

Old Rules, New Players?

Integrating the BRICs in Global Energy Governance

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Introduction

The present paper aims to grasp the consequences of the economic ascent of the so-called 'BRICs' (Brazil, Russia, India and China) for the functioning and governance of the international energy system. These fast-growing economies with their huge populations have a critical influence on the functioning of international raw-materials markets. As large energy consumers (China and India) and large energy producers (Russia and Brazil), these states have fundamentally altered the geography of the world's supply and demand structure. Given their importance for the global energy equation it seems natural that they take part in multilateral efforts to regulate and govern the various energy challenges with which we are confronted today. Yet, as in other domains of global economic governance, the BRICs are still not included in many of the existing international energy regimes, most notably the International Energy Agency (IEA). A serious challenge for the future thus consists of convincing the international community that no global energy regime can be effective without the full support and involvement of the BRIC states.

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Conversely, these ambitious and energy-hungry countries need to be convinced that 'energy security' is indivisible and necessitates a cooperative foreign policy as well as forms of international governance. So far, unfortunately, the BRICs seem to have taken a different view and stance. Their state-centric approach to energy security sharply contrasts with the market-oriented and multilateral approach that was dominant in the 1990s. In this way, the BRIC states epitomize a wider shift in the global energy system. After more than fifteen years of neoliberal and transnational energy logics, the pendulum is swinging back from 'markets' to 'governments' all over the world. Energy policies are becoming increasingly 'securitized' and 'resource nationalism' is proliferating.

The present article argues that the leading industrial and emerging powers should be embedded in an inclusive and global energy forum.³² To that end, the paper is structured in four main parts. First, the concept of the BRICs will be presented as well as the empirical grounds on which it is based. Second, it will be demonstrated that the BRICs are having a crucial impact on the functioning and the governance of global energy markets, not only because of what they are (namely large energy consumers and producers), but also because of what they do, in other words, because of the policies they adopt in the field of energy. Third, we will show that the BRICs are not well represented in the institutional landscape of global energy governance. From this, the conclusion will be drawn that the participation of the BRICs in global energy governance is sorely needed, but is not delivered up to date.

³² Without denying the cross-cutting nature of the energy issue (impact on environment, development, macroeconomics, etc.) the present paper mainly focuses on the supply of hydrocarbon energy sources, and more specifically oil, from a *global* viewpoint.

1. Why the BRICS matter for global energy

Energy relations in the world are a function of the economic and political power structure of the international system.³³ Therefore, the economic rise of the BRICS will have far-reaching implications for the functioning and governance of the international energy system. The apparition of new global players beyond the traditional Triad (United States, Japan, Europe) is just one of the multiple sea changes that are currently afoot in the world economy.

The BRIC acronym was forged in a 2003 Goldman Sachs study on long-term trends in the global economy. Together these four countries account for more than 40% of the world's population and almost a third of the world's land mass. If the BRIC states continue to grow at their present pace, the study argued, by 2025 together their economies could be at least half of the size of those of the G6 (i.e. G7 minus Canada), and by 2040 larger than the G6 in United States (US) dollar terms.³⁴ Although one should always be careful with linear extrapolations and projections, recent reports of international financial institutions confirm that the trend is likely to continue. At the single exception of the year 1998, when a financial crisis hit Asia and Russia, the BRICS have grown significantly faster than the G7 in the past fifteen years (see Figure 1). The International Monetary Fund's (IMF) 2007 *World Economic Outlook* shows that the BRICS, and especially China and India, have become major engines of global economic growth.³⁵ In fact, from 2001 to 2006, the Organisation for Economic Co-operation and Development (OECD) countries

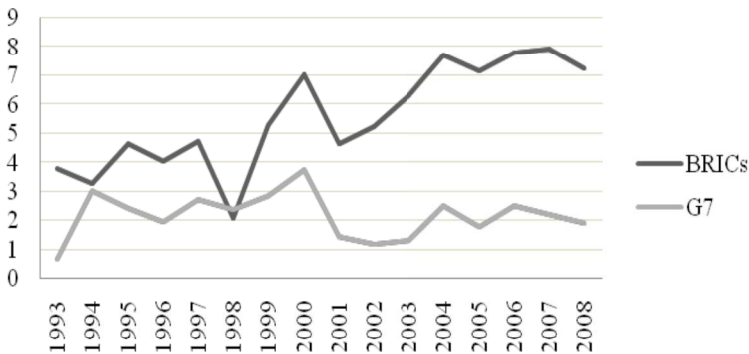
³³ Aad CORRELJÉ and Coby VAN DER LINDE, «Energy Supply Security and Geopolitics: A European Perspective», *Energy Policy* 34, no. 5 (2006): p. 533.

³⁴ Dominic WILSON and Roopa PURUSHOTHAMAN, «Dreaming with BRICS: The Path to 2050», *Global Economics Paper No. 99* (Goldman Sachs, 2003), p. 4.

³⁵ International Monetary Fund, *World Economic Outlook October 2007: Globalization and Inequality* (Washington, D.C.: IMF, 2007), p. xi. See also: World Bank, *World Development Report 2007: development and the next generation* (Washington, D.C.: World Bank, 2006), p. vii.

represented only 34% of world GDP growth, while developing Asia accounted for nearly 50% and China alone even for 30%.³⁶

Figure 1 : G7 and BRICs annual GDP growth (constant prices, 1993-2008)³⁷



The (re-)emergence of these economic powers is having a serious impact on a wide range of global issues, such as world trade, international security, north-south relations and the environment.³⁸ But the area where the impact of the BRICs has been most visible so far is on the global raw-materials markets. By dint of their sheer size, large populations and rapid economic ascendancy,

³⁶ Franklin DEHOUSSE, «The Coming Energy Crash and Its Impact on the European Union», *Egmont Paper 17* (Brussels: Egmont, 2008): p. 9.

³⁷ Source: IMF, *World Economic Outlook Database*, October 2007. Note: Figures for 2007 and 2008 are estimates.

³⁸ John HUMPHREY and Dirk MESSNER, «Unstable Multipolarity? China's and India's Challenges for Global Governance», *Briefing Paper 1/2006* (Bonn: German Development Institute, 2006).

the BRIC states have an enormous appetite for energy and other resources. IEA experts believe that in the next 25 years, the bulk of global energy demand growth will come from the developing world and, in particular, the BRIC states.³⁹ China, Russia, India and Brazil are respectively the world's second, third, fifth and tenth largest energy consumers, but their energy demands are still rising rapidly. China, which became a net oil importer as late as in 1993, is expected to overtake the United States to become the world's largest energy consumer soon after 2010.⁴⁰ India is expected to become the third largest, overtaking Japan, by 2030.⁴¹ Turning to oil, the BRICs accounted for 18% of global demand in 2005. In 2025 this is expected to be 31%, mainly thanks to a dramatic increase in China's share of global oil demand (see figure 2 in annex). Although the impact of the BRICs on oil demand has had the widest macroeconomic ramifications, their impact is not limited to *energy resources*. China, for instance, is already the world's top consumer of *metals* such as copper, nickel, aluminium and zinc, and of *agricultural commodities* such as rubber, cotton, wheat and rice.⁴² (see figure 2 in annex).

To be sure, the BRIC countries also possess large natural resources. Russia is the outlier here, and to a lesser extent also Brazil. Russia holds the world's largest gas reserves, the seventh largest oil reserves and is second in coal reserves.⁴³ In fact, it is the increasing windfall from resource exports, due to the combination of rising oil and gas prices and increased production, upon which Russia's staggering economic growth has been largely dependent.⁴⁴

³⁹ Frank VERRASTRO and Sarah LADISLAW, «Providing Energy Security in an Interdependent World», *The Washington Quarterly* 30, no. 4 (2007): 96.

⁴⁰ See website Energy Information Administration: <http://www.eia.doe.gov/> (Accessed: November 14, 2007).

⁴¹ Tanvi MADAN, «India», *The Brookings Foreign Policy Studies: Energy Security Series* (Washington, D.C.: The Brookings Institution, 2006), p. 1.

⁴² Shane STREIFEL, *Impact of China and India on Global Commodity Markets: Focus on Metals & Minerals and Petroleum* (Washington, D.C.: World Bank, Development Prospects Group, 2006).

⁴³ See: <http://www.eia.doe.gov/> (Accessed: November 14, 2007).

⁴⁴ Fiona HILL, *Energy Empire: Oil, Gas and Russia's Revival* (London: The Foreign Policy Centre, 2004).

Brazil is dominant in soy, iron ore and most importantly sugar-cane ethanol.⁴⁵ Brazil is likely to become a more important player, since biomass-based fuels are now acknowledged to be an alternative to oil by the large energy consumers, the United States and the European Union.⁴⁶ China is the world's leading producer of coal and hydro power.⁴⁷ The rising importance of the BRICs is also becoming evident in the global energy industry (see figure 3 in annex). At the end of the first Gulf War in 1991, of the 20 largest companies in the energy industry by market capitalisation, 55 percent were American and 45 percent were European. But in 2007, 35 percent of the 20 largest energy companies are from BRIC countries, about 35 percent are European, and about 30 percent are American.⁴⁸ The stock market debut of PetroChina – China's largest oil and gas producer – in early November 2007, forms another illustration. The state-controlled group immediately became the world's most valuable company and was even valued more than its two nearest rivals, ExxonMobil and Royal Dutch Shell, combined.⁴⁹ Lee Raymond, ExxonMobil's Chief Executive Officer, anticipated this movement in 2002, when he stated that *"the centre of gravity of our industry is inexorably moving to the Far East."*⁵⁰ This is causing anxiety in Washington. In 2005, for instance, the Congress blocked an attempt by the China National Offshore Oil Corporation

⁴⁵ Hui Fang CHENG, Margarida GUTIERREZ, Arvind MAHAJAN, Yochanan SHACHMUROVE and Manuchehr SHAHROKHI, «A Future Global Economy to be Built by BRICs», *Global Finance Journal*, 18 (2007): p. 144.

⁴⁶ Jacques DE JONG, Wilbur Perlot, Stephan Slingerland, *Global Energy Issues and the United Nations: Challenges for the UN CSD Meetings in 2007 and Beyond. Recommendations for the Dutch delegations to the 14th and 15th UN Conference on Sustainable Development* (The Hague: Clingendael International Energy Programme, 2007), p. 11.

⁴⁷ Paul MAIDMENT, «It's the Consumption, Stupid», *Forbes*, 10 September 2006.

⁴⁸ «New Economic Tigers Brazil, Russia, India and China Overtake U.S. in Dominating Global Energy Industry, New Study Says», *International Herald Tribune*, 25 June 2007.

⁴⁹ Geoff DYER and Francesco GUERRERA, «PetroChina Becomes World's First \$1,000bn Company after Debut», *Financial Times*, 6 November 2007.

⁵⁰ Lee Raymond quoted in: Ian RUTLEDGE, *Addicted to Oil: America's Relentless Drive for Energy Security* (London: I.B. Tauris, 2006), p. 137.

(CNOOC) to buy up the American oil and gas company Unocal. Similarly, a few months later, the move by Dubai Ports World (DPW), a state-owned company based in the United Arab Emirates, to acquire the British Peninsular and Oriental Steam Navigation Co. (P&O), the fourth largest port company in the world, was blocked because it would have given DPW operating rights at terminals in a number of American ports.

In any case, it is clear these fast-growing economies will and already have a critical influence on the functioning of international raw-materials markets because of their sheer size. Now, let us home in on the impact these states have on the international scene through the policies they adopt.

2. Are the BRICs bringing the state back in?

The international political economy of energy trade has changed significantly over time. Traditionally, three phases are distinguished, each with a distinct balance in the complex triangular interplay of companies, states and markets.⁵¹ After a long period of dominance of the international oil companies (IOCs), or the 'Seven Sisters' as they came to be called,⁵² the state re-emerged on the scene at the end of the 1960s. The governments of oil-producing countries started to renegotiate the terms on which the companies could operate on their territory and established the Organization of the Petroleum Exporting Countries (OPEC). As a consequence, oil prices raised sharply in the 1970s and the consumer governments created the IEA to interfere in the oil market in order to keep prices down. After 1980, the market came back to the fore, due to the development of the spot and forward

⁵¹ Robert O. KEOHANE, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton: Princeton University Press, 1984); Susan Strange, *States and Markets* (London: Pinter, 1994), pp. 197-203; Bernard Mommer, *The Governance of International Oil: The Changing Rules of the Game* (Oxford: Oxford Institute for Energy Studies, 2000); Kirsten WESTPHAL, «Energy Between Multilateral Governance and Geopolitics: Whither Europe?» *Internationale Politik und Gesellschaft*, 4 (2006): 44-62.

⁵² Exxon, Mobil, Socal, Gulf and Texaco, Royal Dutch-Shell, British Petroleum and CFP.

markets, a multiplication in the number of producing countries and the investment in alternative sources of energy. As the Cold War came to an end, and real oil prices were heading towards an all-time low, it was expected that energy would eventually be traded on global, free, transparent and open markets in which oil would be washed away from its nationality.⁵³

At the turn of the millennium, the international energy order has once more been fundamentally transformed. New players have entered the global energy scene and have challenged the market-oriented and multilateral energy policies of the United States as a rule-setter and the European Union (EU) as a rule-follower.⁵⁴ Alternatively, these rising powers have adopted an old-style 'resource diplomacy' geared toward national autonomy and control. Despite the sharp differences between the BRICs, particularly in the energy sector, they have all adopted a statist approach to energy security, decidedly based on bilateral relations, and they have established state-owned or semi-state-controlled energy companies in their pursuit of energy security.⁵⁵ Instead of pursuing a deeper integration into the global market, China, India and Russia try to maximise their energy 'independence' by seeking direct control over energy sources and supply routes.⁵⁶

China and Russia stand out as the leading examples of demand- and supply-side trends that challenge the liberal-internationalist global energy

⁵³ Coby VAN DER LINDE, Wilbut PERLOT and Femke HOOGEVEEN, «Escenarios del Mañana: Sistema Geopolítico y Petróleo», *Política exterior*, 20 (2006): 49-66.

⁵⁴ Philip ANDREWS-SPEED, Xuanli LIAO and Roland DANNREUTHER, «The Strategic Implications of China's Energy Needs», International Institute of Strategic Studies Adelphi Paper 346 (Oxford: Oxford University Press, 2002), pp. 8-10.

⁵⁵ Annette HESTER and Jean Paul PRATES, «The Energy Sector in Brazil: Lessons in Ingenuity and Compromise», *Canadian Foreign Policy* 13, 2 (2006): 65; George D. Landau, «Brazil and Latin America's Energy Crisis.» Paper presented at the EUISS Annual Conference on 'effective multilateralism: engaging with the new global players'. Working group IV on 'energy security: an agenda of global challenges'. Paris, 22 November 2007.

⁵⁶ Michael WESLEY, «The Geopolitics of Energy Security in Asia», in Michael Wesley, red., *Energy Security in Asia* (London: Taylor & Francis Ltd, 2006), p. 4; Heinrich Kreft, «China's Quest for Energy Security», *Policy Review*, 139 (September/October, 2006): 61-70.

order. China concludes bilateral agreements with exporting countries, often on a non-competitive basis, and trades 'equity stakes' in oil for soft loans and arms deals.⁵⁷ China is doing business with what Washington considers to be 'rogue' states (Sudan, Burma, Iran, etc.) with sometimes severe consequences for corporate and social responsibility, good governance and human rights in those countries.⁵⁸ The BRIC states are also increasingly interacting on energy matters, even to the extent that some observers believe that an 'axis of oil' is emerging, a shifting coalition of both energy producers and consumers centred around ongoing Sino-Russian collaboration and acting as a counterweight to American hegemony.⁵⁹

In pursuing their own agenda and maximizing their own leverage, the major new consumers and suppliers have changed the 'dynamics' of the international energy market. Since "*all countries respond to the evolving situation in the energy market, adopting reflexive strategies and taking account of each other*,"⁶⁰ the energy strategies of all major powers underwent significant changes. Everywhere, decision-making on energy security slipped from the hands of economic policy makers to the hands of national security strategists.⁶¹ In the United States a group of 'new energy realists' is arguing that a laissez-faire energy policy based solely on market evolution is a 'naïve' posture when most of the world's oil and natural gas is

⁵⁷ Amy M. JAFFE and Steven W. LEWIS, «Beijing's Oil Diplomacy», *Survival* 44, no. 1 (2002): 115-134.

⁵⁸ Matthew E. CHEN, «Chinese National Oil Companies and Human Rights», *Orbis* 51, no. 1 (Winter, 2007): 41-54.

⁵⁹ Flynt LEVERETT and Pierre NOËL, «The New Axis of Oil», *The National Interest*, no. 84 (2006): 62-70; Joshua Kurlantzick, «Crude Awakening: The Coming Resource War», *The New Republic*, (2006): 19-27; Tanvi MADAN, «India», p. 63.

⁶⁰ Correljé and van der Linde, «Energy Supply Security and Geopolitics: A European Perspective», p. 533

⁶¹ Danila BOCHKAREV and Greg AUSTIN, «Energy Sovereignty and Security: Restoring Confidence in a Cooperative International System», *East West Institute Policy Paper 1* (2007): pp. 1-2.

not controlled by market forces.⁶² Today, the American military is being used more and more for the protection of overseas oil fields and supply routes.⁶³ Key energy importing countries such as South Korea and Japan that used to adhere to market principles nowadays turn to diplomacy to secure new energy contracts in the face of fierce competition for resources.⁶⁴ Even in the EU Commission there are some officials and experts who favour a geopolitical approach to deal with the import dependency of the EU.⁶⁵

In sum, the state has reappeared as a powerful actor in the global energy system, leading up to a general climate of supply-side resource nationalism and demand-side resource mercantilism. Many commentators talk about a new 'Scramble for Africa', a resurgent 'Great Game' in Central Asia and even a new 'Cold-War style rivalry' between China and the United States, trapped in an 'energy security dilemma.' This discourse reflects a general feeling of insecurity and the concomitant 'securitization' of foreign energy policy.⁶⁶ Trade in energy products has ceased to be a subject dealt with only at economic forums. Energy has firmly appeared on top of the agenda of high-level political meetings between heads of state. Even the North Atlantic Treaty Organization (NATO), formally a military defence alliance, wants to play a more proactive role in ensuring energy security as underlined in its 1999 Strategic Concept

⁶² Richard G. LUGAR, «The New Energy Realists», *The National Interest*, 84 (Summer, 2006), p. 31.

⁶³ Michael T. KLARE, *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum* (New York: Henry Holt and Co., 2004), p. 23.

⁶⁴ Michiyo NAKAMOTO, «Japanese Loan Move to Secure Oil», *Financial Times*, 17 December 2007; Sangim Han and Seyoon Kim, «South Korea Practices 'Resource Diplomacy': New fund Created for Foreign Deals», *International Herald Tribune*, 2 October 2006.

⁶⁵ Susanne PETERS, «Building Up the Potential for Future Resource Conflict: the shortcomings of Western response strategies to new energy vulnerabilities», *EUI Working Paper RSC No. 2003/09* (Florence: European University Institute, 2003), p. 38.

⁶⁶ Jelena RADOMAN, «Securitization of Energy as a Prelude to Energy Security Dilemma», *Western Balkans Security Observer*, 4 (2007): 36-44; Barry BUZAN, Ole WEAVER and Jaap DE WILDE, *Security: A New Framework for Analysis* (Boulder: Lynne Rienner Pub., 1997).

and in the 2006 Riga Summit Declaration.⁶⁷ Richard Lugar, a high-ranking US Senator, went even further, arguing that energy security should be a commitment under the Article V mutual defence clause of the North Atlantic Treaty.⁶⁸ This marks a sharp difference with the beginning of the 1990s when it was expected that the US-led market-oriented system would become the dominant organizing principle of the international political and economic system.⁶⁹

3. The need for inclusive global energy governance

Ensuring global energy security represents one of the most complex, multi-faceted and daunting policy challenges in today's world. The global energy system is plagued by several instances of 'market failure', such as climate change, under-investment, persistent energy poverty and geopolitical distrust. These 'negative externalities' are by nature 'collective action problems' that cannot be adequately addressed by individual governments in a context of 'complex interdependence'.⁷⁰ International energy relations are further characterized by information asymmetries, the veil of uncertainty and the possibility of mutual gains from interstate cooperation. In other words, energy security is an issue endowed with all the ingredients that call for, even

⁶⁷ NATO, «The Alliance's Strategic Concept», Approved by the Heads of State and Government participating in the meeting of the North Atlantic Council in Washington D.C. on 23rd and 24th April 1999; NATO, «Riga Summit Declaration», Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Riga on 29 November 2006.

⁶⁸ Elinor SLOAN, «NATO Approaches to Energy Security: Future Options, Challenges and Directions», *Critical Energy Infrastructure Protection Policy Research Series No. 1* (Carleton: Canadian Centre of Intelligence and Security Studies, 2007).

⁶⁹ Coby VAN DER LINDE, «Energy in a Changing World: Inaugural Lecture», *Clingendael Energy Papers No. 11* (The Hague: Clingendael, 2005).

⁷⁰ See: Mancur OLSON, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge: Harvard University Press, 1971); Robert O. KEOHANE and Joseph S. NYE, *Power and Interdependence* (New York: Longman, 2000).

necessitate, some form of multilateral governance.⁷¹ Up to date, however, there is no single site for international discussion on energy issues. International energy governance is fragmented and dispersed into a patchwork of various nested, overlapping and sometimes overtly competing regimes, as is the case with OPEC and the IEA. Stanford Professor Victor has called this patchwork the 'regime complex' for energy.⁷²

It is important to fully engage the BRICs in the global network of trade and investment, as thin as it may be, "*rather than see them tilt toward a mercantilist, state-to-state approach.*"⁷³ Up until now, however, the BRICs are only weakly embedded in the global 'regime complex' for energy. None of the BRICs is a member of OPEC, but of course OPEC does not seem apt to function as the hub of a comprehensive and sustainable global energy regime as it simply behaves like a commodity cartel.⁷⁴ The same can be said about the much looser Gas Exporting Countries Forum (GECF), in which Russia participates since its first meeting in May 2001 and which is unsuccessfully trying to emulate the OPEC model for gas.⁷⁵ Neither China, India nor Brazil are members of the IEA or the G8. Russia, for its sake, is a member of the G8, but it has refused to ratify the European Charter Treaty (ECT). China has been granted observer status in the ECT process, but India and Brazil are totally absent from the ECT framework. The BRICs participate in the International

⁷¹ Kirsten WESTPHAL, «Energy Between Multilateral Governance and Geopolitics: Whither Europe?» p. 49; Danila BOCHKAREV and Greg AUSTIN, «Energy Sovereignty and Security: Restoring Confidence in a Cooperative International System», p. 6.

⁷² David G. VICTOR, Sarah JOY and Nadejda M. VICTOR, «The Global Energy Regime», Unpublished Working Paper (2006), available from: www.princeton.edu/~smeunier/Victor%20et%20al%20Energy%20Regime.pdf (Accessed: 14 November 2007).

⁷³ Daniel YERGIN, «Ensuring Energy Security», *Foreign Affairs* 85, 2, (2006): 77.

⁷⁴ Danila BOCHKAREV and Greg AUSTIN, «Energy Sovereignty and Security: Restoring Confidence in a Cooperative International System», p. 6.

⁷⁵ Amy M. JAFFE and Ronald SOLIGO, «Market Structure in the New Gas Economy: Is Cartelization Possible?» in David G. VICTOR, Amy M. JAFFE and Mark H. HAYES, eds., *Natural Gas and Geopolitics: From 1970 to 2040* (Cambridge, Cambridge University Press, 2006), p. 440.

Energy Forum (IEF), but this dialogue forum does not yet have a firm structure or a clear mission statement.⁷⁶ Of course, these players are also engaged in the United Nations (UN). However, apart from the International Atomic Energy Agency (IAEA), which plays a crucial role in the field of nuclear energy, the UN has been notably absent in global energy governance.⁷⁷

To ensure that the BRICS participate more constructively in the global system, the international community needs to take account of their resentment of being left out of international decision-making up to this point.⁷⁸ The current rule-set of the international energy order is created under the hegemonic leadership of the US and is tailor-made to the interests of the West. Developing and emerging countries feel that they have no option but to accept these rules which do not adequately reflect their rights and interests. China and India feel they have to 'catch up' with the western companies and they have to take the 'left-overs.' It is also in this context that the Indian proposal for an 'Asian Oil Market' and a pan-Asian gas grid which would end the "*wretched Western dominance*," should be seen.⁷⁹ The recent suggestion of New Delhi to halt trading of crude oil on commodity markets reflects Indian dissatisfaction with the neoliberal ideology of open markets.⁸⁰ Policy-makers in the BRICS would be more inclined to cooperate if they were given a seat at the table and saw the benefits of cooperation firsthand. Otherwise, they will only view international institutions as a method to reduce their autonomy.

⁷⁶ Danila BOCHKAREV and Greg AUSTIN, «Energy Sovereignty and Security: Restoring Confidence in a Cooperative International System», *op.cit.*, p. 6.

⁷⁷ Andrew SCHRUMM, «The Energy Blindspot: The Absence of Global Energy Governance in the United Nations», *Queen's International Observer*, November-December (2006): 14-17.

⁷⁸ Tanvi MADAN, «India», p. 64; Qinhua XU, «China's energy diplomacy and its implications for global energy security», *FES Briefing Paper 13* (Beijing: Friedrich Ebert Stiftung, 2007), p. 6.

⁷⁹ Siddharth VARADARAJAN, «The Asian Axis of Oil», *The Hindu*, 24 January 2006.

⁸⁰ Heather TIMMONS, «India's Solution for Oil Prices: Ban Speculation by Banning Trading», *Financial Times*, 8 November 2007.

One potential venue for action is to consider a framework for the integration of large countries, such as the BRICs, into a cooperative arrangement with the IEA.⁸¹ Indeed, one could ask whether the format of the IEA is still relevant to today's geopolitics of energy as it does not include some of the major energy-consuming states. The IEA is well aware of this and has established the IEA Global Energy Dialogue in 1993 to reach out to countries beyond the OECD that are increasingly important to the global energy outlook.⁸² An impediment to full-fledged membership, however, is the obligation for IEA members to hold oil stocks equivalent to at least 90 days of net oil imports and to be a member of the OECD. China and India have recently stepped up their efforts to develop government managed petroleum reserves, but they still fall short of the IEA's target because it is very expensive to build adequate tankage and to buy adequate supplies of oil⁸³ Furthermore, there are two disincentives for the new consumers to join the IEA. The first one is the lure of 'free riding', i.e. reaping the benefits of the IEA system of oil stock piling without having to pay for it. However, the proportional decline in IEA emergency stocks as a percentage of global consumption risks to seriously undermine the effectiveness of the IEA's response mechanism.⁸⁴ The second one is the voting weight allocation system

⁸¹ David PHILLING, «IEA Must Engage Beijing and Delhi», *Financial Times*, 6 January 2007; William F. MARTIN and Evan M. HARRJE, «The International Energy Agency», in Jan H. KALICKI and David L. GOLDWYN, red., *Energy and Security: Toward a New Foreign Policy Strategy* (Baltimore: The Johns Hopkins University Press, 2005), p. 115; Daniel YERGIN, «Ensuring Energy Security», p. 78.

⁸² Colin I. BRADFORD, «World Energy Needs, Climate Change & Global Governance Innovation», Paper presented at the symposium on 'Breaking global deadlocks' organized by the Centre for Global Studies (CFGs) at the University of Victoria, British Columbia, Canada on January 29-30, 2007, p. 4.

⁸³ Jan H. KALICKI and David L. GOLDWYN, «Conclusion: Energy, Security and Foreign Policy», in Jan H. KALICKI and David L. GOLDWYN, red., *Energy and Security: Toward a New Foreign Policy Strategy* (Baltimore: The Johns Hopkins University Press, 2005), p. 575.

⁸⁴ Asia Pacific Energy Research Centre, *Emergency oil stocks and energy security in the APEC region* (Tokyo: Institute of Energy Economics, 2000), pp. 44-45.

in the IEA Governing Board,⁸⁵ which is partially based on oil consumption shares of 1973, and thus disadvantages the emerging economies.⁸⁶ This issue generated problems in the negotiations leading up to the accession of South Korea to the IEA in 2001.⁸⁷

Another promising path to construct the foundations for a new international energy order is currently being laid out by the G8. In the 'Petersburg Declaration' adopted in 2006, the G8 countries have agreed upon the principles, aims and policies for global energy security. This declaration provides an interesting starting point for discussions over energy policy beyond the confines of the G8. The G8 Summit in Heiligendamm in 2007 resulted in an arrangement with the O5 (Outreach Five) countries (China, India, Brazil, Mexico, South Africa) to institutionalise a high-level dialogue on specific challenges including energy policy. Although the G8 can be criticised for being an 'elite club' and therefore lacking legitimacy, it is probably the only *global* forum in which the energy challenge can *effectively* be debated in all its dimensions.

Conclusion

The present international energy system is characterised by two competing orientations. One orientation revolves around 'markets and

⁸⁵ The Governing Board, composed of energy ministers from each member country or their senior representatives, is the main IEA decision-making body.

⁸⁶ Craig S. BAMBERGER, *History of the International Energy Agency: The First Thirty Years* (Paris, International Energy Agency, 2004), pp. 28-31. Available from: http://www.iea.org/textbase/nppdf/free/2004/history_v4.pdf (Accessed: February 20, 2008).

⁸⁷ Point raised by a participant during the conference on 'Changing Rules of the Game: Global Energy Governance and the Transatlantic Agenda' organized by the Global Public Policy Institute (GPPI) at the Schlosshotel Cecilienhof in Potsdam, Germany, on 31 January - 1 February 2008.

institutions', while the other revolves around 'regions and empires'.⁸⁸ Other studies have dubbed this 'open doors' versus 'flags',⁸⁹ or 'strong' versus 'weak' globalisation.⁹⁰ The common thread in these scenario's is that the power structure in international energy relations is shifting in a number of directions: from consumers to producers, from IOCs to national oil companies (NOCs), from the OECD to the BRICs, from the market to the state. A new set of international rules is needed to ensure that the changed configuration of the global system does not lead to zero-sum, geopolitical clashes over energy security.

Ultimately, indeed, the issue boils down to the question of how to accommodate rising powers in the international system. In this respect, it can be instructive to recall the rise of Japan in the 1950s and 1960s, when the country achieved an average growth rate of 9 percent for about 20 years. Just like the rise of the BRICs today, Japan's economic growth put significant stress on the world's energy resources and on world trade, as protectionism was on the rise. In retrospect, however, the world adjusted. Japan was integrated in the global governance structure of the G7 and the various stresses were resolved. The Japanese example constitutes a benchmark to assess the current and future interaction between the BRICs and the existing regime complex for global energy governance.

Unfortunately, energy is increasingly regarded as the continuation of politics by other means. For the moment, neither the West, nor the BRICs seem to be very inclined to invigorate a substantive multilateral energy dialogue. Yet, the need for such a dialogue seems all the more pressing given

⁸⁸ Clingendael International Energy Programme, «Study on Energy Supply Security and Geopolitics», Report prepared for DG Energy and Transport (The Hague: Clingendael, 2004).

⁸⁹ Shell, *The Shell Global Scenarios to 2025. The Future Business Environment: Trends, Trade-offs and Choices* (The Hague: Royal Dutch Shell, 2005).

⁹⁰ Danila BOCHKAREV, «Russian Pipeline Politics in the Context of 'Strong' and 'Weak' Globalization(s)», *Pipeline & Gas Journal* (October, 2006): 66-67; Coby VAN DER LINDE, «The Art of Managing Energy Security Risks», *EIB Papers* 1, 12 (2006): 51-78.

the geopolitical distrust that has recently surfaced in the international energy system. Without the full and active support of large emerging countries such as China, India, Brazil and Russia, the global public good of energy security becomes impracticable. A formal institutionalisation of the Heiligendamm process could be a pragmatic but significant first step towards inclusive, effective and holistic global energy governance. In the end, however, we will have to find other ways to engage the BRICs in the global 'regime complex' for energy.

Figure 2: Global oil demand shares of the BRICs.

Source: Dominic Wilson, Roopa Purushothaman and Themistoklis Fiotakis, "The BRICs and Global Markets: Crude, Cars and Capital", *Global Economics Paper No.118* (Goldman Sachs, 2004).

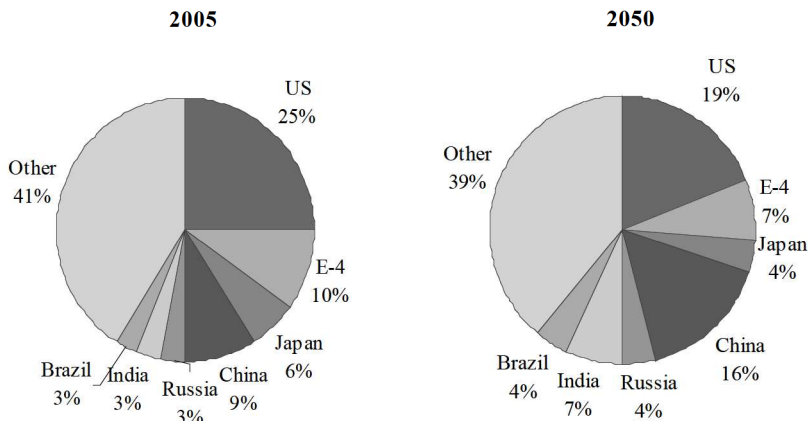


Figure 3 : Origins of 20 largest energy companies by market capitalisation.
Source: Financial Times, 6 November 2007

