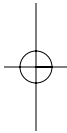
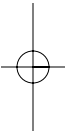
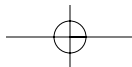


PART ONE

# Global Energy and Trade and Investment



**MASTERS**



# 2

## *Energy Diplomacy in Trade and Investment of Oil and Gas*

Andreas Goldthau

To secure enough oil and gas for their rising energy needs, emerging consumer countries such as China increasingly enter into energy contracts using state diplomacy. Even producer countries like Russia have adopted a state-backed strategy to supplement their domestic energy sources. Both modalities have been labeled *energy diplomacy*. The term commonly connotes the way countries give their energy companies a competitive edge in bidding for resources by using the state's power: consumer countries strengthen their supply situation by diplomatically flanking energy contracts, whereas producer countries use diplomacy to enhance access to markets or reserves.

To be sure, the phenomenon of energy diplomacy is nothing new. Oil and gas have always been politically charged commodities and, hence, have been subject to significant government intervention. China and Russia are simply following a path that the United States, Japan, and a number of European countries once took.<sup>1</sup> Yet the current trend toward energy diplomacy coincides with the general perception that global energy politics has become a zero-sum game, in which one

Ftn. 1

1. A case in point are the corporations dubbed the Seven Sisters, which dominated the world oil market until the end of the 1960s and whose business activities abroad were clearly flanked and fostered by U.S. legislation and policy. For a historical overview, see Yergin (1991).

**Ftn. 2** country's energy security is another's lack thereof.<sup>2</sup> Energy diplomacy has thus emerged as a powerful concept in public discourse. But are the common perceptions of energy diplomacy correct? Is energy diplomacy effective? And does it necessitate adjusting the rules to curb the use of political influence in the energy business?

This chapter argues that the concept of energy diplomacy has clear empirical and functional limits and questions the assumption that diplomatic means can effectively secure supply or access to resources. While energy diplomacy is certainly not to be ignored, its impact is strongly moderated by the logic of market structures. Instead, it is argued that, by sidelining economic fundamentals, energy diplomacy disturbs the effective allocation of capital and decreases transparency in energy markets. Hence the challenge for global energy governance lies in strengthening mechanisms enhancing market transparency and allocation of investment, rather than in curbing the use of diplomatic means in energy relations.

This chapter reviews the trend toward energy diplomacy, drawing on anecdotal evidence from the cases of China and Russia and assessing the motivations for, and the various forms of, energy diplomacy. Further, it asks how empirically significant the current trend in fact is, both with regard to a major importing country aiming at securing its supplies (China) and with regard to a major producer country helping its energy companies to expand abroad (Russia). The discussion challenges some commonly held beliefs about energy diplomacy, examining whether energy diplomacy makes a difference and assessing the success or failure of state-backed efforts to facilitate or foster resource access. Energy diplomacy strategies are also examined in light of the imperatives stemming from existing market structures. On this basis, the chapter then addresses the question as to where and to what extent energy diplomacy challenges existing governing structures in global oil and gas. The chapter concludes by suggesting that emerging consumer nations may at some point develop an interest in reliable rules of access, thus eventually siding with the established Western consumer nations. The chapter also references the way the ongoing financial crisis may impact the calculation of governments and "their" national oil (gas) companies (NOCs).

### **Energy Diplomacy: The State of Affairs**

Energy diplomacy has emerged as a buzzword. While widely used in political debate, its analytical content remains rather elusive. Therefore I begin by defining this rather fuzzy and often politically charged term.

2. *Energy security* is defined as reliable supply at affordable prices in the case of consuming nations and as reliable demand at sustainable prices in the case of producing nations.

*Defining Energy Diplomacy*

Throughout mankind's history, energy resources have both been cause of or proxy for foreign policy or even military actions. At the beginning of the twentieth century, British-Russian rivalry over the control of Persia is believed to have strengthened after the discovery of oil in the region. Italy's invasion of Abyssinia in 1935 was met with economic sanctions from the League of Nations, centrally targeting Italy's access to oil and other resources. The U.S. oil embargo against resource-poor Japan, aimed at forcing the country to withdraw its troops from occupied China, is widely portrayed as a primary cause for Japan's declaration of war against the United States in 1941. Germany's strong import dependency on overseas oil and the Soviet Union's dependency on Caspian oil reserves are believed to have been a core cause of Berlin's decision to invade the Soviet Union in 1941, in order to seize control of Caspian energy.<sup>3</sup> And recent projects such as the Baku-Tblisi-Ceyhan pipeline, built to provide (Western) access to Caspian oil reserves, would not have been realized without Washington's strong and outspoken diplomatic backing.<sup>4</sup> Hence the link between energy and diplomacy or even military action is not a recent phenomenon.

Ftn. 3-4

A decade-long period of oversupply on oil and gas markets and resulting low prices calmed public debate on these issues. It is only since the turn of the new millennium, when supply-demand balances both in global oil markets and in regional gas markets tightened again, that energy diplomacy has come to receive renewed attention. Despite a myriad of contributions linking the term to the nexus of energy, foreign policy, and supply security, there is no consensus on what exactly the term *energy diplomacy* means. A review of current debates on energy diplomacy reveals an assumed strong issue linkage, particularly between energy and development policy, bilateral trade, military aid, and foreign policy in general. As a general pattern, the term is used mostly in the geopolitics-informed debate on access to resources and points to a strategic and instrumental use of foreign policy to secure a country's energy supplies. References to China's oil diplomacy in Africa and the Kremlin's pipeline diplomacy in the Caspian region and Asia are cases in point. In addition, the rise of NOCs, together with ongoing efforts to marginalize private international oil companies in promising (foreign) development projects, are frequently cited proofs of revived

3. Crane and others (2009), p. 25f.

4. Jofi (1999).

state efforts in securing energy supplies or revenues stemming from resource extraction.<sup>5</sup>

Ftn. 5-6

While a generally accepted definition of energy diplomacy does not exist, it would seem appropriate to define the term as the use of foreign policy to secure access to energy supplies abroad and to promote (mostly bilateral, that is, government to government) cooperation in the energy sector. This definition suggests that the primary units of analysis are states or state actors; that the primary driver behind the conclusion of oil and gas deals is not necessarily maximizing business opportunities but national security goals; and that the underlying cost-benefit calculations do not follow an economic logic but rather a political one.

What are the motivations of conducting energy diplomacy, and what means are typically used? In what follows, the cases of China and Russia are used to illustrate the schemes that consumer and producer nations employ in their efforts to give their NOCs an edge. China's quest for energy, most prominent in Africa, has almost become legend and offers insight into the country's mercantilist approach to energy security. Russia, on the other hand, a top oil and gas producer since the turn of the new millennium, is backing the strong expansion course of state-owned gas monopolist Gazprom, both on domestic and on foreign markets.

#### *State Efforts to Secure Supply: China's Quest for Energy*

An examination of China's mercantilist approach to securing resources allows analyses of the motivations for and specific patterns of energy diplomacy in an import-dependant consumer country. Unlike fully industrialized nations, China has not yet decoupled economic growth from energy consumption. Indeed, despite its two-decade-long economic rise, the country's energy demand is set to continue on its steep upward slope in the years ahead. While China will be able to cover most of its power production through domestic coal and gas (for both of which there are sufficient reserves for decades to come), oil has emerged as the country's Achilles' heel (box 2-1). In fact, according to the projections by the International Energy Agency, China could rely on imports for as much as 85 percent of its overall oil consumption by the year 2030.<sup>6</sup> Against this backdrop, a number

Box1

5. For recent analyses on China's Africa policy on the resource nexus, see, among others, Alden (2007), Konings (2007), Holslag (2006), Tull (2007), Taylor (2006), and Downs (2005). Pars pro toto on Russia, see Smith (2006), Norman (2005), and Champion and Chazan (2006). For a counter perspective, see Noel (2008) and Goldthau (2008a). On "pipeline diplomacy," see Socor (2005), Stulberg (2008), Lall (2006), and Bahgat (2003). In the remaining parts of this chapter, for the sake of simplicity, the term *NOC* is also used to mean national gas companies.

6. International Energy Agency (2007), p. 124.

*Box 2-1. A Primer on Chinese Energy*

Having become a net importer of oil in 1993, China can no longer cover domestic demand through its generic reserves, amounting to mere 1.3 percent of the world's total. The country consumed 7.45 million barrels a day in 2006, about twice its domestic production and 9 percent of global demand. The majority of China's producing oil fields have matured. While China's decreasing domestic oil production may be partially compensated by increased volumes generated by coal-to-liquid (CTL) plants, overall import share will rise from 51 percent in 2004 to 85 percent in 2030. By that time China is expected to be both the world's second-largest oil consumer (behind the United States and before the European Union) and the world's second-largest oil importer.

As for gas, China is projected to increase both consumption and imports. Yet as the country's electricity generation and power sector relies mainly on large generic coal reserves, demand for gas is not projected to increase as steeply as for oil. As the International Energy Agency estimates, the Chinese import market will not expand beyond 106 billion cubic meters by 2030.

Source: BP (2007); International Energy Agency (2007), pp. 105, 118.

of intertwined factors render energy diplomacy an attractive and to some extent imperative policy option for Beijing.

First, China's elite crucially depends on continued economic growth in order to maintain social and political stability and to legitimize the rule of the Communist Party—with a reliable supply of energy being a precondition thereof. Trying to secure constant and reliable oil imports is thus a highly rational move. Given Beijing's historic penchant for controlling the way oil supplies are generated, markets appear a rather unreliable mechanism.<sup>7</sup>

Ftn. 7-8

Second, China is a latecomer to the international oil business. After being self-sufficient for large parts of its postrevolution industrialization phase and its market-based catch-up period after the 1978 Great Leap Forward, the country entered the global oil market only in the early 1990s. Yet as the U.S. Department of Energy pointedly notes, few untapped areas for petroleum investment are available to latecomers such as China.<sup>8</sup> Moreover, as the structure of the global oil

7. See for example Lieberthal and Herberg (2006).

8. U.S. Department of Energy (2006), p. 32.

market has traditionally been shaped by established (Western) market actors, China has to play according to rules of the game which may not necessarily be perceived suiting its interests. In addition, Western, especially U.S., international oil companies (IOCs) have a historic advantage in tapping and operating reserves in key producer regions such as the Persian Gulf. Hence in the view of Beijing effective supply security is not guaranteed by the existing market structure, which is seen as biased toward established players. From this angle, public intervention, in the form of Chinese NOCs sent abroad in order to directly tap reserves, would appear justified. As a consequence, China has turned to regions whose reserves have been opened up to foreign exploration and production only fairly recently and that are characterized by relatively low American corporate, government, and military presence. Africa and Central Asia both fulfill these characteristics.<sup>9</sup>

Ftn. 9-13

Third, however, it is important to acknowledge the role that Chinese NOCs themselves are playing in driving China's outreach. In fact it is argued that the restructuring of the domestic oil and gas sector in 1998 motivated Chinese NOCs to maximize their commercial interests, improve their performance, and expand their business.<sup>10</sup> Further, against the backdrop of limited and declining domestic reserves, and given that Chinese NOCs face strong limitations on growth through mergers and acquisitions, they have an additional incentive to expand their business by growing abroad, even if this implies accessing politically and technologically demanding regions.<sup>11</sup> Adding to this, their status as latecomers forces them to tap countries where the IOCs' activities are legally restricted or politically infeasible, such as Sudan, Burma, and Iran. In all, as Trevor Houser argues, "though Beijing actively encouraged overseas investment in the past, the [NOCs] are taking the lead today . . . to suit economic interests."<sup>12</sup> In other words, rather than Beijing solely designing China's global strategy, it is also Sinopec, the China National Petroleum Corporation (CNPC), and the China National Offshore Oil Corporation (CNOOC) that use government support to flank their expansion efforts and shape policy.<sup>13</sup>

In sum, China's energy diplomacy efforts are driven by both the government's strategic considerations and the NOCs' commercial motives. Both are deeply intertwined. But the NOCs appear to be increasingly in the driver's seat.

9. Crane and others (2009), p. 38.

10. Chen (2008), p. 91.

11. CNOOC's failed attempt to take over UNOCAL in 2005 is a case in point; Chen (2008), p. 91; Houser (2008), p. 158; for a comparative perspective, see Paik and others (2007).

12. Houser (2008), p. 156.

13. On incentives for Chinese NOCs to go abroad, see also Downs (2004); Xiaojie (2007); on the relationship between the oil companies and the government, see also Lieberthal and Herberg (2006).



*State Intervention to Secure Reserves and Markets: Russia's Lock-Up Efforts*

While it may appear somewhat straightforward for a major, import-dependant consumer nation such as China to recur to foreign policy support in securing access to energy supplies, what are the motivations for a major producer such as Russia to engage in energy diplomacy? In fact, Russia is the largest holder of world gas reserves and has also emerged one of the globe's top oil producers in recent years. While its oil reserves are comparably limited, its gas supply is abundant, totaling 26 percent of global reserves (box 2-2).<sup>14</sup>

Box2  
Ftn. 14-15

Yet, and somewhat counterintuitively, it is mainly foreign gas reserves and infrastructure that are the primary target of Russian energy diplomacy efforts, areas in which the Russian industry already is in a strong position. In recent years Russia has tended to not only diplomatically flank Gazprom's expansion strategies abroad but also to take the lead in establishing bilateral business relations in the gas sector, most prominently in the Caspian region, Central and Eastern Europe, and North Africa. The reason for Russia's diplomatic efforts to strengthen Gazprom's presence in these regions are manifold and reflect the coinciding yet not necessarily identical interests of the Kremlin and the Russian gas industry.

First, given that Gazprom accounts for almost a third of overall state revenues during the last years, it is imperative for Moscow to ensure a strong development of this vital corporation. Expanding Gazprom's business both within and outside Russia has thus been openly declared a core policy goal.<sup>15</sup> In addition, Moscow's recent rhetoric seems to suggest that natural gas is also regarded as a potential tool in fostering foreign policy objectives. Feasible or not, given the strong bilateral interdependency in Eurasian gas market structures, such an approach requires a strong position of the gas sector in key markets, an additional incentive to diplomatically flank its expansion strategy.

Second, Gazprom itself has a strong incentive to go abroad. Given a strongly regulated domestic market, which allows for only modest price increases, the company can grow only in foreign markets. Hence it has adopted a growth strategy targeting key consumer regions, notably Central and Eastern Europe. Given the largely locked up European downstream sector, strongly guarded by national governments, political support is a welcome factor when cutting deals.

14. BP (2007).

15. For an overview of the role of Gazprom and energy in the Russian economy, see Gaddy and others (2008) and Stern (2005).

*Box 2-2. A Primer on Russian Energy*

Russia is one of the most resource-rich countries on earth. It owns one-fourth of global gas reserves compared to only 6.6 percent of oil reserves. In 2007 Russian crude oil output amounted to more than 8 percent of global production, rendering the country the world's largest oil producer after Saudi Arabia. While the Russian state has recently strengthened its grip on the oil sector, most prominently by taking over formerly private Yukos, the bulk of the industry remains in private hands. Russia's gas production and export is dominated by the state-controlled monopoly OAO Gazprom, which accounts for around 85 percent of domestic gas production and also controls the domestic pipeline system. As gas makes up more than half of Russia's primary energy consumption, the Russian gas market is highly regulated. Out of more than 650 billion cubic meters of annually produced gas, around 444 billion cubic meters are used domestically. As a consequence of strict domestic price regulation, Gazprom earns more than 80 percent of its profits from exports to Western Europe, although this market accounts for only 30 percent of the company's total production.

As political actors tend to be deeply involved in the Russian gas sector—most evidently represented by Dmitry Medvedev, former chairman of Gazprom's board and now Russian president—the company has come to be portrayed as the Kremlin's foreign policy arm. The recent financial crisis has put severe financial strains on Gazprom, which lost around three-quarters of its stock market value in 2008 and now faces difficulties in raising money to serve its debt and tackle demanding investment projects such as the multibillion-dollar gas fields of Shtokman and Yamal.

Source: BP (2007); International Energy Agency (2008); International Herald Tribune (2008a).

**FIG. 16**

Third, given that generic Russian gas production is falling, mainly due to underinvestment and a regulatory framework disincentivizing production by independent producers, Gazprom needs to tap foreign reserves to satisfy growing domestic demand and to at the same time serve its export commitments.<sup>16</sup> To make up for perceived shortages in domestic production and to improve its gas balance, Gazprom's strategy has been to cut openly state-backed deals with resource-rich

16. Goldthau (2008b). Note that the gas market has changed into a soft market since the end of 2008, endangering Gazprom's export revenues rather than putting in question the supply side.

nations in Central Asia and has even approached major African exporters such as Algeria. In that it has sought to lock up reserves in producer regions, which could eventually become alternative and rivaling gas suppliers for Europe, Gazprom's vital key market.

Fourth, Gazprom has sought to gain (or regain) control over pipeline infrastructure in the Commonwealth of Independent States and parts of Central and Eastern Europe, which would enable the company to control export routes to Western consumers. Gazprom has frequently accepted infrastructure assets as a compensation for outstanding debt and thus has gained ownership over pipeline and transport networks in these regions.

To be sure, Gazprom's moves—such as securing markets instead of enhancing product quality or output and marginalizing competitors by controlling market access and infrastructure—fulfill the criteria of a textbook monopolist rather than point to politicized motives. Recently initiated large-scale pipeline projects such as Blue Stream (transporting gas under the Black Sea to Turkey), South Stream (supplying Italy and Hungary through Greece, Bulgaria, and Serbia), and Nord Stream (a direct Russian-German connector under the Baltic Sea) fit well into this picture. These projects, often dubbed pipeline diplomacy, aim to neutralize Western European efforts to diversify supply routes. In that they are a purely rational move by a market actor aiming at exclusive delivery to a profitable market. Yet as this example reveals, corporate interests overlap and coincide with the Kremlin's goals, which renders mutual relations mostly symbiotic.

Again, however, as in the case of China, there remains the question of who in fact sits in the driver's seat. While the underlying rationales of Gazprom's 2009 gas dispute with Ukraine's Naftohaz remain somewhat blurred, especially given the lose-lose outcome for both sides, the 2006 gas dispute with Belarus has revealed Gazprom's and the Kremlin's diverging interests. The push for an increase of margins and enhanced control of infrastructure in a key transit country was not necessarily congruent with the country's foreign policy interests in Central Europe, and the move eventually deprived Moscow of the last remaining ally in the region. Hence while Russia's expansion in the energy business is never apolitical, politics may occasionally just provide a useful narrative when, in fact, economic interests take over.

This quick assessment of China's and Russia's motivations for engaging in energy diplomacy challenges the assumption that the primary driver is national security. Rather, both strategic government goals and corporate business interests—which may often coincide but not necessarily be identical—are reflected in energy diplomacy. As the cases of China and Russia reveal, the driving force of (energy-related)

foreign policy is not necessarily only the Kremlin or the Chinese presidency but may be also the headquarters of Gazprom or PetroChina.

### *Modes and Forms of Intervention*

What forms of intervention can be observed in energy diplomacy? In general both China and Russia use similar instruments, though in different configurations and intensities.

In China, linking development assistance and resource access is the dominant pattern, particularly with African countries. Through its aid-for-oil approach to development cooperation, Beijing has granted significant financial assistance to African countries, mostly through preferential loans, loans turned into grants, and debt relief. In fact as Oxford's Ngaire Woods notes, China has written off total debts of more than US\$2 billion for forty-four recipient countries, the bulk of which are African.<sup>17</sup> Moreover, funding instruments such as the US\$5 billion China-Africa Development Fund have turned China into one of Africa's most important donor countries.<sup>18</sup> As China tends to grant financial aid largely without setting conditions on domestic governance, it provides access for African countries, such as the repressive Sudan and Zimbabwe, that usually fail to meet the conditions of good governance posed by major Western donor organizations. In addition, Chinese development-related efforts in Africa include various forms of nonfinancial assistance, such as construction of hospitals, malaria prevention centers, schools; improvements in roads and infrastructure; and stipends for African students to study in China.<sup>19</sup>

Ftn. 17–20

As for political support at the international level in exchange for favored access to resources, China's obvious protection of Sudan in the UN Security Council is a frequently cited example. The oil-rich pariah state is one of China's main oil suppliers and accounted for around 5 percent of China's imports in 2006.<sup>20</sup> In addition to paralyzing collective international action on Sudan, Chinese trade with this country, mainly in oil, is widely believed to lighten pressure on the Sudanese government to end the Darfur crisis. China's Sudan policy also seems to fit the larger

17. Woods (2008).

18. See [www.cadfund.com](http://www.cadfund.com).

19. Yet it is important to note that, while China's provision of unconditional development assistance is widely interpreted through the prevalent quest-for-energy lens, this approach is not entirely new. Nonconditional aid has been the trademark of Chinese development assistance since the 1960s. Long before China became a net importer of oil and other resources, development policy was used to promote their One China policy.

20. Energy Information Administration (2006); see also Large (2007).

picture of trying to buy friends in the region by granting unconditional support.<sup>21</sup> Finally, military cooperation and arms sales tend to accompany political support, with China's arms sales to oil-rich Nigeria being a case in point.<sup>22</sup>

Ftn. 21-25

In contrast to China's development-centered approach, Russia tends to rely more on subsidies and price incentives, preferential ties with states of the former Soviet Union, and occasional military cooperation. After the dissolution of the Soviet Union, Russia has used preferential oil and gas agreements as a primary instrument to procure access, transit, and allies. This barter practice, inherited from Soviet times, has been used in such different cases as the Ukraine (in-kind gas payments in exchange for gas transit), Armenia (subsidized gas deliveries in exchange for political support), and Belarus (both transit and political support, and both in oil and in gas). More recently Russia has started to reduce subsidies and swap outstanding debt against pipeline and transport infrastructure and access to the downstream sector.<sup>23</sup>

Regarding energy supplies in Central Asia, Russia has used historic political ties, price incentives, and the region's restricted export infrastructure to foster privileged access. In 2003, for instance, Moscow took advantage of both Turkmenistan's lack of alternative export routes and its need for stable markets and managed to make Ashgabat commit its entire gas export capacity to Gazprom for the following twenty-five years. In addition to monopolizing Turkmen gas transit and exports, a 2007 agreement ensures that Kazakh gas exports to Western Europe will continue flowing through the restored CAC gas pipeline system, a pipeline route from Turkmenistan through Kazakhstan to Russia.<sup>24</sup> The Kremlin was represented in all these deal by Vladimir Putin, who was president of Russia at the time. Further, Russian pipeline diplomacy (efforts to circumvent transit countries and exclusively deliver gas to Western European clients) was supported by high-level visits by Russian officials to critical partner countries. As for military cooperation, a joint Russia-Venezuela sea maneuver at the end of 2008, and recent Russian-Libyan arms deals are widely regarded as efforts to foster collaboration in the field of energy.<sup>25</sup> Finally, Russia's ongoing assistance to Iran in the field of nuclear technology, most notably regarding the construction of a nuclear power plant at Bushehr, and its

21. Beijing's long-term support of Mugabe's authoritarian regime in Zimbabwe is a prime example.

22. See, among others, Human Rights Watch (2003); and Taylor (2007).

23. This policy triggered a series of "gas disputes" with neighboring CIS countries. See for instance Stern (2006).

24. *International Herald Tribune* (2007); Torbakov (2003).

25. Among others, *The Economist* (2008); Agence French-Press (2008); and *International Herald Tribune* (2008b).

support for Iranian missile technology are believed to be linked to a Russian-Iranian rapprochement in the gas sector.<sup>26</sup>

In sum, China and Russia use various forms of energy diplomacy, ranging from development assistance and aid to bilateral subsidies and preferential loans, political support on an international level, and even military cooperation and arms sales. While China's activities tend to focus on oil, Russia's main efforts are in the gas sector. Yet it has to be noted that the use of these instruments is neither new nor unique to these two countries. In fact almost all major Western industrial nations have historically used development assistance, arms sales, and financial aid to either forge the interests of their "national champions," or to secure supplies, or both. Cases in point here include not only Great Britain in Persia but also other OECD nations such as Japan. Japan has a long and established history in energy diplomacy following World War II and for a long period sought to secure supplies through state-owned Japan National Oil Corporation. Having abandoned this approach for the last two decades, it is only recently that Tokyo adopted a new energy strategy, which de nouveau aims to increase Japanese companies' share of oil imports (to 40 percent by 2030, up from the current level of 15 percent).<sup>27</sup>

### Does Energy Diplomacy Make a Difference?

As indicated in the beginning, common preconceptions on energy diplomacy center upon one main assumption, namely that both producing and importing countries can improve their position vis-à-vis competitors by giving their countries' companies a competitive edge in bidding processes. Yet are these assumptions justified?

#### *Diplomacy and Access*

Evidence seems to show clear limits for diplomacy when it comes to securing energy supplies or access. Supporting the opposite side, some of China's development assistance and political support is believed to have facilitated successful bids of Chinese NOCs abroad. As Brookings's Erica Downs notes, the Angolan decision to award two concessions to Sinopec in 2004 seems to be linked to a prior US\$2 billion infrastructure loan granted by China's ExIm Bank.<sup>28</sup> Further, CNPC's successful bid for four oil concessions in Nigeria in May 2006 apparently occurred after President Hu Jintao's visit to Abuja a month earlier, which featured an agree-

26. See also recent discussions on the "Gas Troika," involving Russia, Iran, and Qatar: *International Herald Tribune* (2008c).

27. Evans (2006), pp. 8f.

28. Downs (2007), p. 52.

ment on a Chinese multibillion-dollar infrastructure investment.<sup>29</sup> Finally, China's successful buy-in into Sudan's Greater Nile Petroleum Operating Company and the 2002 replacement of some Western oil companies (in promising Sudanese exploration projects) by Chinese companies seem to prove energy-related motives behind Beijing's support of Khartoum in the UN Security Council.<sup>30</sup>

Ftn. 29–37

Yet as observers note, the link between development assistance and access to oil is often less robust than usually assumed, suggesting that China's engagement in Africa also follows other, nonoil-related—and at least partly humanitarian—motivations.<sup>31</sup> In addition, while Chinese outward foreign direct investment (FDI) has grown substantially over the last years, from US\$5.4 billion in 2004 to more than US\$25.5 billion in 2007, only a fraction of these capital flows appears to be directed toward the oil, gas, and mining sectors.<sup>32</sup> According to the Chinese Ministry of Commerce, Chinese outward FDI in oil, gas, and mining amounted to US\$1.8 billion and US\$1.7 billion in 2004 and 2005, respectively; it spiked in 2006 to some US\$8.5 billion and then fell in 2007 to US\$4.0 billion.<sup>33</sup>

Thus although mining indeed holds a prominent position in Chinese outward FDI, it is only fourth in volume after wholesale and retailing, leasing and business services, and transport. In addition, most of Chinese outward capital flows have traditionally been directed toward Asia, not Africa. Cumulative FDI stocks from 2004 through 2007 are dominated by Asia (67.0 percent) and Latin America (20.1 percent), with the remaining marginal percentages going to Europe (3.8 percent), Africa (3.8 percent), and North America (2.75 percent).<sup>34</sup> Moreover, Chinese companies active in Africa have experienced the negative effects that domestic turmoil can have on investment projects, as incidents in Sudan and elsewhere have shown.<sup>35</sup> China's engagement in these regions is thus likely to face significant limits. Further, Beijing has come to face strong international attention on and opposition to its military assistance and its unconditional support of certain, mostly African, authoritarian regimes.<sup>36</sup>

Given this policy's negative impact on China's international standing, Beijing has apparently started to change its approach toward not only oil-rich Sudan but

29. Evans and Downs (2006), p. 3.

30. Eurasia Group (2006), p. 4; Human Rights Watch (2003).

31. Downs (2007); Houser (2008), p. 158; Taylor (2006); Woods (2008).

32. Ministry of Commerce of China (2008), pp. 59f.

33. *Ibid.*

34. *Ibid.*

35. See, for instance, *New York Times* (2008).

36. Among others, *New York Times* (2007)



Ftn. 37–41

also other outlaws such as Zimbabwe. Finally, the share of equity oil (the amount of crude generated by Chinese foreign assets) in overall Chinese crude imports has long been unimpressive. It is true that Chinese NOCs have invested in exploration, development, and pipeline and refinery projects in such varying places as Iran, Sudan, Kazakhstan, and Kuwait, but equity oil—the key indicator for a ‘successful’ going abroad policy—has hovered around some 15 percent until 2005, and reached 26 percent only in 2007.<sup>37</sup> Still, equity oil accounts for only about 12 percent of China’s oil consumption and a mere 1 percent of global oil production.<sup>38</sup>

As for Russia, and despite the country’s successful buy-ins in Central and Eastern Europe and Central Asia, its overall record also appears somewhat mixed. Its policy of swapping outstanding debt against infrastructure assets and downstream access was generally successful in Belarus, which sold a majority stake in Beltransgaz, the state-controlled gas network, and in Moldova, which allowed Gazprom to further increase its (already majority) share in Moldova’s national gas company, MoldovaGaz. Yet it was only partially successful in Ukraine, a crucial transit country for around 80 percent of Russian gas exports. Kyiv used its geographical monopoly as a bargaining chip and negotiated extended gas deliveries at preferential prices.<sup>39</sup> The 2009 gas dispute only confirmed this finding.

Regarding access, although Russia has secured Turkmen exports, this has not yet translated into real upstream capacities, due to a lack of capital and a poor investment climate in this country.<sup>40</sup> Gazprom has also by and large failed to claim control over Azerbaijan’s pivotal energy resources. Despite a recent agreement on gas deliveries to Russia and the growing role of state-owned SOCAL in upstream projects, Baku has kept the country open for foreign companies such as BP. Kazakhstan, in turn, keeps its options open to export natural gas to China and has recently joined a consortium constructing a pan–Central Asia pipeline to be opened in 2013. Bypassing Russia, the gas link also involves Uzbekistan and Turkmenistan and is planned to eventually bring net volumes of 30 billion cubic meters to China.<sup>41</sup>

All of these factors reveal the riskiness of Gazprom’s business strategy, which relies on Central Asian reserves to satisfy both domestic demand and export

37. Wu (2008), p. 6; Eurasia Group (2006), p. 3; U.S. Department of Energy (2006); KPMG (2005).

38. Wu (2008), p. 6.

39. Crane and others (2009), pp. 30f.

40. *International Herald Tribune* (2008d).

41. Reuters (2008).



commitments. In addition, Gazprom's Kremlin-backed strategy to secure foreign markets and strategically lock up reserves has apparently pushed the company to its financial limits. In late 2008 Gazprom faced liabilities of US\$49.5 billion, compared to a stock market value of US\$85 billion, a trend unlikely to turn any time soon, given the gloomy prospects of the Russian domestic market and falling oil prices.<sup>42</sup> These numbers put in question the realization of the Shtokman and Yamal exploration and production projects, which are needed to make up for falling domestic output.<sup>43</sup> Finally, Russian attempts to use regional forums such as the Shanghai Cooperation Organization for energy-related political purposes were blocked by other member states, especially China, which feared Russian dominance.<sup>44</sup>

Ftn. 42-44

In all, anecdotal evidence seems to reveal that there are clear limits for diplomacy when it comes to securing energy supplies or access. Maybe even more important, however, the functioning logic of existing market structures in oil and gas call into question the assumption that countries can improve their competitive position by diplomatic efforts.

#### *Diplomacy versus Market Structures*

The market for oil is both global and liquid. These aspects of the oil market have certain implications for energy diplomacy. A change in global supply, for example, translates into a change in prices on a global scale and for all market actors. In other words, it does not matter who gets the crude out of the ground but how much oil is globally available.

Applied to the case of a large consumer country such as China, this fact means that China's investing in foreign reserves will improve the global supply of oil and have a positive effect on the global offer-and-demand balance, regardless of whether the crude is bilaterally contracted or not. If it is bilaterally contracted the additional equity oil (generated by Chinese NOCs and consumed by Chinese consumers) takes pressure off the market, as global demand rises less steeply. If it is not bilaterally contracted, it still enhances the global supply situation and thus has a positive price effect. Hence energy diplomacy would only be detrimental to the liquidity of global markets if it intends to contract and lock up reserves without eventually tapping them, which is hardly the goal of Beijing's energy diplomacy.

42. After temporarily peaking at US\$300 billion, Gazprom's stock market value dropped by some 75 percent by the end of 2008. See the International Herald Tribune (2008e).

43. See Goldthau (2008b) for a summary assessment of Russia's gas balance.

44. Ria Novosti (2006).

Moreover, as outlined above, because China's energy diplomacy tends to target reserves, Western IOCs would abstain from prospecting this additional supply, due to lacking profitability or for political reasons, and the supply may well bear an additional premium. This premium would translate into a higher price for the barrel compared to the world market price, since exploration and production costs are comparably higher, with projects producing a comparably smaller outcome in terms of equity oil or generating a comparably smaller return on investment; in addition, it translates into—though nonfinancial—political costs; or it does even both. In short, market logic implies that energy diplomacy in oil can easily translate into not only a money loss.<sup>45</sup>

Ftn. 45–46

Energy diplomacy targeting foreign supplies makes no difference for producing countries, either. As long as the crude finds its way to global markets—which it usually does unless there is the exceptional situation in which a number of producer countries manage to effectively cartelize the market—ownership does not influence market fundamentals. Upstream projects run by Rosneft instead of, say, BP therefore just imply a larger share of revenues being rechanneled to Russian state pockets instead of to BP's private shareholders. The ownership of these projects does not, however, affect supply or prices. In other words, the globalized character of the oil market balances out attempts to secure supplies by diplomatic means.

Natural gas, by contrast, has very much remained a regionally traded commodity, primarily as a result of its pipeline-based delivery. The share of liquefied natural gas in total global gas trade is projected to strongly increase throughout the next decades, a trend that makes observers suggest that a liquid, globalized market for natural gas could replace the established bilateral system. Yet due to extremely high up-front costs, most LNG contracts are long term, a characteristic that will change only gradually.<sup>46</sup> Gas trade is still by and large restricted to exchange within Eurasia, North America, and the Asia-Pacific region. As a consequence, and with the notable exception of the United States, markets for gas have been slower to liberalize, and much of gas trading is tied to long-term bilateral deals entailing destination clauses. Most contracts peg the price of gas to the price of oil, hence splitting the price risk (remaining with the producer) and the volume risk (remaining with the consumer). This is a result of high upfront costs in exploration

45. For a pointed critique of the preconceptions on Chinese bilateral energy deals, see also Press and Gholz (2007); for the opposite perspective, see Stevens (2008).

46. International Energy Agency (2008), pp. 115f; see also chapter 11, this volume.

and production and a high degree of mutual dependency.<sup>47</sup> Three consequences follow from this prevalent market structure.

Ftn. 47

First, there is a strong path dependency in mutual gas relations, which is hard to leave. After three-decade-long contractual relations with Central and Western Europe, Russia finds itself firmly tied to these export markets and will remain tied to them for years to come. Serving alternative exports markets such as, say, China requires significant investments in additional, yet nonexistent, pipeline infrastructure, which are characterized by long lead times. In turn, while European consumers have the option to contract additional sources, they cannot easily diversify their imports away from Russia.

Second, consumer countries do indeed have an incentive to contract supply on a bilateralized basis and to cut individual deals in order to secure needed gas supply. Gas producers, by the same token, have an incentive to contract with and to exclusively serve individual consumer markets, as this is the only way to secure a stable stream of revenues. Caspian producer countries, for instance, have already started to look eastward and to diversify their customer base. Russia may follow suit.

Third, both producers and consumers have an incentive to buy into gas-rich regions. Producers can strengthen their position as suppliers to large export markets. Russia has pursued this strategy, notably in the Commonwealth of Independent States and particularly the Caspian region. Consumers, in turn, can broaden their import portfolio.

In view of all this, flanking bilateral contracting efforts diplomatically may appear an attractive option for both gas producers and consumers. Yet at least for the Eurasian gas market, two observations raise doubts about both the market power of a dominant supplier and the probability of a rat race among consumers.

First, even if Russia successfully locked up Caspian reserves, this dominant market position does not necessarily translate into a supply or price problem for European consumers. The simple reason for this is that the market structure prevents Moscow from being able to dictate prices, which are pegged to crude oil and thus are beyond the control of the producer. Rationing supply for strategic business or even for political reasons would thus not translate into higher prices but would (while presumably also hurting consumer economies) first and foremost ruin Russian state finances. Hence there is no incentive to translate a dominant position on the supply side of the gas market into limiting the actual offer.

47. For contractual details and pricing mechanisms see ECTS (2007).

Ftn. 48-51

Second, competition among consumers for natural gas reserves may be less pronounced than assumed when taking into account actual demand developments. European demand will increase from around 540 billion cubic meters a year to some estimated 700 billion cubic meters a year in 2030, 477 billion of which will be imports.<sup>48</sup> China, by contrast, is assumed to have a much lower import demand (106 billion cubic meters a year), since the country has decided to base most of its power generation on abundant domestic coal reserves and not on gas.<sup>49</sup> So despite the fact that China has started to buy into Caspian reserves and has announced (though never realized) a large-scale deal with Russia that would bring gas from fields in West Siberia and the Russian Far East, chances are that competition over reserves may turn out much less pronounced than commonly assumed, at least among major consumers.<sup>50</sup>

To sum up: energy diplomacy does not really make a difference when it comes to securing supply in oil. Although securing supply is certainly possible in physical terms, a consumer country runs the risk of generating its own supply at significantly higher costs than if the crude was instead bought on world markets. This being said, it however remains to be seen what effects the ongoing financial crisis has on world market structures. The recent Sino-Russian deal on a twenty-year oil delivery of 15 million tons a year in exchange for a Chinese US\$15 billion loan to Russian state-owned oil company Rosneft and a US\$10 billion loan to Russian state-owned Transneft (running the country's pipeline infrastructure) might remain an outlier case.<sup>51</sup> It may also stand for a new form of bilateral deal, whose rationale is primarily informed by adverse domestic impacts stemming from the global financial meltdown.

As for gas, diplomatic efforts may in fact facilitate access and thus have an influence on the supply side, although it appears not very likely that a producer can translate control over supplies into market power, while competition among consumers over access may be moderate on Eurasian gas markets—at least under the prevalent market structure, which is characterized by take-off agreements, which all market participants have an incentive to adhere to. It remains to be seen, however, what impact the emerging LNG market has on prevalent market structures. Cartelization is by no means excluded, though it would not take place

48. International Energy Agency (2008), pp. 110, 118.

49. International Energy Agency (2008), p. 118.

50. See, for instance, *Financial Times* (2006); Zang (2008).

51. Reuters (2009).

within the “Gas Troika,” but rather on the industry level (such as between Gazprom and Sonatrach).

### **Implications for International Governance: Energy Diplomacy in Oil and Gas**

As shown, both producing and importing countries face limits when it comes to improving their position vis-à-vis competitors by means of energy diplomacy, regarding supply or access, or both. As history shows, reflexes recurring to diplomatic means, including the strategic use of development assistance or military cooperation, tend to occur in times of high commodity prices. During low-price periods, when capital becomes scarce in producer nations and global energy turns into a consumer market, access both for oil and for gas tends to become easier and foreign investment more welcome. Hence the present trend toward enhanced state efforts to flank energy deals does not necessarily challenge existing market structures the way it is suggested in current public debates; in that, it does probably not require a fundamental reassessment of the rules of the game in global energy. Yet energy diplomacy may exert some negative side effects on two crucial aspects of global energy: investment and transparency. Here energy diplomacy may in fact have significant policy implications and may require action.

As stressed earlier, investment decisions based on political calculations tend to ignore some of the underlying economics. As Chinese upstream investments in Africa reveals, political opportunity may influence both investment location and volume; this often implies a lower return on investment compared to exploration and production projects driven by hard business fundamentals. As a consequence, energy diplomacy entails the risk of money flowing into the “wrong” projects and thus negatively impacting allocation of investment.

For an individual consumer such as China, this may imply just a suboptimal deal and simply put an additional chunk on the price for a barrel—which may be bearable from a political point of view, where the primary goal is to secure supply and not to optimize costs. Yet if this strategy is pursued by a large number of market participants, including producers, the overall effect can be highly detrimental on an aggregate, global level, as the resulting suboptimal allocation of capital implies a suboptimal development of available offer and may eventually translate even into a supply gap. In addition, politically driven or flanked exploration and production projects may crowd out private sector investments, adding to the overall negative supply effect. In sum, energy diplomacy could prevent supply from developing as it would if markets signals were the drivers.

Ftn. 52-55

In addition, politically driven or flanked investments decrease market transparency, a crucial problem in global oil. To be sure, uncertainty and lack of transparency are nothing new in the oil sector. For decades the bulk of market participants (except for OECD member states) have failed to provide detailed information on their supply and demand developments. Major producer countries such as Saudi Arabia keep information on their upstream capacities undisclosed, while major consumers such as China do not reveal data on their real consumption.<sup>52</sup> As a consequence, and put simply, the oil price is formed on educated guesses rather than on real market fundamentals, a fact some observers blame for price volatility.<sup>53</sup> When upstream deals are flanked politically or even backed financially by state capital or guarantees, financial markets may no longer finance large-scale projects, decreasing transparency regarding not only volume of investment but also business fundamentals.<sup>54</sup> Both suboptimal allocation of capital and decreased transparency affect supply, price, and volatility.

In view of this, the challenge for global energy governance is to strengthen the mechanisms that enhance market transparency and improve allocation of investment. Major producers such as Russia obviously have very little incentive to join in global efforts targeting binding investment conditions, for this would affect their domestic regulatory framework. Yet major consumer nations such as China and India may indeed develop an interest in leveling the playing field. Their NOCs could become the drivers of such a process, as their growth potential faces limits in regions in which their private Western counterparts have already been excluded. Chinese oil companies' strategic decisionmaking appears at least partly driven by a desire to maximize profit. Hence, China and India may at some point develop an interest in reliable rules of access as well, thus eventually siding with the established Western consumer nations.

Finally, it also remains to be seen what impact the financial crisis, which started in 2008 and is likely to continue for some time, will have on the allegedly mighty NOCs. Chances are that, voluntarily or not, their cost-benefit calculations might alter rather profoundly.<sup>55</sup>

52. See chapter 12, this volume.

53. Tempest (2001); Brook and others (2004).

54. See, for instance, Evans and Downs (2006).

55. The *Financial Times* (2007) recently identified Saudi Aramco (Saudi Arabia), Gazprom (Russia), CNPC (China), NIOC (Iran), PDVSA (Venezuela), Petrobras (Brazil), and Petronas (Malaysia) as the "New Seven Sisters." Gazprom has recently announced a cut of RUR 200 billion (or EUR 4.4 billion) out of initially planned RUR 920 billion investments in 2009, a function of faltering oil prices and reduced demand (Kommersant 2009). Chinese NOCs, by contrast, have started buy-ins into Western resource companies such as Rio Tinto, with energy companies likely to follow suit.

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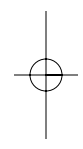
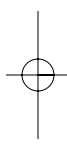
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