU, and NATO have developed individual concepts to implement comprehensive approaches in order to address the growing complexity of missions and to improve their own limited success in tackling crises. The UN designed the concept of "Integrated Missions," the EU has developed the "Civil-Military Coordination"

Major, EU-UN cooperation in military crisis management: the experience of EUFOR RD Congo in 2006 (EU-ISS Occasional Paper no. 72), Paris, September 2008; Karsten Friis, Pia Jarmyr, Comprehensive Approach: Challenges and opportunities in complex crisis management (Security in Practice no. 11, NUPI Report), Oslo 2008.

<sup>6</sup> Kristin M. Haugevik, B. de Carvalho, Civil-Military Co-operation in Multinational and Interagency Operations (Security in Practice. no. 2, NUPI Report), Oslo 2007.

<sup>7</sup> Major, EU-UN cooperation in military crisis management: the experience of EUFOR RD Congo in 2006 (cf. note 7).

and NATO has recently formulated the "Comprehensive Approach." Although these concepts are still blueprints, they are crucial in that they indicate not only the willingness and increasing ability of the IO to adapt to current challenges but also display the degree to which they are able to cooperate. Here, the similarity of the identified problems, but also of the appropriate means and instruments is crucial to determine future opportunities to enhance inter-organizational cooperation.

#### II.1. UN: Integrated Missions

The UN's primary and enduring mission since its creation has been to save "succeeding generations from the scourge of war." As the most active organization in the area of peacekeeping operations (PKO), the UN was hence also the most struck by the fundamental changes of the conditions and character of PKOs. Since the late 1980s, it had to adapt to a paradigm shift in peacekeeping from traditional monitoring of ceasefires and patrolling buffer zones towards highly complex scenarios often characterized by inter-state, ethnic or tribal conflicts, and civil wars that frequently resulted in disorder, social-economic depression and failed states.

This new environment required the tasks of UN engagement to be broadened. A growing number of UN PKOs have become multidimensional, that is, composed of a range of components including military, police, political, civil affairs, rule of law, human rights, humanitarian, reconstruction, public information and gender.<sup>9</sup>

This increased on the one hand the demand of personnel and expertise. On the other, the expanding set of tasks also increased the complexity of missions, both internally and externally. This growing number of UN PKOs has forced member states as well as the UN General Secretariat to recognize the need to develop a "comprehensive doctrine that better defines what modern UN peacekeeping operations have become." <sup>10</sup>

Today, the UN constitutes both conceptually and by practical experience the most advanced international organization regarding the development of comprehensive approaches. The notion of "Integrated Missions," introduced in 2006 and recently substantiated with the so-called Capstone Doctrine, aims at improving the co-

<sup>8</sup> Preamble of the UN Charter.

<sup>9</sup> Handbook on United Nations Multidimensional Peacekeeping Operations, Peacekeeping Best Practices Unit, Department of Peacekeeping Operations United Nations, 2003, p. 1.

<sup>10</sup> Salman Ahmed, Paul Keating, Ugo Solina, Shaping the future of UN peace operations: is there a doctrine in the house?, in: Cambridge Review of International Affairs, March 2007, pp. 11–28, here p. 12.

herence of the UN system in peacekeeping operations and to bundle all military, political, development aid related, and humanitarian activities.<sup>11</sup>

The UN's adaptation efforts have culminated in the Integrated Missions (IM) concept. IM refers to a specific type of operational process and design, where the planning and coordination processes of the different elements of the UN units are integrated into a single country-level UN system when it undertakes complex peace building missions. The IM concept has been established as the guiding principle for future post-conflict complex operations by the 2006 note of the Secretary-General on Integrated Missions.<sup>12</sup>

This concept has been an initiative which aims to achieve system-wide coherence across the UN. Coherence can be defined as the "effort to direct the wide range of activities undertaken in the political, development, human rights, humanitarian, rule of law and security dimensions of a peace building system towards common strategic objectives."13 With coherence comes coordination; the "systematic utilization of policy instruments to deliver humanitarian assistance in a cohesive and effective manner."14

The overall aim of the IM is to create a balance between the need for a security response and the necessity to ensure that all perspectives of developmental, human rights and gender issues are taken into account. 15 By applying such an integrated process, the UN seeks to maximize its contribution towards countries emerging from conflict by engaging its different capabilities in a coherent and mutually supportive manner. Eventually, an IM relies on a common vision of the strategic goal at the specific country level, shared by all UN actors.

Today, the UN encompasses a high number of multidimensional peacekeeping operations where it seeks to take this integrated approach into effect, for example in DR Congo. However, given the recent development of the IM concept, it did not have much time to considerably impact on the UN structure and missions. It mainly influenced concepts like the standards for DDR and the consolidated peace strategies and compacts. One of its main achievements so far was probably to carry on the reform of authorities in operations, e.g. the position of the

<sup>11</sup> Department of Peacekeeping Operations, United Nations Peacekeeping operations: Principles and guidelines, January 2008, p. 56 (Capstone Doctrine).

<sup>12</sup> Note of Guidance on Integrated Missions, Issued by the Secretary-General, 9 December 2005; see also the Revised Note of Guidance on Integrated Missions, 17 January 2006.

<sup>13</sup> Coning (note 3), p. 7.

<sup>14</sup> Coning, ibid.

<sup>15</sup> Coning, op. cit, p. 15.

"Special Representatives to the Secretary General" (SRSG). The person is now the Senior UN Representative in the country having authorities over all UN activities. The SRSG has to ensure that all UN components in the country aim to pursue a coordinated and coherent approach. The success of this step lies less in the systematic development of strategies and priorities than in the ability to manage and balance the contradictions and tensions among the UN elements as well as the overall mandate.<sup>16</sup>

The UN's difficulties in implementing those concepts result from the size of the UN, the parallel structure of its subordinate and specialized organizations, and the concomitant limits of its effective control. In the field of crisis management, the "Department for Political Affairs" and the "Department for Peacekeeping Operations" rival over the overall control of operations. Furthermore, considerable differences exist in the way problems are perceived and resolved by the various respective UN actors. This results in debilitating frictions as well as horizontal and vertical conflicts over jurisdiction. Eventually, this confusion grows when it comes to the distribution of responsibilities for coordination and the level of authority individual units are equipped with and placed within the structure of a local mission.

#### II.2. EU: Civil-Military Cooperation

Like the UN, the EU also disposes of a broad range of civilian and military instruments for crisis management. The core challenge for the EU consists in assuring coherence on the one hand between the instruments of the EU Commission (first pillar) and those of European Security and Defence Policy (ESDP, second pillar), and between civilian and military instruments within ESDP itself on the other hand.

To this end, the EU has developed the concept of Civil-Military Co-ordination (CMCO). It is the hallmark of doctrinal development and seeks to ensure and guide a Comprehensive Approach particularly at the political-strategic level, ranging from the planning phase to the execution of a mission. Accordingly, in the context of CFSP/ESDP, CMCO aims to address "the need for effective coordination of the actions of all relevant EU actors."

<sup>16</sup> Susanna P. Campbell, Anja T. Kaspersen, The UN's Reforms: Confronting Integration Barriers, in: International Peace-keeping, no. 4/2008, pp. 470–485, here pp. 471–472.

<sup>17</sup> Civil Military Co-ordination (CMCO), EU Document 14457/03, November 2003, p. 2.

The "Crisis Management Procedures" as well as the "Crisis Management Concept," which is developed individually for each operation, are geared towards ensuring that the Comprehensive Approach is applied in the EU's crisis management activities. As a practical example, "EU Special Representatives," who are based in the field, increasingly play the role of a coordination hub for EU mission activities, thereby linking both Brussels and the field level, and the different agencies in the field. Besides, the EU constantly attempts to increase the common understanding and organizational culture of its staff for example by integrated training of personnel. Mission evaluations of Congo and Bosnia indicate that the EU is able to improve its effectiveness and coherence of comprehensive crisis management operations.

However, the Union has so far been unable to make full use of its potential for integrated civil-military operations. The inter-institutional cooperation deficits resulting from the EU's pillar construction can be potentially improved by the stipulations of the EU reform treaty, which is, however, currently blocked. The treaty would have addressed such issues as funding of civilian and military operations, or an integrated staff of the Council and the Commission lead by a newly established "High Representative of the Union for Foreign Affairs and Security Policy." However, the implementation of these suggestions for improvement as well as the full use of the already existing civil-military planning cell and the operations center for integrated civil-military ESDP operations are repeatedly prevented by member states who cling to their particular (national) interests. <sup>21</sup>

#### II.3. NATO's Comprehensive Approach

Stating that the geographical location of threats is no longer of importance, NATO has identified threats to international security on a global scale. With threats "getting global," old security paradigms that roamed during the Cold War have been swapped with an "engagement paradigm." This shift from deterrence to engagement requires NATO to address security challenges at their source, in other words, to view security functionally, rather than geographically.

<sup>18</sup> Council of the EU, Suggestions for procedures for coherent, comprehensive EU crisis management, Doc. 11127/03, 2003.

<sup>19</sup> Giovanni Grevi, Pioneering foreign policy: The EU Special Representatives (Chaillot Paper no. 106), Paris, October 2007

<sup>20</sup> Christian Mölling: ESDP After Lisbon: More Coherent and Capable? (CSS Analyses in Security Policy, Center for Security Studies, ETH Zurich, vol. 3, no. 28), Zurich 2008.

<sup>21</sup> European Parliament (ed.), The Impact of the Lisbon Treaty on ESDP—Workshop Summary, Brussels 2008.

<sup>22</sup> Speech by NATO Secretary General, Jaap de Hoop Scheffer, at the IISS Annual Conference, 7th September 2007, via <a href="http://www.iiss.org">http://www.iiss.org</a> -

More palpable lessons have resulted from NATO operations. Since 1992, the Alliance has continuously conducted operations. The lessons identified from those carried out in Bosnia and Herzegovina, Kosovo, Afghanistan but also the disaster relief operation in Pakistan (2005) or the support to the African Union in Darfur, have underlined the fact that NATO is never alone in the theatre. It has thus to ensure effective coordination between a wide spectrum of actors from the international community, both military and civilian, as the essential key to achieve sustainable results.

At the 2006 Riga Summit, NATO Allies agreed that a comprehensive approach engaging different actors was required to meet the challenges of operational environments such as Afghanistan and Kosovo. For NATO, a comprehensive approach is a "broader approach to military planning that takes into account all the military and civilian aspects of a NATO engagement through the entire duration of an operation."<sup>23</sup> It promotes "cooperation and coordination between the international organizations, individual agencies and NGOs, as well as the host government."<sup>24</sup>

With the acceptance of the "Comprehensive Political Guidance" at the 2006 Riga Summit, NATO established the CA as its planning blueprint. This is to be achieved by expanding its approach for military planning to include all civilian and military aspects of a NATO engagement. Due to the fact that NATO itself has no relevant civilian capabilities, its approach primarily seeks to improve the external cooperation with civilian actors and other international organizations.

The Riga decisions build upon earlier doctrinal considerations, above all NATO's first doctrine of civil-military cooperation—CIMIC<sup>25</sup>—which was officially established in 2002. CIMIC aims to facilitate the "cooperation between a NATO commander and all parts of the civilian environment with his Joint Operations Area."<sup>26</sup> More generally, it seeks to provide the interface between civilian and military structures for NATO. It emphasizes the importance of cooperation with national and local governments as well as with other IOs and NGOs. However, CIMIC is an instrument established only at the field level.

In the field, NATO has made a first and partially successful step towards acting with a CA for example by setting up Provincial Reconstruction Teams (PRTs) in

<sup>23</sup> Press Kit, NATO Summit meetings of Heads of State and Government Bucharest, Romania, 2-4 April 2008, p. 3.

<sup>24</sup> Keynote address by NATO Deputy Secretary General Ambassador Claudio Bisogniero at the GLOBSEC Conference, 17 January 2008.

<sup>25</sup> CIMIC is the "coordination and cooperation, in support of the missions, between the ANT commander and civil actors, including national populations and local authorities, as well as international, national and non-governmental organization and agencies" (cf. NATO IMS MC 411/1 NATO Military Policy on Civil-Military Co-operation, January 2002).

<sup>26</sup> NATO IMS MC 411/1 NATO Military Policy on Civil-Military Co-operation, January 2002.

Afghanistan. Currently, 26 PRTs are active on the ground in Afghanistan.<sup>27</sup> These civil-military units are designed to provide security locally and to facilitate reconstruction measures. However, both the composition of the PRTs as well as their precise objectives and means diverge considerably. This reflects to some extent the PRTs adaptation to the specific needs of the local environment. However, defining the composition of PRTs is essentially the prerogative of the respective lead nation and the other participating nations.<sup>28</sup> Hence, national or even departmental conceptions of crisis management and particular interests of domestic actors gain direct influence on the effectiveness and feasibility of NATO's Comprehensive Approach.

However, the Alliance's basic problem is its reputation as a military actor who is by definition less aware of the civilian dimension of crisis management. Thus, particularly among civilian actors, its credibility as a cooperative partner and an advocate of the Comprehensive Approach is rather limited.

The extent to which NATO can revise its crisis management strategy and therefore gain acceptance for it will largely depend on the commitment of US President Barack Obama to the transatlantic relationship and the resulting implications for the issues of Kosovo, Afghanistan, and cooperation between the EU and NATO.

Conclusion: Towards Effective and Legitimate Coordination

So far, comprehensive approaches have shown an ambiguous performance. Diverging organizational cultures as well as available resources pose structural limits for harmonization and enhancing efficiency. Furthermore, systemic changes to assure a CA occasionally require large commitments in terms of transformation costs and time, with frictional losses arising from departmental resistance against the reallocation of power and resources. It is hard to overcome institutional self-interest and to change traditional administrative structures and privileges in the name of abstract concepts such as coherence or efficiency. This persistence of traditional patterns and structures further reduces the space for successfully applying a CA.

However, those challenges that made a CA necessary still linger on. Therefore, and as long as the international community perceives crisis management as an appropriate instrument, there is no alternative than to continue pursuing a compre-

<sup>27</sup> NATO, International Security Assistance Force (ISAF): Facts and Figures, 10 June 2008, <a href="http://www.nato.int/ISAF/docu/epub/pdf/isaf\_placemat.pdf">http://www.nato.int/ISAF/docu/epub/pdf/isaf\_placemat.pdf</a>.

<sup>28</sup> Sebastiaan J. H. Rietjens, Managing Civil-Military Cooperation: Experiences from the Dutch Provincial Reconstruction Team in Afghanistan, in: Armed Forces and Society, no. 34 (2008), pp. 173–206, here p. 179.

hensive approach. Conversely, to keep on failing to manage complexity of crisis management will further undermine the legitimacy and the effectiveness of the engagement of the international community in crisis management.

Given the limits of common crisis management concepts and the reasons therefore, the probability of the Comprehensive Approach to advance from a theoretical model to a palpable contribution to international security will depend on the (re-) balancing of system-wide and particular interests. Common strategies cannot be sustained beyond the security cultures of the participating actors. This however poses a qualitatively different reason than the ones resulting from interministerial or other agency rivalries about resources, prestige and individual careers.

Concrete concepts of CA will always have to manage the tension between effectiveness and political legitimacy. However, this should not lead to hasty abandoning every suggestion to improve effectiveness because of national or other particularities. Instead, the question of the consequences of continued uncoordinated activities of different actors should be addressed. The accompanied frictions do not only imply a waste of resources but also undermine the legitimacy of those acting unilaterally.



Luís Pereira da Costa (NFC 2008) from the European Commission

### Panel II: Scenario's and Strategic Option's for a New Global Energy Order

Rapporteur: Rafeh Malik (Pakistan), Islamabad Policy Research Institute

Chair: Prof. Eberhard Sandschneider, DGAP

## Stephan Renner (Austria), Department of Energy Economics and Policy, Austrian Energy Agency

The Most Important Piece in Solving the Energy Puzzle: Increasing Energy Savings and Efficiency in the EU

## Dmitry Udalov (Russia), Institute for US and Canadian Studies of the Russian Academy of Sciences (ISKRAN)

The Russian Natural Gas Strategy: Fuelling a Common European Future

Simon Koschut (Germany), Transatlantic Relations Program, DGAP Discussant

May-Britt Stumbaum (Germany), Weatherhead Center, Harvard University Discussant

#### Summary

Rafeh Malik

Stephan Renner divided his paper into three parts. In the first part he explained the rationale for political measures in energy efficiency. He then gave a brief overview of the goals and objectives of the European Union in energy efficiency. In his last part he highlighted the implementation of the Energy Services Directives (ESD) in Europe and methods for monitoring energy efficiency measures.

Renner highlighted that, according to European Commission estimates, the EU's energy consumption is approximately 20% higher than can be justified on economic grounds, with energy still being wasted causing negative economic and environmental effects. The EU has set itself a 20-20-20 goal to tackle this challenge: reducing emissions by 20%, increasing the share of renewables to 20% and improving energy efficiency by 20%. In his conclusion Stephan Renner stressed that energy efficiency was a necessary but not sufficient condition to reduce energy demand. He further identified the poor implementation of existing legislation as the main obstacle to improving energy efficiency in the EU. He assessed

Panel II: A New Global Energy Order

> that the willingness to invest into energy efficient technologies and energy services as well as political strength to develop much more ambitious programs was key to reduce EU-wide energy consumption.

> In his presentation on the Russian Natural Gas Strategy, Dmitry Udalov elaborated on the vital links between the European Union and Russia in the energy sector. Unfortunately, according to Udalov, the relationship has been characterized by prejudices and a lack of trust on both sides.

In the near future Russia is likely to retain the largest share of EU energy imports. Also, natural gas is going to play a vital role in the European energy mix. Today natural gas is one of the most important sources of energy, and its importance will continue to grow. Russia plays a significant role in the natural gas sector. Firstly, it possesses the largest natural gas reserves on the planet, with roughly one third of the total world natural gas reserves. Secondly, Russia's experience and technological advancement in geology, natural gas production and transportation make it a key player in this field. Thirdly, Russia has gained valuable experience in the international energy business, having successfully fulfilled a number of projects with foreign partners.

By describing the interdependence of Russia and the EU, Dmitry Udalov explained that while buyers tried to diversify their energy sources, sellers had similar diversification attempts with their buyers. In his conclusion, he stated that cooperation on natural gas between the EU and Russia in the coming years will largely depend on Russia's willingness and the EU's ability to provide financial resources and technical skills for upstream development in the context of long term agreements covering both volumes and pricing.

The ensuing discussion covered questions regarding ways and incentives to engage the United States, consumers and businesses in energy efficiency as well as aspects of energy security as a factor in foreign policy and geo-political strategies.

# The Most Important Piece in Solving the Energy Puzzle: Increasing Energy Savings and Energy Efficiency in the European Union

Stephan Renner

#### Introduction

The European Commission estimates that the Union's energy consumption is approximately 20% higher than can be justified on economic grounds. That is to say that energy is still wasted with negative economic as well as environmental effects. In its Second Strategic Energy Review published on 13 November 2008 the European Commission not only highlights the economic impact, but argues that energy efficiency and energy savings are the key for securing the European Union's energy supply. The Second Strategic Energy Review reconfirms the EU's 20-20-20 by 2020 goals and makes proposals for reaching them. In terms of energy efficiency the goal is to reduce primary energy consumption by 20% compared to projections for 2020. Moreover, energy efficiency is treated as part of the broader issue of energy security.

Already in 2006, the European Council and the Parliament adopted a Directive on the promotion of end-use efficiency and energy services to enhance the cost-effective and efficient end-use of energy in Member States. The goal of the so-called Energy Services Directive (ESD) is to achieve an overall national indicative energy savings target of 9% for the ninth year of application of the Directive and thus increase energy efficiency.

The Commission argues that current energy efficiency legislation alone will not deliver sufficient energy savings to meet the 20% saving objective. In order to improve energy efficiency in the EU and effectively reduce its final energy consumption additional efforts are needed. Moreover, one of the main obstacles for the Commission to energy efficiency improvements is the poor implementation of the existing legislation. However, the ESD is an important first step for improving energy efficiency in the European Union.

The goal of this paper is therefore to provide an informed input to a discussion about the possibilities and obstacles of energy efficiency policies in the European Union. While the case of the ESD will be presented in more detail, the discussion should focus on the ambiguities of the policies that have been adopted so far. The paper is divided into three parts: In the first part I will explain the rationale



Stephan Rennerr

for political measures in energy efficiency. I will then give a brief overview of the goals and objectives of the EU in terms of energy efficiency. In the last part I will eventually highlight the implementation of the ESD in Europe and the methods that will be used in monitoring energy efficiency measures.

#### The rationale for energy efficiency

Meeting the energy demand is the basic requirement of energy security. The level of future demand is influenced by a range of different factors, including energy prices, income and lifestyle decisions. The impact of demand-side developments is measured by the evolution of energy intensity, which refers to the quantity of energy necessary to produce one unit of GDP.

#### Rationale for energy efficiency

In the Second Strategic Energy Review the European Commission argues that the direct benefits of energy savings, provided the 20% energy reduction objective is met in 2020, are expected to be EUR 220 billion per year. However, the indirect economic benefits are estimated to be much higher. "Energy and its use affect us all. Energy efficiency combats climate change, improves energy security, contributes to the attainment of the Lisbon goals, and reduces costs for all EU citizens." The Commission's arguments for more energy efficiency are therefore:

- less CO<sub>2</sub> emissions and a positive effect on the fight against climate change;
- industry, service sector and private households have lower energy bills;
- less dependency on gas and oil imported from abroad at present, the EU imports more than 50% of its energy from third countries;
- lowering the impact of volatile oil prices on the EU;
- creation of jobs: the provision of specific services promoting energy efficient behaviour and the development and sale of energy efficient products (sun collectors, insulation material, compact fluorescent light bulbs etc.) constitute a new growing and profitable market.

Energy efficiency is the most cost-effective way to reduce greenhouse gas emissions. In many cases, investments in energy productivity are feasible with existing technical means. Investments in energy productivity thereby reduce the need to expand energy supply. The IEA estimates that, on average, an additional Euro spent on more efficient electrical equipment, appliances, and buildings avoids more than two Euros in investment in electricity supply. "Energy efficiency is the cheapest form of new energy we have," Chevron CEO David O'Reilly pointed out recently.

<sup>1</sup> Calculated savings are 390 Mtoe; at \$ 96/barrel net of taxes this equals EUR 220 billion.

<sup>2</sup> Memo 08/699, European Commission, 13 November 2008, Brussels.

In addition, European businesses can benefit by innovating and creating new products and markets for energy-efficient products and solution.<sup>3</sup>

Moreover, energy efficiency also has a social implication. The waste of energy through inefficient buildings and appliances particularly hurts the poor. In the UK, average domestic duel fuel bills (Gas & Electricity) have increased from £ 572 to £ 1,287 (+125%) between January 2003 and September 2008. The Fuel Poverty Advisory Group estimates that some 4 million households in England were in a state of fuel poverty in September 2008. Investments in energy efficiency reduce the individual energy consumption and thus always have a social impact, too. While it is the subject of academic debate if energy efficiency will reduce energy consumption at the macro level, this definitely is the case for a single household. If energy consumption is reduced successfully a household with lower income will be proportionately more positively affected than a household with higher income.

#### Europe's current energy situation

Average Europeans consume energy for their iPods and MacBooks, for heating and washing, for travelling to meetings, visiting friends or switching on the light when being back home. Energy is a means to lead a certain lifestyle and to reach certain destinations. It is this demand for energy that mainly drives the energy sector.



3 McKinsey Global Institute (2008), Capturing the European energy productivity opportunity, San Francisco.

Participants of the panel on energy security

The energy consumption is rising in the EU as well as in important developing countries. As can be seen in Figure 1, the final energy consumption is rising in both the USA and the EU. On top of that, China has seen a dramatic increase in its final energy consumption since 2000.

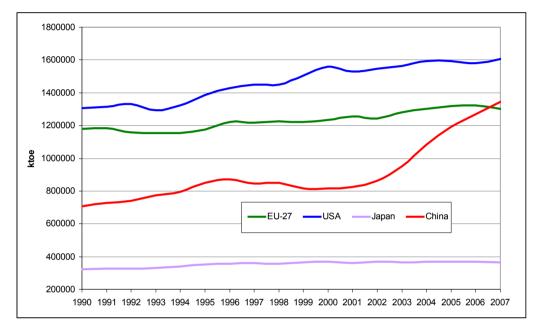


Figure 1: Final energy consumption in ktoe4

Source: ENERDATA

In the Second Strategic Energy Review the European Commission estimates that the EU's consumption will rise between 5% and 9% until 2020 depending on the development of the oil price. Gross inland consumption in 2020 would reach a level between 1.900 and 1.970 Mtoe. However, even in the baseline scenario that includes current trends and policies implemented in the Member States up to the end of 2006, energy intensity will improve until 2020. That is to say that there will be less energy consumption per GDP in 2020 than today. Still, since the goal is to reach a sound annual GDP growth, unless bold policies are implemented soon, more energy will be needed in absolute terms in 2020 than today with all the related consequences on import dependency, GHG emissions and the fuel for the poor parts of the population.

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<sup>&</sup>quot;ktoe" is the abbreviation for "kilo ton of oil equivalent," "mtoe" stands for "mega ton of oil equivalent."

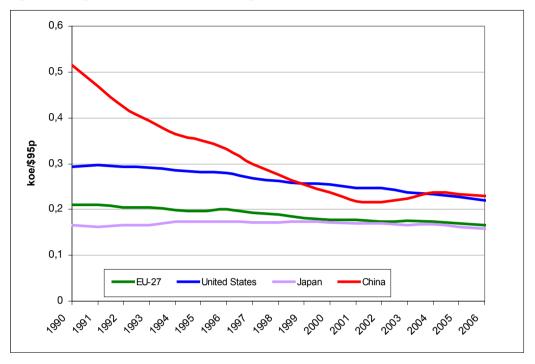


Figure 2: Energy intensity of GDP at purchasing power parities

Source: ENERDATA

Energy intensity differs dramatically between the different countries and regions. Energy intensity per capita in the USA and Canada is the highest in the world. This is highlighted in Figure 2 and Figure 3.

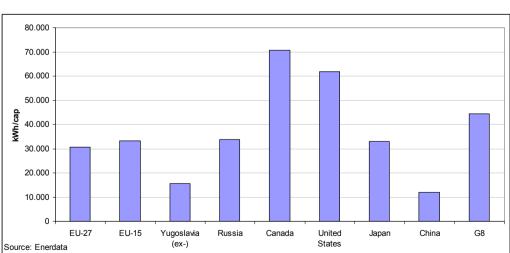


Figure 3: Final consumption per capita 2007

An even more explicit conclusion can be drawn from Figure 4. The energy consumption per capita in the USA and Canada is more than twice as high as in Europe and almost seven times higher than in China. There is an enormous potential for energy savings in North America that has not been exhausted so far. Moreover, the European Union, too, can become much more energy efficient if it uses its existing potentials.

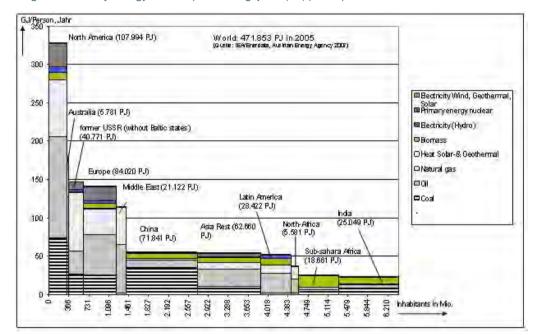


Figure 4: Primary energy consumption in Gigajoule (GJ) per capita in 2005

#### 2.3 Saving Potentials

In the last decade, the EU Member States have improved in energy efficiency. According to the Commission, the annual final energy use would have increased by 115 Mtoe or 11% over the 1997–2006 period, had there not been significant energy efficiency improvements. This equals one third of all crude oil imports to the EU-27 in 2006. While GDP has more than doubled since the first oil crisis of the early 1970s, the total primary energy supply has increased by only 30%. The industrial sector reduced its energy intensity by 24% since 1997; transport and households have improved by only 9%. Still, total energy consumption has been constantly growing.

Much more action is therefore needed to actually reduce energy consumption. The Commission argues that with current legislation and the proper implementation

<sup>5</sup> European Commission (2008) Energy efficiency: delivering the 20% target. Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, 13 November 2008, Brussels.

by the Member States, energy savings of not more than 13% by 2020, relative to current projections, can be reached. According to the PRIMES-Scenario used by the European commission in its Second Strategic Energy Review, action on energy efficiency could deliver efficiency improvements in the range of 34% to 36% by 2020 depending on the oil price. In the so-called New Energy Policy Scenario the absolute gross inland consumption in 2020 will actually decrease.

Figure 5 illustrates the development of the final energy demand in 2005 and in 2020 according to four different scenarios.

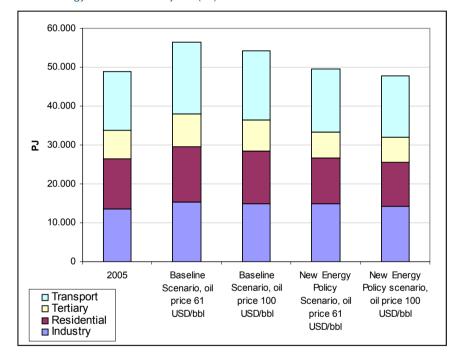


Figure 5: Final energy demand in Petajoule (PJ) in 2020 for EU-27

Source: European Commission, PRIMES

According to a recent study by the Fraunhofer Institute Systems and Innovation Research (ISI), there is an enormous saving potential in the different sectors.<sup>6</sup> In the baseline that includes the successes of recent policies (e. g. building directive, labelling, etc.) the final energy demand will increase until 2020. Only in the high policy intensity scenario the final energy demand will actually decrease until 2020. In a scenario with high policy intensity, i. e. a strong political effort to increase energy efficiency, ISI expects the following saving potentials for the year 2020 (Table 1). As a consequence, more efforts are needed than the current policies to

<sup>6</sup> Wolfgang Eichhammer, Study on the Energy Savings Potential in EU Member States, Candidate Countries and EEA Countries, Preliminary Results. Presentation at the EU Energy Demand Management Committee Meeting on 30 October 2008 (Fraunhofer Institute Systems and Innovation Research—ISI), Brussels 2008.

reduce the final energy demand in the future. The point here is that the demand for energy can be reduced, if concrete political measures are taken.

Table 1: Estimated savig potential in high policy inensity scenario

Industry	10%
Households	28%
Tertiary	23%
Transport	20%

Source: Fraunhofer Institute (ISI).

Current and future EU policies on energy efficiency

There are a number of legislative acts already in place to improve energy efficiency in the EU. Moreover, energy efficiency is an important component and argument in the wider discussion on energy security in the EU. The less the EU consumes the less dependent it is from external sources of energy.

In November 2008, the European Commission presented the Second Strategic Energy Review with the goal of supporting the EU's 20-20-20 goals. The Commission published a range of different proposals, such as an EU Energy Security and Solidarity Action Plan and a package of energy efficiency proposals aiming at energy savings in key areas, such as reinforcing energy efficiency legislation on buildings and energy-using products.

The first priority identified in the Second Strategic Review is to adopt and rapidly implement the measures in order to reach the European Council's energy policy targets for the EU aiming at a 20% reduction in greenhouse gas emissions, a 20% share for renewables in final energy consumption and a 20% saving in future energy demand by 2020.

With the adoption of the so called energy and climate package by the European Council and the European Parliament in December 2008, these 20-20-20 goals were reinforced and strengthened by concrete measures. However, whereas binding targets were established for renewables and carbon dioxide, there is still no binding target for energy efficiency and energy savings in 2020. The energy and climate package contains the following directives, decisions and regulations:

- Directive on the promotion of the use of energy from renewable sources
- Directive on a greenhouse gas emission allowance trading system
- Decision on shared efforts to reduce greenhouse gas emissions
- Directive on geological storage of carbon dioxide

- Direction on monitoring and reduction of greenhouse gas emissions from fuels (road transport and inland waterway vessels)
- Regulation on emission performance standards for new passenger cars.

What is central in all the directives, though, is that energy efficiency is the key to achieving the renewables targets as well as the emission reduction targets. Art. 3 of the Directive on the promotion of the use of energy from renewable sources that was adopted by the European Parliament on December 17, 2008 states that in order to reach the mandatory national targets for the use of energy from renewable sources more easily, "each Member State shall promote and encourage energy efficiency and energy saving."

#### Second Strategic Energy Review

A package of energy efficiency proposals aims to push energy savings in a number of areas, such as reinforcing the energy efficiency legislation on buildings and energy-using products, and enhancing the role of energy performance certificates as well as inspection reports for heating and air-conditioning systems. To improve efficiency in energy supply, the Commission has adopted guidelines to enable the uptake of electricity generation from highly efficient cogeneration installations. For 2009, the Commission plans a thorough evaluation of the 2006 European Action Plan for Energy Efficiency.

The European Commission has proposed reinforcing existing efficiency standards on buildings and energy-using products as part of the Second Strategic Energy Review package announced on November 13, 2008. The key proposals include energy efficiency of buildings, energy labels and new rules for labeling tires for cars and trucks. In addition, the Commission established guidelines on the calculation of electricity from combined heat and power generation (co-generation). "Net imports of fossil fuels are expected to stay at roughly today's levels in 2020 even when EU's climate and energy policies are fully implemented," the Commission argues in a new "action plan" on energy security and solidarity that is part of the Second Strategic Energy Review. The following proposals are related to energy efficiency:

- 1. Review on the Energy Performance of Buildings Directive (EBPD)
- 2. Review on Energy Labelling Directive
- 3. Review on Ecodesign Directive
- 4. Review on Cogeneration Directive
- 5. Benchmarking and best practice
- 6. Cohesion policy funds for energy efficiency

<sup>7</sup> Source: EurActive.com, 14 November 2008.

- 7. Review of Energy Tax Directive in preparation
- 8. Review of Energy Efficiency Action Plan in 2009.

The Energy Services Directive (ESD)

For those end-use sectors that are not covered by the Emission Trading Scheme, the European Parliament and the Council developed the Directive on energy end-use efficiency and energy services (Energy Services Directive, ESD).

The goal of the Directive is to make the end use of energy more economic and efficient by:

- establishing indicative targets, incentives and the institutional, financial and legal frameworks needed to eliminate market barriers and imperfections which prevent efficient end use of energy;
- creating the conditions for the development and promotion of a market for energy services and for the delivery of energy-saving programmes and other measures aimed at improving end-use energy efficiency.

Among other aspects, this includes an indicative energy savings target for the Member States in 2016, obligations on national public authorities as regards energy savings and energy efficient procurement as well as measures to promote energy efficiency and energy services.

As with other directives, the ESD needs to be implemented in the Member States. Each Member State developed a more or less detailed National Energy Efficiency Action Plan (NEEAP) and sent it to the European Commission. All other decisions regarding the implementation of the directive are made in the framework of the comitology process in the so called Energy Demand Management Committee (EDMC). Here, the Commission initiates decisions on common understandings of the different articles of the ESD.

Moreover, in order to achieve a common way to calculate energy savings resulting from energy efficiency measures, the Commission initiates the development of harmonized bottom up and top down methods in its sub-committees. Bottom up methods start with energy savings from an individual energy efficiency measure and add up all the measures to arrive at a figure for energy savings; top down methods, on the other hand, use aggregate data and econometric models in their calculations. However, since this is a very technical process, it necessarily involves many decisions (should all measures or only politically induced measures be

relevant? What is included in the baseline definition? How can the energy savings target of 9% be interpreted?).

Additionally, all member states need to verify their energy savings and monitor the energy efficiency measures taken by the different actors. The Austrian Energy Agency is the responsible body for monitoring energy savings measures in Austria. The relevant body for all decisions regarding the implementation of the ESD at the federal level, however, is the Ministry of Economy.

One of the most controversial issues in that respect is how to include energy companies in the process. The ESD requires Member States (MS) to place obligations on energy suppliers to offer and promote energy services, energy audits and/or other energy efficiency improvement measures to their customers. Within this requirement there is a great deal of flexibility as to the exact form of the obligation and the mechanisms for delivery in different fuel sectors, including use of voluntary agreements and white certificates. MS have the option to use either voluntary agreements or white certificate systems to implement these requirements and a few MS have already introduced white certificate systems or voluntary agreements.

The goal in Austria is to develop voluntary agreements between the interest representation of the energy distributors, distribution system operators and retail energy sales companies. However, so far no agreement has been reached between the energy companies representatives and the Federal Ministry.

#### Conclusion

Today it is widely accepted that energy should be used as efficiently as possible for a variety of economic, environmental or social reasons. Energy efficiency is hence not a controversial issue. However, problems arise when it comes to concrete action both by the member states and stakeholders, most importantly because these involve additional investment costs (even when the cost for the entire life cycle of, for example, a product are eventually lower).

At the same time, it is contested on both the theoretical as the empirical level, if energy efficiency measures actually lead to energy savings at the macro level. Ever since the publication of Stanley Jevons "The Coal Question," first published in 1865,8 economists have been arguing that energy efficiency at the microeconomic level will only lead to a reduction of energy use at this very level, and actually result in an increase in energy use at the national or macroeconomic level. An im-

<sup>8</sup>  $\,$  Jevons Stanley, The coal question—can Britain survive?, London 1865.

provement in efficiency (of a product) causes the (implicit) price of that product to fall, and hence stimulates consumption. Therefore, the arguments put forward by economists have actually been supported by the historical record for most of the past century and the current decade. We can, indeed, observe increasing levels of both energy efficiency and energy consumption.9

Thus, energy efficiency does not always lead to energy savings. The drivers for energy consumption, such as GDP growth, personal wealth, lifestyle changes, mobility, etc. are, up to now, stronger than the savings generated by increased energy efficiency. Even if a thermal insulation in a buildings reduces the energy consumption of this particular building, the fact that more rooms are heated after retrofitting the building (the so called rebound effect) and ever more people need comparatively more living space due to smaller families will result in a net growing energy demand at the macro level.

As a consequence, two messages remain to be stated at the very end of this paper. First, energy efficiency is a necessary but not sufficient condition to reduce energy demand. If energy efficiency measures had not been improved, the final energy consumption would have increased more than it actually did. However, the inconvenient truth is that – still – our lifestyle and our wealth are based on the availability of cheap energy. As long as our lifestyle demands more energy, any efficiency gains will simply be used to consume the saved energy for new appliances. While this is easily said, changing energy consumption patterns requires drastic measures, such as higher energy prices, taxes for energy consuming activities (individual traffic, etc.) and a fading out of inefficient appliances (light bulbs, household appliances, etc.).

Secondly, while even the European Commission itself argues that one of the main obstacles for improving energy efficiency is the poor implementation of existing legislation, the measures taken at the European level are still much more effective than what we know from most of the Member States. If the EU wants to reach its 2020 goals, stronger efforts are needed. In many cases (such as in the limits of CO<sub>2</sub> emissions for cars) the Member States' only see short term costs for their companies without recognising the long term benefits in lower energy consumption and technological innovation. What is needed is to define both a binding saving target for 2020 and also penalties and costs for missing this target. The price for not being energy efficient and not reaching the targets has to be high enough to be an incentive for actually changing policies.

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<sup>9</sup> Horace Herring, Energy efficiency—a critical view, in: Energy, vol. 31/2006, p. 10-20.

Even with lower energy prices, energy efficiency is a business case already. At the same time, there is a need for political strength and persistence to develop more ambitious programmes that actually reduce the total final energy consumption in the European Union and thereby contribute to a long-term security of the EU's energy supply. We do have ideas and instruments at hand. It is about time to implement them and overcome the existing obstacles for more energy efficiency and less energy consumption.



Kathrin Brockmann from Germany and Carmen Godeanu from Israel during the opening ceremony at EADS headquarters in Berlin

# The Russian Natural Gas Strategy—Fuelling a Common European Future

Dmitry Udalov

In the near future Russia is likely to retain the largest share of the EU's energy imports. It makes this country a unique energy supplier and explains the necessity of a special partnership between the EU and Russia in this field. Still, the ongoing energy dialogue requires constant clarification of the respective roles and duties to escape a diametrically opposed interpretation of the developments in this sector.



For certain reasons natural gas is going to play a specifically valuable role in the European energy balance as it is the most abundant, comparatively cheap and ecologically acceptable non-renewable fuel.

The importance of natural gas in the world energy business has rapidly evolved over the past decades. Out of a waste product of oil industry, natural gas has become one of the most important sources for the development of our civilization. It might seem odd today, but until very recently a dollar invested in an oil field returned twice the profits of a dollar invested in a gas field. Thus most of the gas was either reinjected into the reservoir to extract the remaining oil or, more commonly, burned at the wellhead.

The attitude to natural gas started to change in the 1970s when demand for energy soared quickly. After the tremendous increase of the oil price due to the Arab embargo, big industrial oil users were forced to look for alternative fuel, including gas. At the same time, the rise of environmental concerns started to have an impact on the minds of policy makers and eventually made big coal users, mainly electrical utilities, switch to natural gas. This development made possible the birth of a new energy era based on natural gas. Oil companies readjusted their strategies of natural gas production and the number of natural gas consumers continued to grow while more pipelines were built to transport natural gas via thousands of miles.

Today, gas is one of the most important sources of energy for many communities around the globe. And there is no doubt that the importance of natural gas will continue to grow. Natural gas is not merely a source of energy—it is the most promising form of hydrocarbon energy since it results in a comparatively lower emission of carbon dioxide than coal and oil. It is therefore the most promising



**Dmitry Udalov** 

non-renewable energy source in order to cope with new challenges of global economic growth and pave the way to sustainable development.

In terms of global economic development, natural gas plays an exceptional role because it satisfies the needs of the developed and developing world. In developed economies, such as the US and the EU, natural gas is one of the key instruments to cope with climate change and provide sustainability. Recently, both the EU and the USA have proclaimed ambitious environmental goals. The achievement of these goals is impossible without the strengthening of the role of natural gas as an energy source accompanied by a number of actions to enforce renewable energy and energy efficiency.

In the developing world, other aspects of the natural gas industry might be more important. While developing countries still consider economic growth to be more important than environmental protection, they are in constant search for cheap sources. Thus natural gas, which is cheaper than petroleum, should be used to fuel economic growth. Therefore, its key characteristics in terms of costs, comfort and competitiveness seem lucrative to developing countries, while its long term environmental aspects continue to benefit the whole planet, at least when compared to more "dirty" forms of fossil fuel.

Abundance of natural gas is also an advantage. Most analysts believe that while we may experience a serious shortage of oil in 30–50 years, the proved reserves of natural gas are enough to satisfy growing supply for at least 150–200 years.<sup>2</sup>

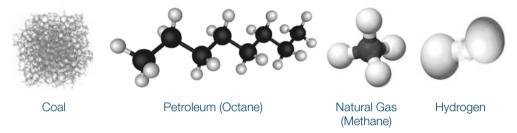
It is therefore not surprising that, in a broader term, natural gas is considered by some scientists a "bridge fuel" to the new energy economy. The point is that the whole energy evolution is viewed as a transition from carbon intensive sources of energy like coal to sources with less quantities of carbon. Carbon captures and stores hydrogen. Hydrogen in turn is the main source of energy, which we receive in the process of burning it. Carbon captures hydrogen but results in environmentally problematic emissions in the form of carbon oxide and carbon dioxide when it is being burnt (cf. picture 1).

While the transition from coal to petroleum already enabled energy consumers to use a greater amount of hydrogen at lower emissions of CO<sub>2</sub> natural gas,

<sup>1 20 20</sup> by 2020—Europe's climate change opportunity—Communication from the Commission COM(2008) 30; Towards a low carbon future—A European Strategic Energy Technology Plan (available in all official languages) Communication from the Commission, Com(2007) 0723; Advanced Energy Initiative, US Department of Energy.

<sup>2</sup> Oil Information 2008, International Energy Agency (IEA), Paris, August 2008; Natural Gas Information 2008, International Energy Agency (IEA), Paris, August 2008.

i.e. methane, includes only one atom of carbon and four atoms of hydrogen. It makes it a more efficient source of energy than coal and petroleum and the most environmentally friendly one of all other hydrocarbons. In the future, pure hydro-



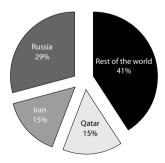
gen will be used for our energy needs. The transfer to a hydrogen economy by a massive use of hydrogen fuel cells in vehicles and industry, which we may witness in the forthcoming decades, will in turn require large quantities of pure hydrogen. Natural gas will be the cheapest way to produce hydrogen until there will be more sophisticated technological advancements to receive hydrogen from other sources like helium and tritium.

Thus, the future of the natural gas economy looks rather bright. It is reliable, efficient, and a comparatively environmentally friendly source of energy to fuel human development in this century and beyond.

## Russian Natural Gas Strategy

Russia plays a particular role in the global natural gas equations for several reasons. Firstly, it possesses the largest natural gas reserves on the planet. By the end of 2007, Russian natural gas reserves amounted to around 50 trillion cubic meters which is roughly one third of the total world natural gas reserves (see graph 1).

Graph 1. World Natural Gas Reserves<sup>3</sup>



Other major natural gas reserves are concentrated in Iran and Qatar. Next come Saudi Arabia, the United Arab Emirates, the United States, Nigeria, Venezuela

<sup>3 &</sup>quot;Worldwide Look at Reserves and Production," Oil &Gas Journal, Vol. 105, No. 48 (December 24, 2007), pp. 24–25.

and Algeria—each country with approximately 3% of world natural gas reserves. Considering that Russia is a country endowed with such abundant natural gas resources makes its position in the market especially strong. While for other energy producers the main question is where to search for natural resources, for Russia the main question is rather when to exploit them. It therefore requires the development of a comprehensive strategy of natural gas production, domestic consumption and exports.

Secondly, gas fields require huge investments to deliver the gas from the snow deserts of Siberia to the Russian and European markets. This proves another characteristic which underlines Russia's exceptional role in the area of natural gas. Its experience and technological advancement in geology, natural gas production and transportation is largely unparalleled. In several decades the country managed to find, produce and transport gas in one of the most dangerous and climatically rigorous regions of the world. Besides, Russia can boast of the largest main gas pipeline network in the world, which is over 158,000 km long. Occasionally, this huge transmission system might be viewed as an Achilles heel of Russian gas industry due to its age and the necessity of massive investments in repairing works and maintenance. Yet, the number of technical failures in the gas transmission system per 1,000 km of pipeline has actually decreased from 0.21 in 2001 to 0.11 in 2007.<sup>4</sup>

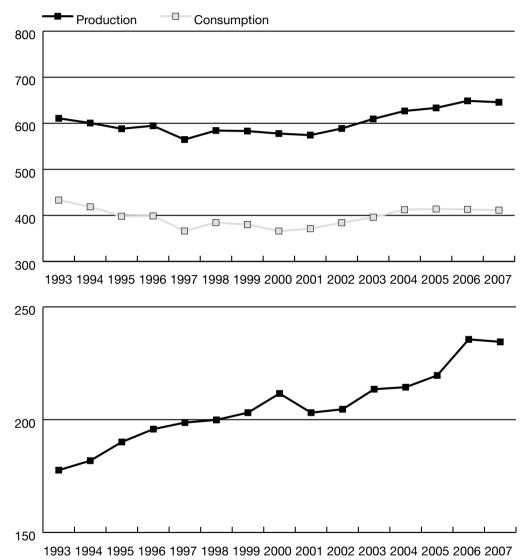
Having invested enormous financial, technical and human resources, Russia has thus become one of the major producers and exporters of natural gas. The figures provided in the second graph prove Russia's ability to play the role of a sustainable supplier of natural gas.

Since 2001 the Russian natural gas production is growing rapidly alongside its export share. A small slowdown in 2007 was due to the unconventionally warm winter of 2006–2007 which caused a significant decrease of consumption in Russia and Europe. For 2008 and 2009 further growth in production is expected. Future production depends on the speed with which Russia develops new gas fields to replace the decline of its giant gas fields such as Medvezhiye. The most recent development was realized with the implementation of two huge long-term production projects on Zapolyarnoye field in 2001, and on Yujno Russkoye field in 2007. Other super giant fields in the Yamal peninsula are scheduled to come into operation in the upcoming decade. The Shtokman offshore project is an additional potential source for continuing the success story of the Russian natural gas industry. This project requires significant international cooperation and know-how

<sup>4</sup> Газпром в вопросах и ответах, Moscow 2008.

for its implementation. That is why on February 21, 2008 Gazprom, Total and StatoilHydro established a joint venture to develop this long-term project which is of pan-European interest.

Graph 2: Natural Gas Production and Exports (bcm)



Thirdly, Russia has been gaining valuable experience in the international energy business over the last decade by successfully fulfilling a number of projects together with its foreign partners. Today, Russian energy companies are operating beyond the domestic market and are increasingly integrated in the global energy business.

Yet, there are a number of problems in the Russian domestic natural gas industry which should be taken into account to understand the rationale of the Russian

energy strategy. In most cases foreign press coverage is distorted and problems are narrowly viewed as the drawbacks of Russian energy industry which undermines Russia's role as a reliable energy partner. A broader and comprehensive analysis shows that those challenges actually represent big opportunities both for European investors and Russia itself.

The first serious problem of the Russian energy sector is the level of energy efficiency, which is far lower than in the European Union and the United States. Table 1 depicts the figures of energy intensity, i. e. the total primary energy consumption per dollar of Gross Domestic Product (GDP).

Table 1: Energy Intensity
Total Primary Energy Consumption per Dollar of Gross Domestic Product<sup>5</sup>

	2003	2004	2005
Russia	16.323	15.698	14.935
US	9.534	9.376	9.113
Sweden	8.877	9.089	9.069
Germany	7.198	7.238	7.021
UK	6.286	6.140	6.048
Ireland	5.055	5.021	4.919
World total	8.188	8.152	8.035

As we can see, energy consumption per unit of GDP in Russia is almost twice as high as the average level in developed countries. Although we see a gradual decline in energy intensity, it is evident that much is to be done to reach the same degree as in Europe and North America. To achieve this aim, one has to realize that Russia is burning more energy per dollar of GDP than other developed countries not only because of its cold climate but mainly because of structural problems in energy consumption. Decades of cheap domestic sources of energy including natural gas halted the development and implementation of energy saving technologies. Heat and electricity losses are tremendously high. To address this problem, the Russian government has developed a strategy which, besides other factors, includes a gradual increase of natural gas prices for the electricity generating sector and big industrial consumers. In 2003, the Russian government committed itself to raising domestic prices to world market levels by 2011. These measures should stimulate Russian energy consumers to use more energy efficient technologies. Thereby, it opens a huge market for European innovative technologies which may be exported to Russia.

<sup>5</sup> International Energy Annual 2006, EIA, 2007.

Independent natural gas production is another issue in the Russian gas industry. Besides Gazprom and NOVATEK, Russian oil companies might become other important economic players in national natural gas production. Until the new legislation was adopted in 2008, it was unprofitable for competitors of Gazprom and NOVATEK to produce natural gas since they had limited opportunities to sell and distribute it. A new legislation as well as the gradual increase in domestic natural gas prices will permit those companies to get to the market greater quantities of natural gas which they produce. Thus, the overall analysis of future natural gas production should also include possible additions by non-traditional natural gas producers.

The lack of a domestic natural gas infrastructure is a paradoxical issue for Russia in its position as a major natural gas producer. In Soviet times emphasis was given to the construction of a gas distribution network in Ukraine, Belarus and the Baltic states in order to fuel their heavy industry and agricultural sector, while the domestic Russian network was dominated by main gas pipelines and a lack of distribution networks. Eastern regions of Russia were almost left behind in terms of natural gas use. Aware of the importance of natural gas for commercial, industrial and residential needs, the Russian government is currently implementing a strategy of gasification for Russian regions. It is actually one of the major goals of Gazprom. The program has already provided gas to some additional 13 million Russian citizens in 58 Russian regions in the period from 2005 to 2007. During this time, the average "gasification" level as a share of the population with access to gas in the country went up from 54% to 62%.

Growth in domestic consumption will be inevitable as a result of the two factors mentioned above. On the one hand, it will be driven by the general economic growth plus the increase of Russian domestic consumption due to the extension of its domestic network. Secondly, as Russian domestic prices for natural gas are increasing, the domestic gas market will be nearly as profitable for Russian natural gas producers than their existing export contracts. Thus, the popular public belief that Gazprom's key goal is to control the European market may seem unfounded since the company will have enough customers both at home and abroad in the long run. On the contrary, European partners should now start about the perspectives of the domestic Russian gas market and possible cooperation projects in this respect. This dimension implies the possibilities of exchange of assets in distribution between Russian and European companies.

<sup>6</sup> Poccrar, <a href="http://www.gks.ru/bgd/regl/B08\_11/IssWWW.exe/Stg/d02/14-01.htm">http://www.gks.ru/bgd/regl/B08\_11/IssWWW.exe/Stg/d02/14-01.htm</a>.

## The "Geopolitics" of Natural Gas

From time to time, the natural gas industry is viewed as a factor of highest strategic importance. Supporters of this argument do not take into account that energy is simply one of a number of goods which is to be bought and sold on the market, according to market rules.

Yet, from a geopolitical point of view, Europe eventually needs predictability in respect of its gas imports. Predictable and transparent investment programs for export-oriented production may be based only on mutual trust and this mutual trust is subject to tests when one of the two sides is trying to use geopolitical arguments for the sake of market principles. To escape this vicious circle of mistrust, both sides need to understand their importance for one another.

In 2007, the EU relied on Russia to provide 121.43 bcm of a total EU demand of 489.7 bcm, out of which 290.0 bcm were net gas imports. Thus Russian gas amounted to 24.1% of total consumption and 41.7% of net imports.<sup>7</sup> EU officials currently assume that the EU will need between 75 and 215 bcm a year in new imports between 2008 and 2020. This is largely because domestic production is expected to fall to around 130 bcm a year, with the shortfall being made up by imports from a variety of countries.

Besides Russia, continental Europe's major pipeline natural gas suppliers are the Netherlands, Norway, Turkey and Algeria. The EU has outlined a number of vital projects to meet the growing demand for natural gas. This plan—in a framework of TEN-E projects8—incorporates projects worth more than 18 billion Euros of investments in new natural gas networks. Among those projects are: 1) the North European Gas Pipeline (NEGP), 2) the Yamal–Europe Gas Pipeline, 3) a Natural Gas Pipeline linking Denmark, Germany and Sweden (Baltic Gas Interconnector), 4) an increase in the transmission capacity along the Germany–Belgium–United Kingdom axis, 5) an Algeria–Tunisia–Italy (Sicily) gas pipeline (TransMed), 6) an Algeria–Italy gas pipeline, via Sardinia and Corsica, with a branch to France (GALSI), 7) the Medgaz gas pipeline (Algeria–Spain–France–Continental Europe), 8) a Turkey–Greece–Italy gas pipeline (TGI), 9) a Turkey–Austria gas pipeline (Nabucco), 10) a Lybia–Italy gas pipeline (Greenstream). The implementation of all those projects along with plans to build more LNG terminals will provide Europe with sufficient energy resources.<sup>9</sup>

<sup>7</sup> International Energy Agency, Natural Gas Monthly, 2008.

 $<sup>8\,\,</sup>$  TEN-E is the abbreviation for Trans-European-Network for Energy.

<sup>9</sup> MEMO/06/304. TEN-E Guidelines specify a European-wide energy transmission network, Brussels, 24 July 2006.

The analysis of TEN-E projects shows that there is actually no geopolitical competition among the various transport projects since the European costumers will need gas from all of the mentioned projects and that is why the EU provides support to its all major energy partners.

One of the most debated proposals is the Nabucco pipeline, which has been mentioned in the list of TEN-E projects. It is the construction of a pipeline from the Caspian Sea region to Western Europe bypassing Russia and linking Turkey and Austria. This project is portrayed as the major tool to limit Russian influence in the European gas market and provide for Europe's independence in gas imports. Allegedly, Russia is viewed as the main hurdle to the implementation of this project and many of the delays of the Nabucco project are associated with the Kremlin's role. This is, however, a very simplified and biased view. Each multibillion natural gas project, be it a pipeline project or an LNG project, is based primarily on natural gas resources, which are to be sufficient enough to attract investors. So far, the Nabucco project has experienced some drawbacks in terms of the natural gas resources which it is supposed to be transporting to the EU. There were many claims to transport natural gas from Iran, Azerbaijan, Turkmenistan, and Kazakhstan, but no final decision has so far been taken.

Moreover, all the disputes around Nabucco vs. Russian gas seem odd when one fact is taken into account, namely that all of the Russian natural gas is actually exported westwards. This point seems quite obvious since the EU is the world's biggest importer and second biggest consumer in the world which also pays some of the world's highest prices for imported gas. Therefore, Russia will continue to be interested in the European market.

In general, one important argument should be made concerning the prevailing assessment of transport projects for the sake of production and exploration. While there are many talks about transport projects and competition among countries in Eurasia, there is really a lack of public attention towards the production and exploration. Transport projects cannot be viewed as the only solution for energy security since a more comprehensive attitude to the problem should prevail which would imply all the production line from the well to burning tip.

Taking the dependence on the pipeline transportation into account when considering the natural gas trade, traditional market principles might be modified for the sake of political interests. This is the most controversially debated point in natural gas issues. Thus, there must be a clear distinction between business and politics. It will help to reduce the level of unpredictability and increase certainty in the devel-

opment of future projects, because business interests tend to be better reasoned, their feasibility studies better calculated and all kinds of risks assessed properly.

While potential buyers try to reserve as much natural gas as possible from the most diverse set of providers, the sellers try to diversify their customers as well. Trade in Liquefied Natural Gas (LNG) seems to be a promising option for both, sellers and buyers in order to diversify supply and to provide additional sources of natural gas in periods of peak consumption as well as to adjust natural gas trade to traditional market principles.

The first Russian investment in LNG industry is associated with the Sakhalin projects. The first LNG liquefaction plant has already been constructed near Youjno-Sakhalinsk and the first deliveries to Japan are expected to start in 2009. Besides, the Schtokman project is perceived as a way of building LNG plants to supply Russian natural gas to Spain, France and Belgium, as well as to the American market. Thus, the development of Russian LNG business will provide additional flexibility and market oriented approach in international gas trade.

## Unconventional natural gas solutions

Other innovative solution for the future cooperation between Russia and the EU is the possibilities of cap and trade scheme within Russian gas supplies, therefore European customers will be receiving natural gas along with its environmental benefits. Natural gas produces less emissions than any other fossil fuel, see graph 3.

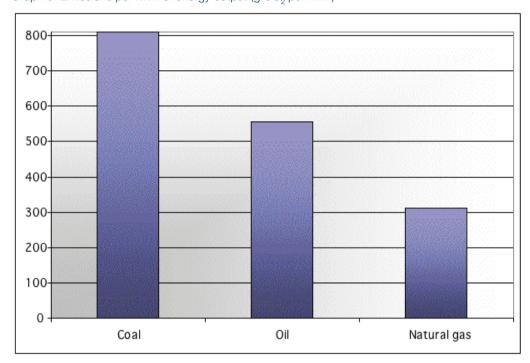
Natural gas produces almost three times fewer emissions than coal and it is twice as "clean" as oil. Taking into account the ambitious goals of the European environmental protection frameworks it is evident that it will be impossible to achieve them without rethinking the role of natural gas and its ecological advantage when discussing the share of fossil fuels for energy consumption. The global economic crisis of 2008 and skepticism regarding the European environmental targets openly aired by Poland and Italy in October of last year has made European decision makers rethink the ways of implementing the environmental agenda with minimal economic losses. According to Europeaneter polls of 2006 and 2002, 54% of European customers were not prepared to pay more for renewable energy. On the business side, analysts estimate that any alternative technology can be competitive with fossil fuels only when the price of oil is higher than \$70/bbl. Natural

<sup>10</sup> Learning from Russian energy model, in: Industry Updates, 8 September 2008.

 $<sup>11 &</sup>lt; http://ec.europa.eu/energy/green-paper-energy/doc/2006\_01\_24/2006\_01\_24\_eurobarometer\_slide\_en.pdf > .$ 

<sup>12</sup> Oil Price Plunge Hits Renewable Energy Firms, in: The Oil Daily, October 17, 2008.

gas with its relatively cheap price and obvious environmental advantage might be among one of the logical solutions for a future European energy agenda.



Graph 3: Emissions per kWh of energy output (g CO<sub>2</sub> per kWh)<sup>13</sup>

One of the concrete proposals is to spread the use of natural gas by using compressed natural gas as fuel for cars. This type of cheap and ecologically friendly fuel is the most efficient and economically attractive source besides alternative bio-fuels. By the way, it has already proven its reliability, safety and efficiency in Latin America. In Argentine and Brazil more than 3 million cars are running on compressed natural gas.<sup>14</sup> Paradoxically, Europe will have to catch up with those countries in terms of the use of alternative fuels!

Furthermore, the development of a hydrogen economy is also impossible without reliance on natural gas. At the outset, it will be the only cheap and reliable source for producing pure hydrogen to be used in fuel cells. Although it is a matter of the coming decades, the planning of a new hydrogen infrastructure and other facilities should be started today, including the launch of some pilot projects, including Russian and European scientists.

<sup>13</sup> IEA CO, Emissions from Fuel Combustion—Emissions per kWh and Electricity and Heat Output, Vol 2007.

<sup>14</sup> Discussion Paper No. 2008-13 TRANSPORT OUTLOOK 2008—FOCUSSING ON CO<sub>2</sub> EMISSIONS FROM ROAD VEHICLES, Joint Transport Research Centre of the OECD and the International Transport Forum, May 2008.

### Conclusion

The coming period of cooperation in the natural gas sector between the EU and Russia will largely depend on Europe's ability to provide financial and technical skills for upstream development within the context of long-term agreements covering both volumes and pricing. Notwithstanding the scenario for this future development, the overall analysis shows that the Russian Natural Gas strategy is an eminent part of European and Global Energy Security. Besides great historical, political and cultural ties between the EU and Russia, the existing link which literally fuels economies across Europe should be viewed as a factor of cooperation rather than disagreement.



Alumni from Slovenia, Palestine, Armenia, Russia and Denmark, and Hungary in DGAP's Robert Bosch Room

## Panel III: Scenarios and Strategic Options for Coping with Climate Change

Rapporteur: Eva Strickmann (Germany), Kings College London

Chair: David Bosold (Germany), Head of Program International Forum on

Strategic Thinking, DGAP

Prof. Dr. Nils Petter Gleditsch (Norway), Peace Research Institute Oslo Conflict-inducing Effects of Climate Change and the Challenges for Security

Mikkel Aarø-Hansen (Denmark), Environmental Department, Technical and Environmental Administration, City of Copenhagen

The Urban Challenge: Climate Change as a Chance for Cities

Catherine Meade Harris (USA), Climate Change Forum, London

Strategies for a Clean Future: What Role for New Climate Treaties, Technologies and Institutional Innovations? A Perspective from the United Kingdom

Mari Luomi (Finland), Finnish Institute of International Affairs Discussant

## Summary

Eva Strickmann

This panel brought together four experts, who discussed options for coping with climate change through four different lenses. Professor Nils Petter Gleditsch started with an overview of the security implications of climate change and analyzed the conflict-inducing effects and challenges for security. Mikkel Aarø-Hansen then looked at the urban challenge and explained how climate change can actually be seized as a chance for cities. Meade Harris discussed strategies for a clean future and elaborated on both international efforts and new approaches in the United Kingdom. These three presentations were subsequently summarized and discussed by Mari Luomi.

Climate Change and Security

While climate change is often described as a major challenge to international security, the immediate security effects of climate change are difficult to identify. Professor Nils Petter Gleditsch analyzed the number of armed conflicts and

casualties since the end of the Second World War and tried to discover parallels to climate change during the last decades. While he explained that the growth of liberal factors such as democracy promotion, membership in international organisations and closer trade cooperation had lowered the number of armed conflicts, he underlined that climate change was heading in the opposite direction: increased international cooperation had not prevented climate change from pursuing a negative trend.

Gleditsch underlined that the physical consequences of climate change were obvious (melting of glaciers and polar ice, sea-level rise, changes in precipitation, more natural hazards) and asked, whether climate change would lead to increased instability and potential for conflict worldwide. He cited UN and US officials, who had defined a clear link between climate change and security, e.g. by stating that "Darfur is the first of many climate wars" (Jan Egeland and Ban Ki-Moon in 2007 and 2008), by defining climate change as an "all-encompassing threat to human health, to global food supply and to peace and security" (Kofi Annan 2006) or by seeing climate change as a "threat multiplier for instability in volatile regions of the world and as a major national security challenge for the US" (CNA 2007). Gleditsch pointed to possible social consequences of climate change like the destruction of traditional livelihoods or migration and presented the following two models of possible pathways to conflict:

- The rise of sea-levels can drive human migration, which can lead to conflict in host areas.
- An increase in droughts, flooding and hurricanes can (a) trigger migration
  and thus follow the same conflict pattern as above, and / or (b) heighten
  competition over scarce resources and create a new potential for local conflict, and / or (c) result in a lower state capacity and strengthen rebel group
  activities.

However, Gleditsch emphasized the following shortcomings in the climate change-security research: first, articles published by NGOs, think tanks and peer-reviewed literature often draw different conclusions. Second, there is little peer-reviewed research on the security implications of climate change. Third, research is often limited to single case studies. Fourth, statistical and comparative analyzes have not been able to identify a clear association between scarcity of renewable resources and armed conflict. He therefore called for the following priorities: to disaggregate the climate-conflict debate, collect better data on violence and geo-references, analyze the interactions between climate change and social, political and economic factors and to link models of climate change to models of conflict.

A general conclusion was that there was little evidence to date that armed conflict is directly affected by climate change. However, it was suggested that future research should increasingly focus on possible links between the two phenomena. Moreover, the Intergovernmental Panel on Climate Change (IPCC) should include the security implications of climate change in its Fifth Assessment Report and help raising awareness for possible future scenarios.

The Urban Challenge: Climate Change as a Chance for Cities

Mikkel Aaro-Hansen referred to the City of Copenhagen, hosting the UN Conference on Climate Change in December 2009 with an expected wide participation of 20.000 experts from all over the world. He explained the need for an increased focus on the urban challenges and opportunities, as "the world is coming to the cities but the cities are also coming to the world." The cities need to find solutions to climate change and energy security, as 50% of the world population live in urban areas and 75% of the world's energy is consumed in cities. Moreover, cities are drivers of the world economy (e.g. Seoul, Shanghai, London), cities compete for labour and knowledge while at the same time cooperating internationally and, not least important, cities set more ambitious standards and targets than states do. Therefore, Hansen emphasized that it is worthwhile focusing on cities since they are the main problem but they are also willing to act, in particular within regional and global networks.



Prof. Dr. Nils Petter Gleditsch (Norway)

The City of Copenhagen has, for instance, been able to reduce CO<sub>2</sub> emissions by 25% between 1990 and 2005, through focusing on renewable energy, a better public transport network and a new heating system. Hansen explained that Copenhagen is using climate change as a positive branding ("Climate Capital Copenhagen," "Energy City") and how new targets are currently being formulated, such as a 20% further reduction in CO<sub>2</sub> emissions between 2003 and 2015. One important point was to exchange experience between cities and to strengthen existing networks. Moreover, cities need to be recognized and empowered on four different levels: (1) government – government; (2) government – city; (3) city – city and (4) United Nations – city. Hansen concluded by citing US president-elect Barack Obama: "we need to stop seeing cities as the problem but as part of the solution."

New Climate Treaties, Technologies and Institutional Innovations: a UK Perspective

Meade Harris presented a paper on strategies for a clean future, which covered three different sections: international regulations for climate change, regulation efforts in the United Kingdom and an overview of the successes and failures of clean technologies for renewable power generation in the UK. Meade Harris chose this perspective, as it will be the states and the private sector that have to implement the treaties to help transition to a low carbon world. To achieve this end international and national regulators need to give incentives to the private sector. Harris first looked at key institutions, the United Nations, the G8 and the European Union, and emphasized the important role of the EU in face of legislation. Moreover, the EU has set ambitious targets, with the 2008 EU Climate and Energy package and the 2005 Emissions Trading Scheme (ETS). She then introduced the UK's target to deliver 15% renewable energy by 2020 as part of the EU's overall goal that 20% of the EU's energy will be sourced from renewables. The UK is also seeking to strengthen the ETS, with an anticipated emissions reduction of 16% by 2020. To reach the scenario of 15% renewable energy, the UK is focusing on (1) onshore / offshore wind and hydropower, (2) biomass for power, (3) nuclear power and (4) carbon capture and storage systems. To better link these issues, the UK has recently created a new department entirely focusing on Energy and Climate Change (DECC). Meade Harris concluded by stating that governments need to work closer with the private sector and concentrate their efforts on companies rather than consumers.

## Discussion

Mari Luomi subsequently discussed these presentations and summarized that climate change has an important impact on the concept of security, has transformed

the role of cities as environmental actors and confronts public-private relations with new challenges.

She then placed the climate change debate in the field of International Relations research, presenting two lines of IR research on climate change, security-oriented research and governance studies.

Moreover, she elaborated on the security perspective of climate change and gave the example of the Gulf States. She referred to Nils Petter Gleditsch's assumption that climate change can be a threat-multiplier in volatile regions and underlined that the Middle East will suffer from climate change-induced problems such as water scarcity, mass migration and rising sea levels. However, she explained that awareness and capabilities of these states to address climate change are very low.

In her concluding remarks, she underlined that the climate change debate should not be securitized, as this could (1) divert attention away from climate change mitigation, (2) bear the risk that the climate change debate could be dominated by security or energy experts, (3) risk that citizens see the provision of "climate security" as a public service and not as a responsibility of each citizen, and (4) shift the efforts to address climate change in multilateral frameworks to a concentration on national security issues instead.

During the discussion, participants agreed that efforts to cope with climate change should focus on clear targets and wide participation in different and flexible frameworks. In this regard, it was considered important to realize that climate change can be a chance for cooperation and that it can make cities and countries more attractive. The group discussed possible incentives, the need for clear political levels of ambition and willingness to act. Moreover, the importance of an exchange of experience between different actors was underlined. Two further crucial questions were how to get commitment from the private sector and how to involve citizens in the climate change debate.

## Strategies for a Clean Future: What Role for New Climate Treaties, Technologies and Institutional Innovations?

A Perspective from the United Kingdom

Catherine Meade Harris

Current treaties and regulation do not provide clear long term directions for power generation companies. As such, private sector development has and will continue to develop slowly with costly setbacks. In the long term this may result in the failure to achieve ambitious energy targets. This paper is not an academic but rather an anecdotal study of the politics around the energy sector and attempts to analyze current regulations and policies for a low carbon economy and sustainable future energy supply.

#### Introduction

The paper is divided into three sections: International regulation, national regulation and finally the successes and failures of low carbon technologies for clean power generation in the UK. The paper also addresses how the current economic crisis is affecting the sector. The section on International regulation briefly discusses the work of the United Nations (UN), the G8 and the European Union (EU) in addressing climate change. The EU as an actor is of particular interest as it is largely responsible for regulating the specific power generating industry that the paper takes a closer look at. A large section of the paper is thus dedicated to explaining how the EU regulates through the European Trading Scheme (ETS), the Union's main instrument to achieve the ambitious target of a 20 percent reduction of carbon emissions from 1990 levels by 2020. The third section focuses on the United Kingdom (UK) as a national example of how industry is being affected from both the international and national level. The paper attempts to assess the success and failures of four low carbon technologies: carbon capture and storage, wind, biomass and nuclear power for power generation in the UK. Finally, it will put forward suggestions as to how the transition to a low carbon world can be achieved.

### International Regulation

The three key International Institutions engaged in climate negotiations that will be addressed in this paper are the United Nations Framework Convention on Climate Change (UNFCCC), the G8 and the European Union (EU). The G8 countries postulated that they, together with the leading developing nations such as China and India, would »consider and adopt« cutting carbon emissions by 50



Catherine Meade Harris

percent by 2050. Yet, their latest meeting in July 2008 gave no baseline date from when the cuts in greenhouse gases would be calculated, nor did it commit to an interim reduction en route to the 2050 goal. As there are no binding targets created at the G8 summits the impact on the industrial sector is rather limited.<sup>1</sup>

Securing a global framework agreement for the post-2012 period, when the first set of targets under the Kyoto Protocol expires, is crucial to achieving climate protection goals. At the UN Bali Climate Change Conference in December 2007, an agreement was reached to launch negotiations for a global and comprehensive agreement, to be concluded in 2009 at the UN Climate Change Conference in Copenhagen.<sup>2</sup>

This agreement looks like it may be much harder to achieve than once expected due to the global economic slowdown. The UN climate change negotiations that took place in Poznan in early December 2008 did not result in any agreements on emissions reduction commitments from key participating parties, leaving the most difficult points to be resolved in contentious negotiations in Copenhagen. However, simultaneously to the closing talks in Poznan, European heads of state and government convened for a two-day summit in Brussels, where a compromise on the EU's climate and energy package was achieved following difficult negotiations. However, significant concessions were made to the energy-intensive industry and Eastern European member states. The decisions, to be turned into law by the European parliament later that week, are an important example of how legislation can impact industry's behavior. Rather than treaties or agreements at the UN and G8 level, legislation is the key driver for private sector change. Therefore this paper focuses primarily on the EU and its ability to regulate the industry and businesses.

The driving vehicle with which the EU regulates the power sector is its climate and energy package, which sets to achieve a reduction in EU greenhouse gas emissions of 20 percent by 2020 compared to 1990 levels, increasing to up to 30 percent in the event of an international agreement on climate change. However, the compromises made to the energy-intensive industry now make it unlikely that the EU will be able to achieve these targets. One of the key instruments of the climate and energy package is the Emissions Trading Scheme (EU ETS), which was introduced in 2005 and has two fundamental components: a cap on emissions and a

<sup>1</sup> Ministry of Foreign Affairs of Japan (MOFA), Declaration of Leaders Meeting of Major Economies on Energy Security and Climate Change, 9-7-2008, <a href="http://www.bmu.de/files/pdfs/allgemein/application/pdf/g8\_toyako\_declaration\_energy\_security\_climate\_change.pdf">http://www.bmu.de/files/pdfs/allgemein/application/pdf/g8\_toyako\_declaration\_energy\_security\_climate\_change.pdf</a>.

<sup>2</sup> United Nations Framework Convention on Climate Change (UNFCCC), The United Nations Climate Change Conference in Bali, 11-12-2007, <a href="http://unfccc.int/meetings/cop\_3/items/4049.php">http://unfccc.int/meetings/cop\_3/items/4049.php</a>...

system for trading the "right to emit." The ETS cap sets a regulatory limit on the total emissions from the power sector and other large emitting industries across Europe. Some 11,000 installations across the EU are required to operate within this cap. The ETS scheme implements an overall cap on the amount of emissions countries can produce, allocates carbon allowances to companies and then allows them to buy or sell the permits to cover shortfalls or profit from cutting their emissions. In the negotiations at the EU summit in December 2008, Poland, which was the largest critic of the original plan, managed to negotiate a provision for Eastern European power plants to buy only 30 percent of permits at auction in 2013, rising to 100 percent by 2020 (as opposed to full auctioning for all countries by 2013). Power generators in other EU member states, like the UK, will be required to purchase all permits at auction in 2013.<sup>3</sup> The power generation sector is the first sector to be affected by the package and it will have to undergo drastic structural change to sustain competitiveness.

## National Regulation in the UK

While it is essential for successful climate protection to negotiate a global treaty on emissions, it first has to be assessed at a national level how the requirements stemming from the regulation put in place by the EU can actually be achieved. The paper therefore looks at ways in which the UK government has implemented

3 The European Union Website (EU), Climate Action - Energy for a Changing world, <a href="http://ec.europa.eu/energy/strategies/2008/2008\_01\_climate\_change\_en.htm">http://ec.europa.eu/energy/strategies/2008/2008\_01\_climate\_change\_en.htm</a>



Catherine Meade Harris (USA), Mikkel Aarø-Hansen (Denmark), and Mari Luomi (Finland)

certain polices in order to hit the 20/20/20 targets. In the recent past, the UK has created a new department entirely focused on Energy and Climate Change (DECC), a reorganization that for the first time inexorably links these two key issues. It also passed the UK Climate Change Act in November 2008, which sets the government binding targets to reduce greenhouse gas emissions. The Act establishes a new independent expert body, the Committee on Climate Change. The Committee's role is to advise government on its "carbon budget" and on opportunities for reduction in different sectors. On December 1, 2009, the Committee on Climate Change submitted its inaugural recommendations to the government. This first report urges the UK to commit to a 34 percent reduction of GHG emissions on 1990 levels by 2020, and a 42 percent reduction if a global deal is achieved. Both of these creations represent major steps for the government and illustrate that British officials are not only taking the targets for 2020 seriously, but are also placing the same value on climate change as they have previously placed on energy security.

However, progress within the power generation sector has been slow, in part because the UK has not implemented feed-in tariffs for renewables like those used in many other European countries. The key mechanism for delivering growth has been the Renewables Obligation Certificates(ROC), which distribute payments from power generators that fail to meet renewable energy targets to companies that comply. According to the DECC, the Act will implement the legislative aspects of the 2007 Energy White Paper. It will update the legislative framework by (1) putting in place key legislation on Carbon Capture and Storage, (2) creating a regulatory framework to enable private sector investment in CCS projects, (3) strengthening the Renewables Obligation to drive greater and more rapid deployment of renewables and (4) by addressing feed-in tariffs to enable the Government to introduce a scheme to financially support low carbon generation of electricity in projects up to 5 MW.<sup>4</sup>

To date, the main focus for the UK's low carbon energy policy to reduce GHG has been placed on the electricity sector. The UK faces an enormous challenge to transition to a low carbon economy and to hit their target for 2020, as the electricity generation sector currently accounts for about one third of the UK's total carbon emissions (36 percent from gas-fired power stations, 37 percent from coal, 18 percent from nuclear, 4 percent from renewables).<sup>5</sup>

<sup>4</sup> Department of Energy and Climate Change (DECC), Energy Act 2008, 26-11-2008, UK; <a href="http://www.decc.gov.uk/en/content/cms/legislation/cc\_act\_08/cc\_act\_08.aspx">http://www.decc.gov.uk/en/content/cms/legislation/cc\_act\_08/cc\_act\_08.aspx</a>.

<sup>5</sup> Department of Energy and Climate Change (DECC), The Energy White Paper 2007: 'Meeting the energy challenge,' UK, <a href="http://www.decc.gov.uk/en/content/cms/publications/white\_paper\_07/white\_paper\_07.aspx">http://www.decc.gov.uk/en/content/cms/publications/white\_paper\_07/white\_paper\_07.aspx</a>...

What will drive the change in the UK? One main driver will be ETS, as there have only been large-scale changes benefiting renewables within the power generation sector as UK companies realized that they were to lose 30 percent of their free carbon allowances. The UK government has led the game in Europe with the first auction and hopes that based on this success it will function as a model for other European countries. Since the first auction of carbon dioxide permits netted the government £54 million (\$80.9 million) in early November 2008, almost 4 million permits were sold in an auction that was four times over-subscribed, despite the fact that the price of emission allowances has plunged by nearly 30 percent since September to around €16.50, partly because there are fears that the auction will flood the market and partly because a recession will cut industrial output and reduce pollution worldwide. The government has pledged to auction another 80 million permits in the next four years, which is likely to bring in revenues of more than £1 billion. While the bidders' identities were not disclosed, electricity producers were expected to be the main buyers as they had their free allocation of permits cut by 30 percent. The free allocation of permits in the first phase of the scheme, from 2005 to 2008, enabled power companies in the UK and other countries to make windfall profits by raising electricity prices to cover the notional cost of having to buy permits, despite receiving them free. How can the UK's power generation sector transition to a low-carbon one? What is needed are specific long term strategies with government subsidies guiding investment for power companies.

## Low Carbon Technologies for Clean Power Generation

Under the Climate Change Act passed in December 2008, carbon budgets were put in place including legally binding ceilings on the level of allowed UK emissions over periods of 5 years. In its first report, the CCC has advised on the level of the budgets for 2008–2012, 2013–2017, and 2018–2022. The current budgets require an emissions reduction of 34 percent in 2020 relative to 1990 and if a global deal is reached this target will be increased to 43 percent.<sup>6</sup>

To achieve these targets the development of markets for offshore and onshore wind-power, biomass for power, nuclear and carbon capture and storage is crucial. These specific technologies and sectors are considered key growth sectors by the UK government and they promise to have the most success in the UK based on the factors size, expense and environmental impact.

The first real potential driver of change for purely renewable power generation can be seen in the offshore wind sector, which allows for the exploitation of free,

<sup>6</sup> Committee on Climate Change (CCC), Carbon Budgets Advice for 2008-2012, UK, <a href="http://www.theccc.org.uk/carbon-budgets/">http://www.theccc.org.uk/carbon-budgets/</a>>..

supposedly limitless and clean sources of energy. Yet, while wind power seems like one of the best options for the UK to hit its renewable targets, its potential is far from limitless. The UK is world leader for offshore wind capacity, having recently overtaken Denmark. The technology lacks popularity in other countries, where installing turbines on land is comparatively easier. The UK's renewable energy plans rely heavily on offshore turbines. However, the cost of renewable energy seems to be increasing. In fact, Britain's biggest operator of offshore wind farms Centrica released a report that found that it is now more expensive to build an offshore wind farm than a nuclear power plant in the UK. Many companies such as Shell and BP have pulled out of the UK's wind energy sector for the foreseeable future and instead focus on projects in the US which supposedly offer better returns. Given this current economic climate and without government subsides, it is therefore unlikely that the UK will build new offshore wind farms as the projects are expensive to install and prone to delays. While onshore wind farms would offer comparative advantages in this situation, objections and complaints exist regarding the noise and effect on landscapes, particular given the small size of the UK and thus potential density of wind farms. Unless the government makes a concentrated push on swaying public opinion on onshore turbines, offshore wind projects enjoying large government subsidies are among the most suitable renewable options to help the UK meet its targets.

Biomass for power, on the other hand, is a less suitable option for the UK. Unlike coal, which releases new carbon dioxide into the atmosphere when it is burnt, biomass is seen as carbon neutral, because burning organic material like elephant grass or willow simply releases the carbon dioxide that the plant has absorbed from the atmosphere while it was growing. The UK has one of the most generous government subsidy schemes in the world. Biomass electricity generators will receive 1.5 renewable obligation certificates (ROCs) for every mega-watt (MW) hour of electricity they produce from non-food crop biomass sources. Biomass is only being looked at as a viable option to actually compete in the renewables market as of 2013 when power stations are expected to have to buy all their carbon-emission permits, rather than being given a large proportion free as they are now. A national example is the Drax Power station. It is the biggest source of power in the UK, as well as the largest coal fired plant in Western Europe. In November 2008, Project Willow, a £2 billion joint venture with Siemens to build three power stations that will burn not coal but "biomass" such as wood chips and peanut husks was unveiled. Turning the country's biggest polluter into one of its largest producers of clean energy sounds like an attractive solution, but the practicality of the plan is limited. The organic material to be burned is much less "energy dense" than

<sup>7</sup> Ed Crooks & Fiona Harvey, Offshore wind costs alarm Centrica, in: Financial Times, 14-11-2008, p. 12...

coal, so much more of it has to be burnt to get the same amount of energy. The proposal for three 300 MW plants would require vast quantities of waste wood and other organic material, much of it shipped from as far away as Canada. Drax would need 30 times the length of the UK in biomass material every year to run these three new plants. Biomass for large scale power generation is a relatively infantile industry that seems to offer a lot more questions about where the actual biomass will come from and how it will be transported than can be answered at this stage.

While nuclear it is not a new clean technology, or as some might even argue not a clean technology at all, because energy is used when mining and enriching of uranium to make nuclear fuel, the reactors do not emit CO<sub>2</sub> when generating electricity. It is a low carbon technology. Nuclear is one option that is commercially viable, can last for decades and also meets energy security demands. Nuclear power supplies 3.8 percent of the energy consumption of the UK, according to figures published by The Department of Business Enterprise & Regulatory Reform (BERR). The government has called for the nuclear program to go beyond replacing the existing stock of 23 reactors and to contribute was significantly higher proportion of the nation's energy needs in the years ahead with the aim for Britain to become a world leader in the development of nuclear power technology. The government announced its approval of the construction of a new generation of nuclear power stations in January 2009, along with a series of measures designed to attract the support of private sector investors, who are expected to pay for the new reactors and their eventual decommissioning costs.<sup>8</sup>

Regulatory issues stemming from the EU hinder the development of nuclear powers' full potential in the UK. For example, the majority share of British Energy (the nuclear provider in the UK) has been sold to EDF which is 85 percent owned by the French government. Because of concerns of the UK's energy supply falling entirely to foreign hands, Centrica is bidding for 25 percent of the company. The deal should be done, but EDF could be forced to sell several UK power stations to get approval from the European Commission for its £12 billion takeover of British Energy, since a combined EDF-BE would produce almost a quarter of the country's electricity and become the sole provider of nuclear power. This is only the first hurdle as each plant takes about 10 years to build.

Finally, Carbon Capture & Storage (CCS) has the most potential to help reduce GHG gases in the UK as it can reduce emissions by up to 90 percent, depending

<sup>8</sup> Department of Energy and Climate Change (DECC), The Energy White Paper 2007: 'Meeting the energy challenge,' UK, <a href="http://www.decc.gov.uk/en/content/cms/publications/white\_paper\_07/white\_paper\_07.aspx">http://www.decc.gov.uk/en/content/cms/publications/white\_paper\_07/white\_paper\_07.aspx</a>.

on the plant type. Traditional coal-fired power stations are inefficient and only harvest about 35 percent of the energy in the fuel. Coal in particular is widely accessible and relatively cheap, and is relied upon to generate power for some of the world's biggest economies. But coal is also the dirtiest fuel, and burning it in power plants produces more carbon dioxide than any other form of electricity generation. If it can be proved that CCS technology can work on a large commercial scale the potential opportunities are huge.

CCS is central to the UK's plans to tackle climate change. In his first statement as head of the newly created department of energy and climate change (DECC), Ed Miliband committed the UK to cut carbon emissions to 80 percent of 1990 levels by 2050 and stressed the importance of investing in CCS to achieve this aim. However, the government has been criticized by many in the energy industry for failing to move fast enough with regard to CCS. BP has pulled out of the UK government's carbon capture and storage competition, leaving just three consortia still bidding to build a government-backed CCS demonstration plant in the UK. With BP Alternative Energy's withdrawal from the competition, the three bidders remaining are E.ON UK, Peel Power, and Scottish Power. BP has quit the CCS competition, because it was unable to find a partner power generator to put together a consortium. BP insists that its withdrawal from the UK competition does not represent a shift in the company's policy on CCS.

The government seems to fully support CCS capabilities. Ed Miliband announced the funding for up to four CCS demonstration plants at the end of April 2009. In case these plants were to guarantee a capture of 100 percent of emissions over the next five years, legislation is expected to permit new coal-fired power plants only on the basis of a full-scale CCS retro-fit. While CCS should pay a significant role in achieving the 2020 targets, its success depends how quickly the retrofits can begin and when the new CCS plants go underway. It will certainly play a crucial role for climate protection in the decades that follow, both in the UK and internationally.

## Conclusion

While changes in businesses in Britain and across Europe as well as institutional developments such as the DECC are encouraging, these measures are not sufficient if the UK or the EU are to achieve their ambitious climate targets. Each of the technologies addressed above have a role to play in the transition to a low carbon economy. As there is no one technology that can successfully and significantly reduce emissions, it has to be a mix of renewable and low carbon options that

will help achieve these targets. Current treaties and regulation do not provide clear long term directions for energy companies. As such, private sector development will continue to develop slowly with costly setbacks. The current economic crisis and the restriction of private sector finance that comes with it puts further emphasis on clear government regulation for long term planning on investment for the private sector. Where private investments are constrained, the government will have to provide for long term and reliable commitment to financial incentives and subsidies. If it fails to do so, the needed technologies will not be further developed, climate treaties may not be signed and the long term consequence may be the failure to achieve ambitious renewable energy and climate protection targets. This paper calls for the EU to establish such clear, specific and long term strategies to address the outlined problems. Without government subsidies and a reliable framework for investments in technologies, innovation, research and development on renewable energies, Europe will not be able to transform into a low-carbon economy and hence sustain effective climate protection efforts.



Eva Strickmann, rapporteur for panel III and former member of the IFST team

# Panel IV: Scenarios and Strategic Options for Economic Integration and Global Trade

Rapporteur: Alejandro Ribó Labastida, University of Oxford

Chair: Katharina Gnath, Program Globalization and World Economy, DGAP

Dr. Robert Mudida (Kenya), Institute of Diplomacy and International Studies, University of Nairobi

Strategic Options of Economic Integration and Global Trade for Africa in the 21st Century

Esra Pakin (Turkey), Istanbul Bilgi University

The Rise of the Gulf: Myth or Reality?

Wolfgang Lehofer (Austria), EU Liaison Office of the Austria Development Agency, Austrian Permanent Representation to the EU Discussant

Detlev von Busch (Germany), Roland Berger Strategy Consultants Discussant

## Summary

Alejandro Ribó Labastida

Dr. Robert Mudida, from the University of Nairobi, presented a paper on Africa's trade challenges and strategies for the future. Esra Pakin from Istanbul Bilgi University elaborated on the economic potentials and problems of the Gulf Cooperation Council (GCC) countries. After the two presentations, the discussants, Wolfgang Lehofer and Detlev von Busch, commented on the two papers.

Trade for Africans is "a means to develop, to improve the quality of their life," said Robert Mudida. Yet, the position of Africa in world's trade is clearly deficient, in 2006 it only counted for 3.1% of all world exports, while in 1963 that figure accounted for 5.7%; this is the product of the swift decline of Africa's share of world exports in the 1970s and 1980s. If the 1980s was considered "the lost decade," and the 1990s was nicknamed "the second liberalization" with the emergence of processes of democratization and institutionalization that later created much frustration among African people, the 2000s seem to have brought a

African renaissance with the creation of the African Union and the creation of the New Partnership for African Development (NEPAD).

Yet the challenges that Africa faces are steep, for there are many economic and political problems for the continent's integration: an overlapping membership between the different cooperation organizations; a deficient, and perhaps inadequate, imitation of other integration processes, mainly the European Union; an excessive ambition and formalism in the projects of integration at work; overlaps in the production and manufacturing of African countries, e.g. coffee; the small size of most African economies; deficient infrastructure and transportation networks; structural problems with the implementation of treaties, regulations and planned strategies; or the many multilateral concerns with agricultural subsidies, competition in services and strict enforcement of intellectual property rights.

According to Robert Mudida, strategies to face these problems include the following aspects. First, Africa would need a trade strategy, learning from other countries' experiences, e.g. Chile. Second, the state should promote trade, though the African state is "a predatory state," benefiting a very small clique of people. Third, complementary measures would be needed to build infrastructure and transportation networks, create competition, fight corruption, improve the financial system, and attain real implementation. Fourth, cooperation would need to be more flexible and perhaps start with other less obvious areas, e.g. transportation infrastructure. Finally, African countries should coordinate their strategies in multilateral negotiations, such as in the WTO.

How could these strategies be implemented? Institutions are the key. Africa's institutional structure needs to de-concentrate, decentralize and devolve power, explained Robert Mudida, replying to a question by Emma Argutyan about the ways to change the relevant institutions. In the 1950s–60s, the solution was the state, but groups seized power to grunt: "it's our time to eat." In the 1970s-80s, the solution was the market, but the poor paid for the wave of neoliberal reforms. Today, "if Africa is to claim the twenty-first century" it needs institutional reform, it needs "liberalism from below," says Mudida.

Esra Pakin's paper entitled "The Rise of the Gulf: Sustainable or Temporary?" focused on the "bright picture" and the "dark clouds" looming over the Gulf Cooperation Council (GCC) countries – i. e. Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

On the bright side, Pakin sees the large production and export of oil plus vast gas reserves; the economic benefits for these countries' population and their international presence thanks to the oil and gas proceeds; the diversification of the economy towards construction, finance – for example Dubai's gold and commodities exchange market –, insurance, exports of cement and steel, or tourism.

On the negative side, she reveals the fact that the GCC countries account for only 1.5% of the global production and for 4% of the world's exports; Foreign Direct Investment (FDI) in these states is as low as 2.4% of all FDI; the diversification of the economy is occurring at a very slow pace; their monetary union has problems, mainly related to the pegging of their currencies to the dollar; the current financial crisis has left them in a very unstable situation – on the one hand they are injecting great amounts of liquidity into the market, but on the other hand their assets and exchange market are plummeting in value, while oil demand and price are dropping; there is the seemingly sempiternal threat of terrorism and the alienation of Iran; and, finally, their increasing population and the decrease of the number of skilled workers in these countries is considered a socio-economic time bomb.

Esra Pakin's recommendations to confront these challenges include the following steps. First, currencies should leave the dollar peg and adopt a trade-weighted currency basket. Second, further cooperation with Europe and the US is needed to defeat al-Qaida and other security threats, like the sea piracy along the Somali



Iskandar Jahja (Summer School 2008) and Head of Program David Bosold

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coast. Third, investments into tourism, international sport and cultural events need to be increased. Finally, more resources should be allocated to research, development and training.

Questions from the audience dealt with regional integration, institutional reform, education, the impact of conflict in Africa, the consequences of foreign intervention, and possible contributions by Europe to growth and stability in the two regions.

# Strategic Options of Economic Integration and Global Trade for Africa in the 21st Century

Robert Mudida

#### Introduction

Despite huge strides in economic development made in many parts of the world over the last few decades, many people in Africa still remain in dire poverty. According to the 2007/2008 United Nations Human Development Report, the twenty countries with the lowest human development are all located in Sub-Saharan Africa. Trade has often been identified as a vital engine of economic growth and development to facilitate an African renaissance in the 21st Century. However, economic integration schemes in Africa continue to suffer from many limitations and Africa's participation in the global economy remains miniscule. Regional integration arrangements in Africa, for example, continue to be characterized by overlapping membership and weak institutions. At the turn of the new century Africa's share of world trade plummeted to levels below those in the 1960s when it had accounted for 2 percent of world trade. The erosion of Africa's world trade share represents a staggering income loss of billions of dollars annually. The acceleration of globalization seems to have placed Africa at the threshold of further marginalization.

With the formation of the African Union in 2002 and associated institutions such as the New Partnership for Africa's Development (NEPAD), it appeared that there was a renewed impetus for development on the continent. A new and better calibre of African leaders emerged in some countries in the 21st century, although with some notable exceptions. This paper will explore what needs to be achieved for economic integration to be more effective in Africa and for Africa to participate more effectively in global trade. The relationship between different economic integration initiatives in Africa to global trade liberalization in the framework of the WTO will be explored. It will be argued that in order for African states to become more fully integrated in the global economy they will need to adopt a more pro-active rather than reactive approach. Such an approach will center on building more effective institutions at the national and regional levels so as to give Africa a greater voice in the 21st century. Africa's development challenges are essentially about a crisis of institutions at the political, economic and social levels. Weak regional institutions reflect internal weaknesses of member states. The paper will explore competing conceptual constructs of regional integration in Africa with a view to arriving at a set of strategic options for enhanced effectiveness. For



Robert Mudida

example, open regionalism based on neo-classical assumptions will be contrasted with the concept of "regionalism from below" which emphasizes the importance of civil society and informal organizations in regionalism. Concerns of African states arising from the existing multilateral framework and current trade round of the WTO will also be examined as will be strategic options for integrating Africa more fully into the global economy.

#### Africa's Position in World Trade

Africa's relative performance in world trade has been generally declining over the past thirty years. Although the levels of merchandise trade have increased for all African countries, Sub-Saharan Africa's share of world trade has been in decline for several decades, most markedly since the 1980s. Table 1 shows, for example, that Africa's share of world exports was lower in 2006 when it stood at 3.1% as compared to 1963 when its share of world trade was 5.7%. The extent of this poor performance becomes clear when we compare Africa's performance with that of the Asian region whose share of world trade has doubled over the same period reaching 27.8 percent in 2006. This implies that Africa's trade performance in global terms is far below that of other developing regions. These declining trends indicate Africa's increased marginalization in world trade.

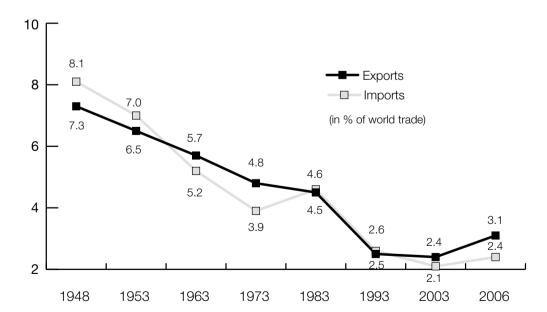


Figure 1: Africa's Share of World Trade

Source: European Centre for International Political Economy (ECIPE), Media Briefing Note, no. 1/2007.

<sup>1</sup> European Centre for International Political Economy, Africa and World Trade, Media Briefing Note, no. 1/2007, p. 1.

The figure reveals that even during the period 2003 and 2006 where there has been a slight upswing in Africa's world share, this mostly reflected rising oil prices. Thus the upswing is only confined to a handful of countries, such as Angola and Nigeria. While this constitutes a positive development for oil producers, most African countries have continued to experience deterioration of their role in world trade.

Sachs and Warner<sup>2</sup> assert that Africa has been left out of the process of globalization. The World Bank estimates that losses in world trade have cost Africa almost \$ 70 billion a year due to a lack of product diversification and falling market shares for traditional commodities.<sup>3</sup> African states are still heavily dependent on traditional export commodities despite their low income elasticity of demand and their declining terms of trade in the long run. Continuing concentration on these traditional exports will have adverse consequences on income and employment.<sup>4</sup>

Rationale and Fundamental Challenges of Economic Integration Initiatives in Africa

Economic integration refers to the merging of the economies and economic policies of two or more countries in a given region to various degrees.<sup>5</sup> Economic integration occurs whenever a group of countries in the same region join together to form a regional trading bloc. Development economists have argued that developing states should orient their trade towards each other. They base their arguments on the notion that greater collective self-reliance will be fostered and that there are comparative advantage changes to South-South as opposed to North-South trade. The fundamental economic rationale for economic integration of African economies is a long-term dynamic where integration provides the opportunity for industries that have not been established yet as well as those that have in order to take advantage of the economies of large scale production facilitated by expanded markets. In the absence of integration, each separate state may not have a sufficiently large domestic market to enable local industries to lower their production costs through economies of scale.<sup>7</sup> Economic integration also provides the possibility of an increase in trade patterns where free trade within regional trading blocs leads to a shift in production from high to low-cost member states. Given the tiny and fragmented economies in Africa, the issue is not whether Africa should be integrated but rather how.

<sup>2</sup> Jeffrey D. Sachs and Andrew M. Warner, Sources of Slow Growth in African Economies, in: Journal of African Economies, no. 3/1997, pp. 335–376.

<sup>3</sup> World Bank, Can Africa Claim the 21st Century?, Washington, DC, 2000.

<sup>4</sup> Ibid

<sup>5</sup> Michael P. Todaro and Stephen C. Smith, Economic Development, London 2006.

<sup>6</sup> W. Arthur Lewis, The Slowing Down of the Engine of Growth, in: American Economic Review, no. 4/1980, pp. 555–564.

<sup>7</sup> Todaro and Smith, op. cit. (note 5).

Despite these potential advantages there are fundamental challenges for economic integration initiatives in Africa. Africa has a multitude of sub-regional schemes and strong political rhetoric supporting them, but the results remain modest. The Abuja Treaty of 1991 envisaged an African economic community, but progress has been mostly sub-regional. The main economic integration schemes in Africa are the Common Market for Eastern and Southern Africa (COMESA), the Southern Africa Development Community (SADC), the Economic Community of West African States (ECOWAS) and the East African Community (EAC). However, intraregional trade among African countries remains low accounting for less than 10% of the total trade of African States. Many African states produce similar primary products thereby limiting the potential for trade.

Asymmetries in development among member states within a regional trading bloc have constituted a major obstacle to economic integration in Africa. A fear persists that the more developed and relatively larger members of the trading bloc will get disproportionate benefits. Once the poorer member states open up their economies to the more developed member states the result could be flooding of the domestic market with cheaper goods and the closure of domestic industries in the poorer states. This factor contributed to the collapse of the East African Community in 1997 since Kenya, which had a relatively more developed manufacturing base compared to Uganda and Tanzania, was considered to be gaining more from the economic integration.

Many African states belong to several regional integration initiatives at the same time leading to overlapping and conflicting obligations. Kenya, for example, belongs to both the East African Community and the Common Market for Eastern and Southern Africa. Tanzania belonged both to SADC and COMESA and eventually had to pull out of COMESA because of conflicting objectives of the two regional trading blocs.

The design and objectives of regional integration schemes in Africa have also been driven by a preference for formal trade and factor market integration rather than a focus on basic policy coordination and collaboration in regional projects. This factor has resulted in excessively ambitious models of regional integration. However, Africa's unfavorable structural features such as competitive primary production, small size, low levels of per capita incomes, limited manufacturing capacity, weak

<sup>8</sup> World Bank, Can Africa Claim the 21st Century?, op. cit. (note 3).

<sup>9</sup> George Saitoti, The Challenges of Economic and Institutional Reforms in Africa, Aldershot 2002, pp. 101–103.

financial sectors, poor transportation and communications infrastructure make such ambitious models difficult to implement.<sup>10</sup>

African integration schemes have also suffered from implementation lapses, including those due to weak governance. Many states cannot cope with the loss of national sovereignty that integration schemes would entail. Other factors that have limited economic integration in the African context include a lack of adequate technical and management expertise, and also concerns about losing trade tax revenues.

A number of African states have also experienced protracted conflicts. These include, for example, the Democratic Republic of Congo, Sierra Leone, Liberia, Somalia and Sudan. Such conflicts hinder effective regional integration because the emphasis of states becomes to address domestic instabilities and they cannot therefore effectively focus on fostering regional integration.

Linking Economic Integration and Africa's Position in World Trade

An important debate with respect to regional integration is whether regional groupings will fragment the world economy and run counter to the recent globalization of trade. It can be argued that liberalizing trade at the sub-regional level





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excludes non-member countries from preferential trade thereby offsetting globalization at a broader multilateral level. However, for countries in Africa, effective regional trading blocs can provide a buffer against the negative effects of globalization while still permitting the dynamic benefits of intra-union specialization and greater equality among members to take place. Globalization refers to the integration of markets, nation-states, and technologies to a degree not witnessed before and permitting individuals, corporations and nation-states to reach around the world further, faster, deeper and cheaper than ever before. A challenge for African states is to gain from the trend towards globalization. Stronger regional integration blocs will improve Africa's position in world trade, especially if such economic integration encourages greater competitiveness of Africa's products. Regional integration can also encourage investment in the export sector in African states as entire regions can be promoted as one investment area. More effective economic integration blocs in Africa will also give African states a greater voice in multilateral institutions such as the World Trade Organization.

#### Concerns for African States in the current Doha Trade Round

The current round of WTO multilateral trade negotiations was launched in November 2001 in Doha, Qatar. It is intended to enhance the development relevance of the WTO, although expectations for its successful conclusion remain mixed. The collapse of the Doha Ministerial in Cancún, Mexico, in September 2003 underscored the challenges faced by the negotiators. African states have several key concerns relating to the Doha round.

Agriculture remains a fundamental concern for African states because many of their economies are still predominantly agricultural. The WTO Agreement on Agriculture is seen as one of the most controversial because special and differential treatment is, in effect, provided to developed rather than developing countries. African, and other developing countries, accepted the Uruguay Round Agreements as a whole mainly because they thought they would benefit from agricultural liberalization and subsidy reduction in the OECD countries under the Agreement on Agriculture. However, these promises were often not fulfilled and loopholes such as the "Green Box" permitted supposedly non-trade distorting subsidies by the developed countries. As a result, OECD countries' agricultural subsidies have been legitimized and have increased rather than decreased since the Uruguay

<sup>11</sup> Todaro and Smith, op. cit. (note 5).

<sup>12</sup> Thomas L. Friedman, Understanding Globalisation: The Lexus and the Olive Tree, New York, NY, 2000, pp. 3-16.

<sup>13</sup> Carlos A. Primo Braga and Elwyn Grainger-Jones, The Multilateral Trading System: Mid-Flight Turbulence or Systems Failure?, in: Richard S. Newfarmer (ed.), Trade, Doha, and Development: A Window into the Issues (The World Bank), Washington, DC, 2006, pp. 27–42.

Round.<sup>14</sup> Many farmers in Africa have therefore been pushed out of farming or lost their land because they cannot compete.

The General Agreement on Trade in Services (GATS) is also of concern to African states. Trade in services was brought into GATT for the first time under the Uruguay Round despite misgivings among developing states. As a compromise it was agreed that a "bottom-up" approach would be used so that each member would have the right to decide on the sectors it would open up and the limitations to liberalizing each sector. However, the GATS agreement is one from which the African states reap little benefit because of the unequal competitive positions of service suppliers from the North and South. African countries have therefore been put under considerable pressure to liberalize in service sectors where they cannot compete thus adversely affecting local service industries and development objectives. 15 International trade in services is dominated by a few large multinational corporations and given their massive financial strength, world-wide networks and access to sophisticated information technology infrastructure, it is difficult for indigenous African country providers, which are mainly small and medium enterprises, to catch up. Liberalization in services has therefore aggravated the divide in supply capacity between developed and developing states.

Yet another area of concern for African states in the Doha Round is the Trade-Related Aspects of Intellectual Property Rights (TRIPs) agreement. Intellectual property rights were brought for the first time into a multilateral trade framework during the Uruguay Round. This was done especially at the behest of multinational corporations in the pharmaceutical and information technology industries, especially in the United States, which claimed they were undergoing significant losses from the inadequate protection of their intellectual property abroad. African states, like other developing countries, resisted the TRIPs agreement on the basis that it would benefit multinational corporations while preventing their own enterprises from copying technologies to develop as had been done historically in the developed countries. The TRIPs agreement, however, came into effect in 1995 and it sets high standards of protection for patents, copyrights, trademarks, and industrial design and licenses, allowing patents to be granted on products and processes for twenty years. 16 The issue of patenting of life forms under the TRIPs agreement also received widespread criticism from African states. In addition to raising fundamental ethnical issues such as the patenting of the human genome, the agreement has in a sense facilitated "biopiracy" through the patenting of life

<sup>14</sup> Fatoumata Jawara and Aileen Kwa, Behind the Scenes at the WTO: The Real World of International Trade Negotiations The Lessons of Cancun, London 2004, pp. 25–49.

<sup>15</sup> Ibid.

<sup>16</sup> Jawara and Kwa, ibid.

forms, including plants and their medicinal functions, which were previously available for public use in African countries.<sup>17</sup>

Strategies for Overcoming the Challenges of Poor Trade Performance in Africa in the 21st century

African states therefore face a myriad of challenges in trade both at the level of regional integration and at the WTO multilateral level. African countries have considerable potential, but realizing this potential requires action on several fronts especially to raise international competitiveness. Sustaining competitive and stable real exchange rates are vital to improving export performance in Africa. Real exchange rates are critical for export growth. Chile's experience suggests that economic competitiveness need not come at the cost of adequate integration with the global capital market.<sup>18</sup> Initially interest and exchange rates in Chile were unfavorable to export growth, but gradually these factors changed leading to an increase in the profitability of exports relative to producing non-tradable commodities. The Chilean experience provides valuable lessons for African states seeking to improve their competitiveness. Chile's exports have been one of the engines behind its development. The export sector in Chile represents about 40 percent of the country's Gross Domestic Product. Chile's export market diversification provides an important lesson for the export policy of African countries which tend to concentrate on a narrow range of markets and products. 19 Kenya's exports, for example, tend to be concentrated on the East African region and the European Union. Effective market diversification can, however, only be achieved by a welldeveloped and implemented export policy. Chile provides a compelling case for a limited but important role of the state in export promotion. Chile's endowments, like many African countries, have included a rich natural resource base. Its export promotion policies show that foreign direct investment is responsive to activities that open up new export possibilities or introduce new technologies. In addition, a growth strategy spearheaded by a few niche products can lead to important dividends. Chile's experience also shows that temporary well-managed subsidies can spur the growth of non-traditional exports.<sup>20</sup>

The East Asian experience also reinforces the argument that the state can play an important role in promoting exports by establishing a pro-export incentive struc-

<sup>17</sup> Ibid.

<sup>18</sup> World Bank, op. cit. (note 3), pp. 219-233.

<sup>19</sup> Robert Mudida, The Chilean Experience: Lessons for Kenyan Economic Policy, in: KASNEB Newsline, no. 3, July-September 2002, pp. 3–7.

<sup>20</sup> Manuel Agosin, Export Performance in Chile: Lessons for Africa, in: Gerald K Helleiner (ed.), Non-Traditional Exports and Development in Sub-Saharan Africa: Issues and Experiences (forthcoming).

ture that coexisted with moderate but highly variable protection of the domestic market.<sup>21</sup> A variety of instruments were used in East Asian countries including export credit, duty-free imports for exporters and their suppliers, export targets, and tax incentives. These measures can be studied by African governments and adopted where appropriate.

African tariffs and other trade restrictions are still higher than in other developing regions and anti-export bias is still considerable. This has significant impact especially because of the small size of African economies and the importance of imported inputs. Many African states are still heavily dependent on trade taxes for about one-third of government revenue.<sup>22</sup>

It is vital to introduce complementary measures beyond trade policy to improve Africa's competitiveness. Trade reforms need to be accompanied by measures that lay a firm foundation for investment and production. These include an effective and non-corrupt tax administration, functioning commercial courts, reliable infrastructure, and a working financial system.

<sup>22</sup> World Bank, op. cit. (note 3).



Dominik Antonowicz, Gerald Neugschwandtner, and Alejandro Ribó Labastida (all Summer School 2002)

<sup>21</sup> World Bank, The East Asian Miracle: Economic Growth and Public Policy, Oxford 1993, pp. 12-13.

Given shortfalls in domestic investment because of low incomes, it is vital for African states to attract substantial investment to the export sector. A major challenge in this respect is that many African countries are still ranked among the riskiest places to do business and even retaining domestic savings is difficult. A critical priority is for African governments to provide a safe and profitable business environment. Institutional reform is key to improve the business environment. Institutions in this context refer to sets of formal or informal rules governing the actions of individuals and organizations and the interactions of participants in the development process.<sup>23</sup> Formal legal rules may, for example, ensure that contracts are enforced, property rights honored and competition maintained. Informal rules relate to unwritten rules which are deeply embedded in a society's culture and reflect its fundamental values. Institutions simultaneously enable and constrain the actions of individuals or organizations. Institutional reforms specify new rules or change old ones with the intention of changing the behavior of individuals and organizations. African states should aim to create institutions which aim to promote entrepreneurship, profits and capital accumulation while achieving an overall objective of promoting the common good.<sup>24</sup> It is necessary to undertake measures to strengthen the state and manage public resources in more accountable ways. Domestic and international pressure must be sustained so as to ensure greater entrenchment of democratic values in many African states. Such values combined with a greater concern for the common good will help to stem the massive levels of corruption that have impeded development in many parts of Africa. Institutional reform will also help to reduce protracted conflicts in many parts of Africa because it will ensure that basic needs of the larger proportion of the population are more adequately met. There are close linkages between security and development.<sup>25</sup>

Economic Partnership Agreements (EPAs) also constitute an important vehicle for improving Africa's trade prospects in the 21st century. They are based on the principle of "more trade not aid." An example is the attempt to create a free trade area between the European Commission of the European Union and the Group of African, Caribbean and Pacific countries (ACP). The EPAs are a fundamental element of the Cotonou Agreement, which is the latest agreement in the history of ACP-EU Development Co-operation. The Cotonou Agreement aims at poverty reduction while contributing to the sustainable development and gradual integration of the ACP countries into the world economy.

<sup>23</sup> World Bank, Entering the 21st Century: World Development Report 1999/2000, Washington, DC, 2000, pp. 13-30.

<sup>24</sup> Delphin Rwegasira, From Recovery to Accelerated Development: Some Key Issues for Twenty-First Century Africa, in: Ernest Aryeetey et al. (eds.), Asia and Africa in the Global Economy, Tokyo 2003, pp. 385–399.

<sup>25</sup> Mudida, The Security-Development Nexus: A Structural Violence and Human Needs Approach, in: Katrin Brockmann, Hans Bastian Hauck and Stuart Reigeluth (eds.), From Conflict to Regional Stability: Linking Security and Development (Research Institute of the DGAP), Berlin 2008, pp. 11–22.

Despite past challenges, the case for stronger economic integration in Africa remains compelling. There is a widely held view within Africa that African unity could help stem its political and economic marginalization. The promise of pan-Africanism has kept alive the ideals of the Lagos Plan of Action despite formidable challenges in its implementation. Thus a vital policy question for African states in the 21st century is how regionalism can help to attain Africa's development goals in a globalized economy. Given Africa's modest success with regional integration, it is vital that a regionalism with a more flexible design is stressed, based on cooperation among countries to jointly implement specific projects. Such cooperation should include transportation and communications infrastructure in addition to investment regulation and trade policies.

Since many African economies are small, both individually and in sub-groups, the potential welfare gains from freer trade in Africa may be limited in the short to medium term. This implies that perhaps the principal focus of integration should be on promoting investment rather than intra-regional free trade. The creation of an economic space where investors can produce for regional as well as global markets may provide small African economies with better growth opportunities than simply removing trade barriers among themselves.

The concerns that African countries have relating to the current Doha Round underscore the need to pay more attention to multilateral negotiations and try to influence the outcome. Many African states do not even have representatives in the WTO. African states should participate in setting the global agenda and partner with other developing countries, for example, in Latin America and Asia to negotiate for the dismantling of restrictive trade practices that inhibit export diversification in poor countries. To improve the multilateral trade regime, institutional reforms within the WTO are required. These reforms should focus on how decisions are made, what gets put on the agenda, how disagreements are resolved and how rules are enforced. Such reforms, if effective, will ensure that the benefits of globalization are more equitably shared. The agricultural sector, for example, accounts for almost two-thirds of the economic gains that could be obtained by dismantling the present global system of merchandise trade barriers and farm subsidies.<sup>27</sup>

<sup>26</sup> Joseph Stiglitz, Making Globalisation Work, London 2006, pp. 61-101.

<sup>27</sup> Kym Anderson and Will Martin, Agriculture: The Key to Success of the Doha Round, in: Richard S. Newfarmer (ed.), op. cit. (note 13), pp. 77–96.

Conclusion: Towards a New Trade paradigm?

The current trade challenges faced by African states expose the shortcomings of the neo-liberal model of economic development which has dominated the WTO. An important aspect of the new agenda is to recognize that trade is an instrument and not the ultimate goal of policy. The fundamental policy goal is economic development in the context of a fair, inclusive and politically acceptable globalization.<sup>28</sup> Thus for African states, trade represents much more than simply commercial interactions—it is a vital avenue for their development. "Open regionalism" is informed by neo-classical assumptions that the market is the key driving force of integration.<sup>29</sup> This approach is consistent with unfettered economic globalization and has a tendency of reinforcing in some respects the inequalities in the international system. In view of their development objectives, African states should pursue an approach to economic integration and multilateralism that mitigates the adverse effects of globalization on their economies. Such an approach should emphasize collective self-reliance through the mobilization of regional resources and also promote "regionalism from below." This entails underscoring the importance of civil society and the informal sector in the economic integration framework.<sup>30</sup> Such home-grown approaches serve to improve Africa's situation in economic integration and its position in global trade. Enabling macro-economic policies should also be pursued at the domestic level underpinned by measures for improved accountability and infrastructure. Institutional reform is vital at the political, economic and social levels. Such reform should aim at infusing a culture of greater concern for the common good. Only then can Africa truly claim the 21st century.

<sup>28</sup> Thomas I. Palley, Globalisation and the Changing Trade Debate: Suggestions for a New Agenda, in: Public Policy Brief (The Levy Economics Institute of Bard College), no. 91/2007, pp. 5-6.

<sup>29</sup> John K. Akokpari, Dilemmas of Regional Integration and Development, in: Akokpari et. al. (eds.), African Union and Its Institutions (Centre for Conflict Resolution), Cape Town 2008, pp. 85-110.

<sup>30</sup> Ibid

## The Rise of the Gulf: Myth or Reality?<sup>1</sup>

Esra Pakin

The Arab states of the Persian Gulf, namely the kingdoms of Bahrain and Saudi Arabia, the sultanate of Oman, and the emirates of Kuwait, Qatar, and the United Arab Emirates (UAE), constitute a region with some of the fastest growing economies in the world. These six countries forming the members of the Gulf Cooperation Council (GCC) are increasingly integrating into the global arena, investing abroad, welcoming foreign workers, and hosting such events as the 2006 Asian Games in Qatar. They are all members of the Arab League and World Trade Organization, and furthermore, Qatar, Saudi Arabia, Kuwait and the UAE are prominent members of OPEC. Despite the boom they have enjoyed thanks to high oil prices, the region is vulnerable to some problems pertaining to domestic and international developments. This regional bloc will be a true global actor to the degree that it achieved monetary unity, diversified its economy, created a vigorous native work force and eliminated state and non-state threats around its vicinity. To date, the Gulf countries have been taking active steps to overcome these obstacles albeit to varying degrees and with varying success.



Looking at the bright picture first, the Gulf enjoys large production and export volumes of oil and oil products. A similar conclusion can be drawn for the Gulf's vast gas reserves. Qatar's gas reserves alone amount to more than twice the combined reserves of North America and the North Sea. Iran's alienation in the energy sector also adds to the region's revenues and leverage. Their account surpluses not only enable the GCC to build up international reserves but also help reduce



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<sup>1</sup> The author would like to thank Mari Luomi and David Chaim Weiss for their invaluable comments on the earlier version of this paper

<sup>2</sup> Saudi Arabia: Population 24 million, GDP per head (PPP) \$ 22,828, Real GDP growth 7.2%; United Arab Emirates: Population 5.2 million, GDP per head (PPP) \$ 28,222, Real GDP growth 8.5%; Qatar: Population 1.3 million, GDP per head (PPP) \$ 53,202, Real GDP growth 11.8%; Kuwait: Population 3.4 million GDP per head (PPP) \$ 39,791, Real GDP growth 6.8%; Bahrain: Population: 1 million, GDP per head (PPP) \$ 23,233, Real GDP Growth 6,9%; Oman: Population 2.58 million GDP per head (PPP) \$ 19,000 Real GDP growth 5.6%, all in: The Economist, Country Briefings. Retrieved from <a href="http://www.economist.com/countries">http://www.economist.com/countries</a> (accessed 25-10-2008); CIA The World Factbook—Oman. Retrieved from <a href="https://www.odci.gov/library/publications/the-world-factbook/geos/mu.html">https://www.odci.gov/library/publications/the-world-factbook/geos/mu.html</a> (accessed 26-10-2008).

<sup>3</sup> OPEC comprises Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela. Indonesia has suspended membership and will leave the cartel at the end of 2008, and Iraq does not have an output quota because of the country's post-war chaos.

<sup>4</sup> K. R. Singh. Energy Insecurity and Military Misadventures in the Persian Gulf Region, in: International Studies, no. 4/2007, pp. 293–294, 300.

indebtedness.<sup>5</sup> According to estimates by the Institute of International Finance, the countries are buyers of American shares and government bonds, as well as of European bonds, shares and foreign companies. Arab oil exporters also invest in China in the form of infrastructure projects or buying property and firms.<sup>6</sup>

The GCC has not only invested in the economies of and opened its markets for major actors but has also reached out to countries such as New Zealand or Malaysia. A Free Trade Agreement with New Zealand in September 2006 has made the GCC New Zealand's 8th largest export market, particularly in food and machinery.7 GCC investments to Malaysia have reached great sums in the sectors of manufacturing (i. e. metal products), services, finance, oil and gas. Malaysia also hosts the GCC-ASEAN Economic Center, launched in August 2008.8 The Gulf countries have long supported financially weak countries in the Middle East like Egypt and Jordan, by providing jobs for their citizens, attracting tourists, engaging in investment, and sustaining order in an unstable region. The International Institute of Finance argues that a large share of GCC funds goes to the Middle East and North Africa, where liberalization and privatization, as well as an increased pace of project implementation have invited capital. Among the recent assets acquired by the GCC countries are iron ore mines in Mauritania, bought by Qatar Steel for \$ 375m in November 2007, and a \$ 3 billion worth Saudi-financed oil refinery project in Bangladesh, in addition to Saudi refining interests in China, South Korea and the Philippines. Furthermore, Gulf-based telecommunication firms have spent at least \$ 20 billion in countries from Algeria to Singapore. 10 The GCC countries also engage in research on renewable energies since dependence on fossil fuels is believed to cause harmful ecological effects, drain the treasury through subsidies and increase food prices. More importantly, the economies are aware of the need to adapt to a post-carbon era once their oil production peaks and eventually decreases. In this respect, Saudi Arabia, Oman and Bahrain have the potential, experience and will to realize solar or wind energy projects. Masdar City in Abu

<sup>5</sup> Hilary Whiteman. The GCC & the Dollar, in: CNN.com, 1-2-2008. Retrieved from <a href="http://edition.cnn.com/2007/BUSINESS/12/06/gcc.fastfacts/index.html">http://edition.cnn.com/2007/BUSINESS/12/06/gcc.fastfacts/index.html</a> (accessed 29-10-2008).

<sup>6</sup> The Petrodollar Puzzle, in: The Economist, 9-6-2007.

<sup>7</sup> New Zealand Ministry of Foreign Affairs and Trade, New Zealand-GCC Free Trade Agreement, March 2007. Retrieved from <a href="http://www.mfat.govt.nz/Trade-and-Economic-Relations/Trade-Agreements/Gulf-Cooperation-Council/index.php">http://www.mfat.govt.nz/Trade-and-Economic-Relations/Trade-Agreements/Gulf-Cooperation-Council/index.php</a> (accessed 29-10-2008).

<sup>8</sup> The Launching Ceremony of the GCC-ASEAN Economic Center in Malaysia, 21-8-2008. Retrieved from <a href="http://www.miti.gov.my">http://www.miti.gov.my</a> (accessed 29-10-2008).

<sup>9</sup> Michael Slackman. Slowdown in Persian Gulf Reverberates in Middle East, in: The New York Times, 28-10-2008. Retrieved from <a href="http://www.nytimes.com/2008/10/29/world/middleeast/29mideast.html?\_r=1&oref=slogin">http://www.nytimes.com/2008/10/29/world/middleeast/29mideast.html?\_r=1&oref=slogin</a> (accessed 9-11-2008).

<sup>10</sup> Cash is going to the poor, too, in: The Economist, 21-2-2008.

Dhabi for example, aiming to be the first carbon neutral city in the world to house 50,000 people, is expected to be finished by 2016.<sup>11</sup>

The Gulf countries also follow a variety of other ways to re-adjust their economies to a post-carbon world. In particular, Saudi Arabia's recent accession to the WTO is paving the way for the liberalization and further diversification of its economy. Once insurance was officially regarded as sinful for it meant precaution against God's will, now the country has acknowledged that modern commerce requires insurance. With the reevaluation of previously held religious axioms also come additional fields of investment. Today's Saudi Arabia is already a big exporter of cement and steel, and is intending to invest into aluminum. The UAE is also seeking to reduce its dependence on hydrocarbons. Its second-largest emirate, Dubai, has taken steps to develop its services sector, particularly financial services and tourism. In addition, the Dubai International Financial Exchange (DIFX), and the first commodities and futures exchange in the Middle East, the Dubai Gold and Commodity Exchange (DGCX) were both launched in 2005. With the opening of DGCX for derivatives trading, Dubai is now in the same camp with

<sup>13</sup> UAE Factsheet, in: The Economist, 26-9-2008.



Peter Matjasic from Slovenia and Ann-Kristin Otto from Germany, former team member of the Forum Euroipean Foreign and Security Policy

<sup>11</sup> Eckart Woertz, Alternative Energy Trends and Implications by the GCC Countries (Gulf Research Center Reports), Dubai, July 2008, pp. 14–19.

<sup>12</sup> William Clatanoff, C. Christopher Parlin, Robert Jordan et al., Saudi Arabia's Accession to the WTO: Is a 'Revolution' Brewing?, in: Middle East Policy, Spring 2006, pp. 5, 12, 21.

its counterparts in New York, London and Tokyo.<sup>14</sup> In terms of tourism, three palm-shaped island-resorts and the recently opened seven-star hotel Burj al-Arab illustrate the potential of the region and the ambitions of its investors. Dubai's tourism infrastructure also features the Middle East's first indoor ski-slope, and Dubailand, an entertainment complex.<sup>15</sup>

The Kuwaiti government is equally keen on decreasing its dependence on oil. The planned US\$ 77 billion City of Silk is expected to be the largest real estate development project in the Middle East. 16 As for Bahrain, it has the fastest growing economy in the Arab world according to figures by the UN Economic and Social Commission for Western Asia.<sup>17</sup> It is also a popular tourist destination due to the kingdom's heritage and the Middle East's first international Formula 1 Circuit. 18 As for Qatar, the Qatar Science and Technology Park established in 2004 is a home not only for technology-based companies from around the world like ExxonMobil, Microsoft, Shell and Total, but also for campuses of Carnegie Mellon, Texas A&M, Weill Cornell and other leading universities within a complex called Education City. 19 Lastly, Oman's economic diversification points to fertilizer and manufacturing industries, not to mention several deposits of exportable minerals and assembling industries. Oman's strategic location as the gateway of energy sources enhances its marketing potential. In the field of tourism, Oman is also a promising tourist destination.<sup>20</sup> Al Baleed, the cultural capital of the Sultanate hosts the popular Archaeological Park. Oman outdoors is also a favorable venue for adventure tourists.<sup>21</sup>

"Soft belly": fixed peg, foreign labor, frail security

On the negative side, despite efforts to open up to the world with respect to global markets, the GCC output in 2007 accounted for only 1.5% of world production. Furthermore, FDI inflows to GCC countries have been truly modest, comprising a total of less than 2.4% of global direct investments. Nevertheless, hope rests upon

<sup>14</sup> Ten Global CEO's Predict the GCC's Economic Prospects in 2006, January 2006. Retrieved from <a href="http://www.zawya.com/marketing.cfm?zp&p=/story.cfm/sidZAWYA20060103112327">http://www.zawya.com/marketing.cfm?zp&p=/story.cfm/sidZAWYA20060103112327</a> (accessed 29-10-2008).

<sup>15</sup> A New Itinerary, in: The Economist, 15-5-2008.

<sup>16</sup> Mohamed F. Hamoda. Desalination and water resource management in Kuwait, in: Desalination, no. 1–3 (20-9-2001), pp. 385–393; Mohamed Al-bahoua, Zamzam Al-Rakafa et al., Desalination experience in Kuwait, in: Desalination, no. 1–3 (5-2-2007), pp. 403–415; City of Silk website. Retrieved from <a href="http://www.madinat-al-hareer.com/">http://www.madinat-al-hareer.com/</a> (accessed 26-10-2008).

<sup>17</sup> Bahrain expected to bustle, in: Arabian Business, 1-2-2007. Retrieved from <a href="http://www.arabianbusiness.com/index.cpm?option=com\_content&view=article&id=7116">http://www.arabianbusiness.com/index.cpm?option=com\_content&view=article&id=7116</a> (accessed 25-10-2008).

<sup>18</sup> See <a href="http://www.bahraingp.com.bh/">http://www.bahraingp.com.bh/</a> (accessed 9-11-2008)

<sup>19</sup> Qatar Science and Technology Park website. Retrieved from <a href="http://www.qstp.org.qa/output/page7.asp">http://www.qstp.org.qa/output/page7.asp</a> (accessed 25-10-2008); Small Country, Big Ideas, in: The Economist, 5-6-2008.

<sup>20</sup> Doing Business in Oman (Oman Chamber of Commerce and Industry website). Retrieved from <a href="http://www.chamberoman.com/doing\_occi\_opportunities9.asp">http://www.chamberoman.com/doing\_occi\_opportunities9.asp</a> (accessed 9-11-2008).

<sup>21</sup> Oman Ministry of Tourism website. Retrieved from <a href="http://www.omantourism.gov.om/">http://www.omantourism.gov.om/</a> (accessed 9-11-2008).

plans for a monetary union, expected to start in 2010. Henceforth, economic and financial policies would become unified, a single currency would be introduced and the region would acquire more bargaining power, a bigger market and fewer transaction costs.<sup>22</sup> But the plan involves big impediments along the road, requiring that the GCC countries should maintain a fixed peg to the US dollar. In addition, it stipulates low inflation rates in a region infamous for high inflation rates. This has been the case since 2003, due to the economic boom which coincided with the rise in oil prices—except for the least hydrocarbon-dependent Bahrain.<sup>23</sup>

The GCC countries have pegged their exchange rates to the US\$ since 1986, except for Kuwait, which severed these ties in May 2007. This was one of the steps before the supposed monetary union, whose primary aim is to securing the region's small sized and inexperienced economies. Many Arab-speaking countries have followed this route of providing greater stability to the domestic currency and delivering low price inflation, at least in tradeable goods. However, a stable nominal exchange rate does not guarantee full domestic price stability. A fixed currency is vulnerable to swings in oil price. In light of high oil prices and vast riches, their exchange rates should rise. The currency is expected to be strengthened, but the peg prevents nominal appreciation. In case of a falling dollar, the result is rising domestic inflation. The dollar's decline is pushing up import prices across the region, particularly food prices. Furthermore, as certain grains are diminishing in quality and quantity due to global warming and biofuel production, the Gulf countries may be faced with even higher food prices. The countries are since the region of the grains are diminishing in quality and quantity due to global warming and biofuel production, the Gulf countries may be faced with even higher food prices.

Consequently, despite their budget surpluses, the Gulf's casting its fate with the dollar's have not fared well. A recent example is the current US financial crisis that has brought with it negative repercussions on a global level. The reasons for this crisis are beyond the scope of this paper.<sup>28</sup> Nevertheless, the Gulf became one

<sup>22</sup> Crucial Steps to Capture Gains from Integration, in: Kuwait Times, 19-10-2008. Free trade agreement was launched in 1983, followed by the customs union in 2003 and common market in early 2008.

<sup>23</sup> William T. Wilson, Is the GCC Ready for Monetary Union? An Economic Evaluation of its Prospects (National Bank of Kuwait GCC Research Note), 28-9-2008, pp. 2, 3, 7, 9

<sup>24</sup> Whiteman, The GCC & the Dollar (note 4).

<sup>25</sup> Simon Gray and Mario I. Blejer, The Gulf Cooperation Council Region: Financial Market Development, Competitiveness and Economic Growth, in World Economic Forum, Global Competitiveness Reports, 2007, 42. Retrieved from <a href="http://www.weforum.org/pdf/Global\_Competitiveness\_Reports/Reports/chapters/1\_4.pdf">http://www.weforum.org/pdf/Global\_Competitiveness\_Reports/Reports/chapters/1\_4.pdf</a> (accessed 29-10-2008); Time to break free, in: The Economist, 24-11-2007.

<sup>26</sup> Whiteman. The GCC & the Dollar (note 4).

<sup>27</sup> Peter Beaumont, Food riots fear after rice price hits a high, in: The Observer, 6-4-2008; Paul Krugman, Grains Gone Wild, in: The New York Times, 7-4-2008.

<sup>28</sup> Very succintly, fueled by cheap credit, a housing bubble developed in the US from 2001 onwards. The FED followed a low interest policy, while the banks marketed risky mortgage products and increased lending to subprime customers. The crisis peaked in March 2007 when more than 25 subprime lenders in the US declared bankruptcy, announced enormous losses or put themselves up for sale.

of the foremost actors that came to the aid of the US. The Gulf countries gave a helping hand to some of subprime lenders, such as Merrill Lynch, which was injected with capital by Kuwait, together with Korea, Japan and Singapore. The Abu Dhabi Investment Authority purchased nearly 5% in Citigroup shares for a total \$7.5 billion. Most importantly, the Gulf, already owning a considerable amount of the US Treasury debt may be expected to buy up to half a trillion dollars worth of debt before the end of 2008.<sup>29</sup>

However, with an estimated \$1.8-2 trillion in foreign assets, of which about 60% are held in US \$, the GCC countries are concerned about asset depreciation. The hitherto announced subprime exposure of GCC banks totaling about \$ 2.7 billion is comparatively small in the face of US and Europe's, which amount to more than \$ 300 billion. However, international banks, being influential actors in local project finance market as they have larger capitalizations than GCC banks, face liquidity constraints. This might negatively affect the fate of mega-infrastructure projects.<sup>30</sup> In the Dubai property market, Nakheel, the developer of the Palm Jumeirah and a planned 1.4 km tower, announced the cut of 500 jobs and the further delay of some of its projects. In Bahrain, prices have dropped as developers and home buyers find it hard to get loans.<sup>31</sup> Parenthetically, the majority of assets in the region are not managed by banks, but by Sovereign Wealth Funds (SWF) like the Abu Dhabi, Kuwaiti and Qatar Investment Authorities and Bahrain Mumtalakat. Interestingly, the SWFs have been less affected by the current crisis despite the huge sums of investments that are administered by these funds.<sup>32</sup> It comes thus as no surprise that the US Deputy Secretary of the Treasury Department Robert Kimmit's recent tour in the Gulf region was aimed at attracting investments from SWFs.<sup>33</sup>

Governments in the Gulf, including Kuwait's, have already taken additional measures to stabilizing their economies by injecting, or pledging, huge amounts of liquidity into their banking systems. Most Gulf nations have also further cut interest rates. The latest IMF regional economic outlook forecasts economic growth in

<sup>29</sup> Eckart Woertz, Impact of the US Financial Crisis on GCC Countries (Gulf Research Center Report), Dubai, October 2008, pp. 3–7.

<sup>30</sup> Woertz, op. cit., pp. 8-11.

<sup>31</sup> Bradley Hope, Gulf economies will 'bounce back', in: The National (Abu Dhabi), 1-12-2008. Retrieved from <a href="http://www.thenational.ae/article/20081201/BUSINESS/275864607/1005/rss">http://www.thenational.ae/article/20081201/BUSINESS/275864607/1005/rss</a> (accessed 5-12-2008). Also see The Global Financial Crisis and the Gulf Cooperation Council (Brookings event), 23-11-2008. Retrieved from <a href="http://www.brookings.edu/events/2008/1123\_financial\_crisis.aspx">http://www.brookings.edu/events/2008/1123\_financial\_crisis.aspx</a> (accessed 14-12-2008).

<sup>32</sup> Woertz. op. cit. (note 28), pp. 9–11. Overall \$ 15 billion of foreign currency debt (local and bonds) have to be repaid in the GCC in 2008 and \$ 35 billion in 2009, plus \$ 6.9 billion in local currency. The widely observed Islamic banking in the Gulf is one of the reasons for immunity against the crisis. Its closed system incorporates provisions for protecting wealth and financial interests, in the present case most notably by a comparatively low level of integration into the global financial market.

<sup>33</sup> Gulf, the Savior in the time of crisis, 1-11-2008. Retrieved from <a href="http://www.ndtv.com/convergence/ndtv/StoryPrint.aspx?ID=NEWEN20080070804&ch=633611444415363750">http://www.ndtv.com/convergence/ndtv/StoryPrint.aspx?ID=NEWEN20080070804&ch=633611444415363750</a> (accessed 2-11-2008).

the Gulf region will slip to 6.6% in 2009 from an estimated 7.1% in 2008.<sup>34</sup> Stock markets in GCC countries witnessed a big downturn last October, losing nearly \$ 200 billion in a few days.<sup>35</sup> There is also the prospect of reduced demand for crude oil and products, not to mention the slump in petrochemical and aluminum products of GCC's newly launched heavy industries.<sup>36</sup>

It might be best for the Gulf states as well as the global economy if the states followed the Kuwaiti example of shifting to a currency basket. A more flexible exchange-rate regime would allow them to liberate themselves from America's monetary policy, which has rendered real interest rates too low for such fast-growing economies. Furthermore, the GCC's imports from America accounted for a meagre 10% compared to one-third from Europe and Asia, respectively. Against this background, the dollar peg makes little sense. In a similar vein, 20% of the EU's energy demand is met by the GCC.<sup>37</sup> The main argument against a deliberate rise in the exchange rate would be its harmful effect on the competitiveness of the non-oil sector in economies that are in dire need to diversify. However, when the dollar gained strength in the late 1990s, non-oil industries were hurt coincidentally as the price of crude was sliding. Hence, more flexibility through a trade-weighted basket in which the euro had a larger weight would stabilize the real exchange rate of the GCC countries and further enhance their competitiveness. On the other hand, oil exporters argue that oil is priced in dollars which reduces exchange-rate risks. Nevertheless, exchange-rate stability does not necessarily bring about economic stability. On the contrary, a more flexible currency would enable economies to handle oil-price shocks better.<sup>38</sup> One last argument for injecting flexibility to Gulf economies is that, since most big currencies belong to oil importers, the Gulf States would be linking their currencies to unsuitable monetary conditions. Accordingly, including the oil price as part of a basket that includes the leading currencies, would absorb some of the negative impact of oil swings.<sup>39</sup>

In a similar vein, the region is still taking baby steps on its way to diversifying economies. The Gulf countries must therefore allocate more revenues to R&D

<sup>34</sup> Gulf states to seek common front to tackle crisis, in: Gulf Times (Qatar), 25-10-2008. Retrieved from <a href="http://www.gulf-times.com/site/topics/article.asp?cu\_no=2&item\_no=250178&version=1&template\_id=48">http://www.gulf-times.com/site/topics/article.asp?cu\_no=2&item\_no=250178&version=1&template\_id=48</a> (accessed 25-10-2008).

<sup>35</sup> Ghazanfar Ali K Han, GCC to unify stand against crisis, in: Arab News, 26-10-2008. Retrieved from <a href="http://www.arabnews.com/?page=6&section=0&article=115807&d=26&m=10&y=2008">http://www.arabnews.com/?page=6&section=0&article=115807&d=26&m=10&y=2008</a> (accessed 28-10-2008).

<sup>36</sup> Woertz, op. cit. (note 28), pp. 12-19.

<sup>37</sup> The EU has a region-to-region relationship with the GCC through a cooperation agreement in 1988. The Agreement aims at broadening economic and technical cooperation and also cooperation in energy, industry, trade and services, agriculture and science. See The EU and the Gulf Cooperation Council (GCC), Retrieved from <a href="http://ec.europa.eu/external\_relations/gulf\_cooperation/intro/index.htm">http://ec.europa.eu/external\_relations/gulf\_cooperation/intro/index.htm</a> (accessed 29-10-2008).

<sup>38</sup> The Petrodollar Peg, in: The Economist, 9-12-2006.

<sup>39</sup> Time to break free, op. cit. (note 24).

and try to further their knowledge and experience in the finance, services, derivatives and construction sector. Furthermore, the GCC region cannot compete with the history of Egypt or some of the ancient cities in the Levant and North Africa when it comes to tourism. 40 According to the Travel and Tourism Competitiveness Index Report 2008, the Gulf region was less competitive in terms of travel and tourism industries than the year before. While UAE, Qatar, Bahrain, and Kuwait slipped down in the respective rankings, Oman and Saudi Arabia were newcomers in a survey of 130 countries. 41 Accordingly, the Gulf countries should increase their efforts in promoting their touristic assets, while taking initiatives to host international sports or cultural activities.

Apart from structural economic problems that beset the region, there are also other factors that may create havoc despite considerable wealth. Al-Qaida targets the supplies of Muslim-produced oil on which Western economies depended. On the other hand, it does not seek to cause irreparable economic damage to the region. Accordingly, al-Qaida seeks to damage the infrastructure needed for refining and transporting oil: pipelines, refineries and seaport, rather than the oil wells as such. 42 Likewise, these mostly pro-US regimes of the Gulf incur the wrath of Iran, for the latter's alienation from the energy market. 43 Such threats eventually cause a rise in defense budgets and drain the treasury. It would be best for the GCC countries to strengthen their cooperation with the Western countries in the fight against al-Qaida. Likewise, maintaining alternatives to shipments of oil from the Persian Gulf through the Strait of Hormuz could be beneficial in reducing Iranian leverage over the strait and reducing the chances of its closure in order to disrupt the flow of oil. A similar problem is observed in the Red Sea region, where Somali pirates have been harassing and hijacking ships including, for example, Saudi-owned tankers carrying oil. This constitutes another stumbling block, hindering the flow of oil to Europe and the United States.<sup>44</sup> In addition to the hitherto efforts of the International Maritime Organization to curb Somalian piracy, the United States, China and Gulf countries may set up an ad hoc multinational convention to guarantee freedom of the seas. In the face of dependence on Persian Gulf oil, Asian countries would be more than willing for any multilateral initiative that would make supplies from the region more secure. 45

<sup>40</sup> Gray and Blejer, op. cit. (note 24), p. 44.

<sup>41</sup> Oman a fast growing travel and tourism economy, in: Times of Oman, 28-5-2008. Retrieved from <a href="https://www.zawya.">https://www.zawya.</a> com/story.cfm/sidZAWYA20080528043646> (accessed 9-11-2008)

<sup>42</sup> Michael Scheuer, Al-Qaeda and the Oil Target, in Michael Scheuer, Stephen Ulph and John C. K. Daly, Saudi Arabian Oil Facilities: the Achilles Heel of the Western Economy (The Jamestown Foundation), Washington, DC, 2006, p. 8.

<sup>43</sup> Joe Barnes and Amy Myers Jaffe, The Persian Gulf and the Geopolitics of Oil, in: Survival, Spring 2006, pp. 149,

<sup>44</sup> Jenny Booth, Somali pirates demand \$ 25m ransom for supertanker, in: The Times, 20-11-2008.

<sup>45</sup> See Barnes and Jaffe, op. cit. (note 42).

Finally, to some extent all Gulf countries suffer domestically because of fast rising populations and the lack of a skilled domestic work force, which attracts foreign labor. 46 Despite official strategies like Saudization, Emiratization or Omanization to encourage employment of Gulf nationals<sup>47</sup>, many men and women from Asia, Africa and the Middle East, not to mention Western experts arrive to the Gulf in flux. Saudi Arabia's rate of unemployment still stands at 12% despite efforts to provide qualified education like Effat College, a private women's college that operates in partnership with Duke University to educate women engineers. 48 The problem is most clearly evident in the United Arab Emirates, where foreigners account for more than 90% of the private-sector labour force.<sup>49</sup> Even though many GCC countries since the 1990s have been hosting renowned American schools or training exercises run by companies such as Toyota or DHL, private sector employers favor cheap and hard-working Asian expatriates.<sup>50</sup> The high revenues in the oil sector has led to high wages and subsidies for public sector jobs offered to domestic workers, who did not have additional incentives to acquire further skills. Saudi and Kuwaiti levels of public spending on education prove their function as a role model for the rest of the Gulf countries. There is also a low quality of teachers due to lack of teaching skills and knowledge of recent teaching and learning techniques. This is also related to the fact that the educational system is biased against technical fields and most of the students in higher education are to be found in the humanities and social sciences. Another implication of the generally low level of skills is the poor local technological capacity. For the UAE case, lack of technology policy, R&D and technological culture results in a strong dependence on foreign expertise in this field.<sup>51</sup> This dual nature of employment in the Gulf in which domestic workers are employed in the public sector whereas foreign workers are in the private sectors should be dealt with. Change in the economic structure of the Gulf economies can only be possible through due incentives and policies to improve skills. Yet another problem is brain drain. The governments will also have to provide incentives to make skilled natives return to their former home, which would then pioneer indigenous industrialization and modern education.

Parenthetically, it is now widely acknowledged that Norway, one of the world's largest petroleum exporters, has been making the best use of its oil revenues against the background of depleting resources and a post-carbon future. Its oil

<sup>46</sup> P.K. Abdul Ghafour, 470,000 Saudis Are Jobless, Says Study, in: Arab News, 15-4-2007.

<sup>47</sup> These policies involve both "carrot and stick" tactics, which, at worst, may go as far as withholding government contracts from foreign companies in the Gulf failing to employ a certain number of Gulf nationals.

<sup>48</sup> Clatanoff, Parlin, Jordan et al., op. cit. (note 11), p. 15.

<sup>49</sup> Labor Rations in the Gulf, in: The Economist, 3-9-2008.

<sup>50</sup> Young, rich, idle, like it or not, in: The Economist, 20-9-1997.

<sup>51</sup> Joan Muysken and Samia Noir, Deficiencies in Education and Poor Prospects for Economic Growth in the Gulf Countries: The Case of the UAE, in: Journal of Development Studies, August 2006, pp. 961, 964–965, 971, 974.

fund, namely the Government Pension Fund, which is worth an estimated \$ 390 billion, ranks second after that of the United Arab Emirates (Abu Dhabi Investment Authority) among funds run by governments. It differs from those in the Emirates due to its transparency with respect to its strategy and fields of investments. It is known that its investment in any company mostly amounts to less than 1 percent of available shares. This precludes any catastrophic consequence in bad or uncertain times.<sup>52</sup> As a mature democracy, in Norway, political competition over economic performance has created a strong constituency for sound economic management involving both the state and private sector. However, the paternalistic autocracies in the Gulf have been involved in incessant state spending for the sake of sustaining political support. This not only generates further commitments, but also unproductive, overstaffed bureaucracies and protected, inept enterprises. It is very likely that the Gulf countries will no longer be able to use the public sector to employ all new entrants to the labor market. There is the urgent need to accelerate non-oil private sector growth in order to generate new job opportunities. Furthermore, resistance to transparency and adherence to the legitimizing force of oil-led state spending pave the way towards corruption and create difficulties in a period of partial political and economic transition. It would therefore be more beneficial for Gulf countries if they did not simply shower their people with money, but provide sums for those who are needy or whose projects serve wider public interests, including job opportunities outside the oil sector. Introducing a merit-based system for the workforce, putting forth incentives for development of skills and creating a culture of tax-paying in the longer term not only would lead to more qualified and responsible manpower who would help develop the country, but also save money for unfortunate times such as the current period of the global financial crisis.<sup>53</sup>

### What to do

To conclude, the rise of the Gulf is neither myth or reality. While these countries have a considerably successful record in integrating with the global economy through investment as well as modernization and diversification of regional economies, their prosperity is not a panacea for the internal and external constraints that render the region vulnerable. Wealth should be multiplied via a currency basket and then directed to educational and promotional activities that would augment the number of skilled domestic workers as well as tourists and investors. Alternative energy projects and further diversification of economy should also be

<sup>52</sup> Robin Wigglesworth and Simon Kennedy, Norway provides model on how to manage oil revenue, in: International Herald Tribune, 17-10-2007, and Tarjei Kidd Olsen, Norway: Oil Fund Pursues Socially Responsible Investments, in: Inter Press Service English News Wire, 31-7-2008. Retrieved from <a href="http://www.highbeam.com/doc/1P1-154777101">http://www.highbeam.com/doc/1P1-154777101</a>. html> (accessed 14-12-2008).

<sup>53</sup> Benn Eiffert, Alan Gelb, Nils Tallroth, Managing oil wealth: The political economy of oil-exporting countries—why some of them have done so poorly, in: Finance & Development (IMF), 2003.

catalyzed through importing knowledge and experts or sending natives abroad to learn the business. Last but not least, international cooperation not only would secure the region from possible threats to the oil flow, but also create a favorable atmosphere for new markets or trade agreements.



The closing session with the rapporteurs

Notes

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