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# China's Governance over Offshore Oil and Gas Development and Management

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*With its rapid economic growth, China is eager to get sufficient energy (including oil and gas) to support its dynamic national development. Economic reform in the late 1970s triggered China's offshore oil and gas exploration and exploitation. Relevant laws and regulations have been enacted and implemented, including regulations on exploiting offshore petroleum resources in cooperation with foreigners and regulations on marine environmental protection against pollution from offshore petroleum activities. This article attempts to assess and analyze China's national policy and relevant laws and regulations governing offshore oil and gas development and their effectiveness. In addition, the prospect for joint development in disputed sea areas adjacent to China is discussed.*

**Keywords** China, environmental management, foreign investment, joint development, offshore oil and gas

## Introduction

Due to its rapid economic growth, China is eager to obtain sufficient energy, including oil and gas, to support its dynamic national development. According to a recent report, China's demand for oil reached a new record of 5.62 million barrels per day (mb/d) in August 2003 and it will soon replace Japan as the second largest oil consuming country in the world, just after the United States.<sup>1</sup> As reported by the Xinhua News Agency, China has planned to increase its energy production by 20% by 2005 as the market demand keeps soaring, and the updated target for oil and gas will be 173 million tons of petroleum and 50 billion cubic meters of gas. In 2003 China imported 91.12 million tons of crude oil and 28.24 million tons of refined oil, up 31.3% and 38.8% year to year, respectively and is expected to rely on imports for 40% of its petroleum consumption in the coming years.<sup>2</sup> Experts predict that China will import more than 500 million tons of oil and over 100 billion cubic meters of natural gas in 2020.<sup>3</sup> This trend inevitably triggers China's enthusiasm to quicken the pace of exploring and exploiting offshore oil and gas to counter some of the burden of increased dependence on imported energy resources.

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Offshore oil accounts for one fourth of the total oil production in the world. It is characterized as a business activity with “high investment, high technology and high risk.” Drilling a well 2,000 meters deep on the seabed needs 10–15 million Renminbi Chinese currency (RMB), but the same drilling onshore only needs one tenth of the offshore expenses.<sup>4</sup> It usually takes six to seven years to develop an offshore oilfield from the time of its discovery. The cost for building a medium-size offshore oilfield is between 300 and 600 million U.S. dollars, and a large one, 2–3 billion U.S. dollars.<sup>5</sup>

China began its offshore oil and gas exploration and exploitation in the late 1950s. In 1959, the Ministry of Geology began to conduct offshore seismic surveys in the Bohai Sea area. During the 1960s and early 1970s, China conducted petroleum prospecting in the Yellow Sea, East China Sea, and South China Sea and found the existence of oil sedimentary basins. China even tried to drill in the Bohai area.<sup>6</sup> Despite China’s early efforts, there was little prospect for actual offshore oil exploitation because of the high cost of offshore drilling as well as the lack of advanced expertise and technology. This was in contrast to the onshore exploitation experience, where the Daqing Oilfield produced large quantities of oil. The marginal success of the early efforts made China’s petroleum planners recognize “the limitations imposed by their indigenous offshore technology” and the long-standing “self-reliance” policy.<sup>7</sup>

More and more areas of hydrocarbon potential have been discovered in China recently. In 2001, an international oil consortium led by the China National Offshore Oil Corporation (CNOOC) discovered two oilfields in the South China Sea, located in the Pearl River Mouth Basin of the sea, 150 kilometers southeast of Hong Kong, with a total area of 2.6 square kilometers. Two pockets together were expected to yield at least 11,000 barrels of oil a day.<sup>8</sup> The recent survey in 2003 revealed that oil and gas potential in 38 sedimentary basins in China’s ocean areas might amount to more than 40 billion tons of oil equivalent.<sup>9</sup> The current producing field in the deepest water (300 m) is Lihua, located in the Pearl River basin.<sup>10</sup> Since most of the deepwater areas in China have been scarcely touched, the potential for offshore petroleum is significant.

Nevertheless, there is a definitional problem as to what constitutes offshore oil and gas. There is no definition of “offshore oil and gas” in the Chinese law, but there is a definition of onshore petroleum resources. The 1993 Regulations on the Exploitation of Onshore Petroleum Resources in Cooperation with Foreign Enterprises provides that onshore petroleum resources “comprise underneath petroleum resources within the whole onshore area *including beaches, islands and sea areas extending outward up to the depth of 5 meters*” (italics added).<sup>11</sup> This means that onshore oil and gas also includes some sea areas, though strictly speaking they are near-shore rather than offshore. It is clear that, except for the onshore resources, the rest should be regarded as offshore. This division between onshore and offshore is related to the division of petroleum operations between different Chinese state-owned oil companies. According to the relevant regulations, the China National Petroleum Group Corporation (CNPC or PetroChina) and the China Petrochemical Group Corporation (Sinopec) are responsible for the onshore operations, while CNOOC operates in offshore areas. Nonetheless, in practice, the two onshore state oil companies are also involved in offshore petroleum activities and explore offshore areas deeper than five meters. For example, Sinopec explored the Shengli Oilfield in the Bohai Sea as deep as 18 meters.<sup>12</sup> Table 1 indicates oil production from the above three major companies in 2001.

Though the onshore oil companies only engage in a small portion of the overall offshore production, business conflict and competition between them and CNOOC occurs from time to time. For example, the Pinghu Gas Field in the East China Sea was

**Table 1**  
Offshore oil and gas production (2001)

	Oil (ten thousand tons)	Gas (ten thousand cubic meters)
CNOOC	1843.35	421,416
Sinopec	213.60	15,600
PetroChina	86.00	20,196

*Source: China Ocean Yearbook 2002, at 133.*

first discovered by Sinopec and began to produce gas in 2001. With the mediation of the National Planning Commission of the State Council, Sinopec and CNOOC signed a cooperative agreement in June 2001 to jointly own the discovered gas field.<sup>13</sup> It is predicted that such business conflicts could happen more frequently because of difficulties in discovering oilfields onshore. Driven by profits, the onshore oil companies will not give up easily their chances for profitable business in the offshore. The compromise arrangement for the Pinghu Gas Field demonstrates the increasing interference of the onshore companies in offshore petroleum activities.

Relevant national laws and regulations have been enacted and implemented to deal with offshore oil and gas activity. These include the basic law of mineral resources, regulations on offshore petroleum resources and on environmental protection in offshore oil exploration and exploitation. This article attempts to assess and analyze these laws and regulations and their effectiveness. This article will link the implementation of these laws and regulations to environmental management to see whether China's offshore activities are in line with the requirement of sustainability. Finally, this article will address the issue of joint development in the disputed sea areas between China and other countries. It is to be noted that the offshore oil and gas activities in this article only refer to the upstream stage of exploration and exploitation without referring to the downstream stage of distribution and marketing.

### **National Law and Policy**

According to the Chinese Constitution, mineral resources including oil and gas belong to the state, and in turn the state ensures the rational use of natural resources.<sup>14</sup> Based on this general legal norm, the Law on Mineral Resources was enacted in 1986 and subsequently amended in 1996.<sup>15</sup> The Law reiterates what is in the Constitution and further provides that the State Council exercise the ownership of mineral resources on behalf of the state.<sup>16</sup> There are a number of provisions relating to offshore oil and gas activities. First, the Law applies to the exploration and exploitation of mineral resources within the Chinese territory and in the sea areas under China's jurisdiction (art. 2); second, anyone who wishes to explore and exploit mineral resources should apply for the rights of exploration and mining separately according to law and acquire them with approval, and should go through registration, and should meet the qualifications requirements (art. 3); third, the department in charge of geology and mineral resources (currently the Ministry of Land and Resources after the 1998 government restructuring) should approve the applications and issue licenses for the exploitation of mineral resources within China's territorial sea and other sea areas under its jurisdiction (art. 16); and fourth, the exploitation

of special minerals such as petroleum and natural gas may be approved by the relevant department authorized by the State Council and a mining licence will be issued upon approval (art. 16). The above stipulations indicate that the exploration and exploitation of offshore oil and gas requires a double approval because the mining site is located in the sea area and oil and gas are designated as special mineral resources. That the approving authorities may be in two different government departments increases the costs during the application process, particularly for those foreign investors not familiar with the local environment of doing business in China. It is to be noted that the power to review and approve applications for offshore oil and gas exploration and exploitation belongs solely to the central government. Unlike for other mineral resources, local governments have no such administrative power.

In addition, the exploration for and exploitation of minerals is subject to the registration system based on the two regulations issued by the State Council in 1998.<sup>17</sup> The Ministry of Land and Resources is responsible for the registration of such mineral activities provided that the mineral resources are located in the territorial sea or other sea areas under China's jurisdiction; or involve foreign investment, or relate to oil and gas. It approves and issues mineral exploration or exploitation licenses.

Petroleum development offshore is different from onshore in the sense that its geographical locations are in the sea areas and it has specific governing regulations, including the Regulations on the Exploitation of Offshore Petroleum Resources in Cooperation with Foreign Enterprises and the Regulations concerning Environmental Protection in Offshore Oil Exploration and Exploitation, which will be addressed in the following sections.

Offshore activities are also governed by marine laws and regulations (see Table 2). China passed its Law on the Territorial Sea and Contiguous Zone in 1992,<sup>18</sup> which declares that China's territorial sea is 12 nautical miles measured from the baselines of the territorial sea along the Chinese coast. Within this zone, China enjoys full sovereignty, including its exclusive rights to natural resources therein. All international organizations, foreign organizations, or individuals are to obtain approval from the Chinese Government for carrying out marine operations or other activities (including offshore oil and gas activities) in China's territorial sea and are to comply with relevant Chinese laws and regulations.<sup>19</sup> In 1998 China promulgated the Law on the Exclusive Economic Zone and Continental Shelf,<sup>20</sup> which provides that China has sovereign rights in its exclusive economic zone (EEZ) and continental shelf for the purpose of exploring and exploiting, conserving and managing the natural resources of the waters superjacent to the sea-bed and of the sea-bed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone. China has in its EEZ and continental shelf jurisdiction with regard to the establishment and use of artificial islands, installations, and structures, marine scientific research, and the protection and preservation of the marine environment.<sup>21</sup> Moreover, China has the exclusive right to authorize and regulate drilling on the continental shelf for all purposes. Again, any international organization, foreign organization, or individual who wishes to explore and exploit natural resources in China's EEZ and continental shelf or to drill for any purpose on the continental shelf must obtain approval from the competent Chinese authority and comply with Chinese laws and regulations.<sup>22</sup>

China's sovereignty over its territorial sea and sovereign rights to its EEZ and continental shelf and their resources derive from international law, particularly the 1982 United Nations Convention on the Law of the Sea (LOS Convention), which China ratified in 1996.

In 2003 a significant initiative came from the Chinese Government when a white

**Table 2**  
Laws and regulations related to offshore oil and gas activities

Name	Time of adoption/ amendment
Law of Mineral Resources	1986/1996
Law on Marine Environmental Protection	1982/2000
Regulations on the Exploitation of Offshore Petroleum Resources in Cooperation with Foreign Enterprises	1982/2001
Regulations Concerning Environmental Protection in Offshore Oil Exploration and Exploitation	1983
Regulations Concerning the Dumping of Wastes at Sea	1985
Law on the Territorial Sea and Contiguous Zone	1992
Law on the Exclusive Economic Zone and Continental Shelf	1998
Provisions on the Payment of Royalty for the Exploitation of Offshore Petroleum Resources	1989
Provisional Measures on the Management of Abandoned Offshore Oil Platforms	2002
Provisional Regulations on Resources Taxes	1993
Regulations on the Protection of Oil and Gas Pipelines	2001
Measures on the Management of Registration of Mineral Resources Exploitation	1998
Measures on the Management of Registration of Mineral Resources Prospecting Areas	1998
Procedures on the Management of Environmental Impact Assessment for Offshore Petroleum Development Projects	2002
Detailed Rules on the Implementation of the Law of Mineral Resources	1994
Interim Rules on the Supervision and Management of Oil and Gas Pipelines Safety	2000
Procedures on the Management of Environmental Impact Assessment for Offshore Petroleum Development Projects	2002
Law on Environmental Impact Assessment	2002
Implementing Measures for the Regulations Concerning Environmental Protection in Offshore Oil Exploration and Exploitation	1990
Provisions on the Use of Anti-oil Chemicals in Offshore Petroleum Exploration and Exploitation	1992
Provisions on the Protection of Seabed Cables and Pipelines	2004

*Source:* Prepared by the author.

paper on the Chinese policy towards mineral resources was issued.<sup>23</sup> In this document, China elaborated its policy towards sustainable development of mineral resources as a national strategy. In April 2001, China approved the implementation of the National Program on Mineral Resources, and in January 2003 it began to implement the Action Program on Sustainable Development in the 21st century. The overall goals of the Chinese policy are: (a) to enhance access to mineral resources to safeguard the building of a moderate affluent society (*xiaokang shehui*); (b) to improve the ecological environment of mining sites; and (c) to create the developing environment of fair competition. To these goals are added two important areas: encouragement of foreign investors to explore and exploit mineral resources in China and improvement of the laws and regulations concerning mineral resources. As for oil and gas, the top priority is to develop and utilize domestic resources and to strengthen the exploration and exploitation of offshore hydrocarbon resources.

The initiative for developing offshore oil and gas is also reflected in the new National Marine Development Program (for the years from 2001 to 2010) prepared in 2003. The growth target is that marine industries will account for 4% of the total national GDP in 2005 and more than 5% by 2010, with the overall goal being the marine sector becoming a pillar in the national economy.<sup>24</sup> The offshore petroleum industry is one of the most important marine industries. The development of offshore oil and gas should carry out the principle of “two resources and two markets”; i.e., oil and gas are equally important, and so are the domestic and overseas markets as well as exploration and exploitation by China and in cooperation with foreigners. Petroleum exploration in the East and South China Seas should be strengthened.<sup>25</sup>

## Foreign Investment

Due to the lack of sophisticated technologies for offshore petroleum exploration and exploitation, China, at the first stage of its offshore development, relied on the cooperation of foreign oil companies. In addition to the laws and regulations concerning foreign investment (which are not discussed in this paper), the most significant specific legislation for foreign involvement in the offshore oil and gas industry is the Regulations on the Exploitation of Offshore Petroleum Resources in Cooperation with Foreign Enterprises, which was first promulgated in January 1982 and revised in September 2001.<sup>26</sup> Under these Regulations, foreign enterprises are allowed to participate in the offshore oil development in cooperation with Chinese counterparts. Foreign investments, profits, and other legitimate rights of foreign enterprises and their offshore cooperative exploitation activities are protected (art. 3). This is a reflection of the relevant provisions in the Law of Mineral Resources, which stipulates that “the state shall guarantee the lawful rights and interests of mining enterprises established according to law in the exploitation of mineral resources.”<sup>27</sup> The “mining enterprises” include foreign-invested enterprises.<sup>28</sup> Furthermore, China has promised in general not to expropriate the investment and income of foreign enterprises (art. 4).<sup>29</sup> On the other hand, all activities for cooperative exploitation should abide by relevant Chinese laws and regulations, and foreign enterprises and individuals should accept inspection and supervision by the competent Chinese authorities (art. 3). All buildings and structures set up and all vessels operating to exploit offshore petroleum, including corresponding onshore oil and gas terminals and bases, are under China’s jurisdiction (art. 2).

It is to be noted that the revision of the 1982 Regulations in 2001 was a timely response to China’s entry into the World Trade Organization (WTO), and many of the



Regulations restrictive provisions, in particular relating to technology transfer, sales of production, purchase of raw materials, and employment, were deleted or amended. The entry by China into the WTO, on the other hand, encourages China to attract more foreign investment in mineral resources exploration and exploitation, and this is indicated in the Guiding Catalogue of Industries for Foreign Investment adopted in 2002, where exploration and exploitation of oil and gas and development of related new technologies is listed as an area where foreigners are encouraged to invest.<sup>30</sup>

At the beginning of China's open policy, the offshore situation was a bit chaotic, since foreign investors did not know which was the correct department for dealing with investment. To rectify this, the State Council issued an instruction to relevant departments and provinces clarifying that cooperation with foreigners for petroleum exploration and exploitation was to be under the authority of the Energy Committee and the Committee of the Import and Export Management of the State Council, while the Ministry of Petroleum was responsible for organizing and inviting foreigners to negotiate and sign agreements or contracts. When foreigners approached provinces, the relevant provinces were to introduce them to the Ministry of Petroleum.<sup>31</sup>

### *CNOOC*

According to the 1982 Regulations, the CNOOC is responsible for the overall offshore work in cooperation with foreign enterprises, and it enjoys the exclusive right to explore, exploit, produce, and sell the petroleum extracted from cooperative blocks (art. 6). The CNOOC also has the right to organize biddings and sign petroleum contracts and/or agreements with foreign counterparts for cooperative exploitation of offshore petroleum (art. 7).

The CNOOC was created in February 1982, just after the adoption of the 1982 Offshore Regulations. The purpose of its creation was obvious: to fulfill the responsibilities created by the law. The day after its creation (16 February 1982), CNOOC announced that 43 blocks totalling more than 150,000 square kilometers were open for competitive bidding, and in August, 33 companies submitted 102 formal bids to the CNOOC. In May 1983, the CNOOC signed the first exploration and exploitation contract with a consortium led by British Petroleum (BP) and involving participants from Australia, Brazil, and Canada.<sup>32</sup> In late 1984, the CNOOC announced a second round of bidding, which covered 4 blocks of a 13,300-square-kilometer area in the Yinggehai Basin, 12 blocks of 50,000 square kilometers in the Pearl River mouth, and 6 blocks of 43,000 square kilometers in the southern Yellow Sea.<sup>33</sup> As of 31 May 2003, the CNOOC had signed 154 petroleum contracts and agreements with 70 foreign oil companies from 18 countries. The total acreage of the 32 contracts and agreements now under execution is about 120,000 sq. km. and involves 13 oil/gas fields (see Table 3).<sup>34</sup> In 2003, the CNOOC announced a further 10 foreign cooperative blocks and two cooperative areas in the Yellow Sea, East China Sea, and South China Sea.<sup>35</sup>

The CNOOC is the third largest oil company in China. In January 2004, its total assets reached 116.7 billion RMB, an increase of 9.3 billion RMB from June 2003. Its profits in 2003 broke the record based on production of 37.63 million tons of oil equivalent, an increase of 6.4% from 2002.<sup>36</sup> In October 1999 CNOOC Ltd. was incorporated in Hong Kong and has been listed on the stock exchange of Hong Kong and New York since 2001. Its six operating areas include Bohai, East China Sea, eastern part of the South China Sea, western part of the South China Sea, Indonesia, and the northern part of the Caspian Sea in Kazakhstan.<sup>37</sup> It aims to increase its domestic oil and gas output



**Table 3**  
Offshore petroleum contracts (as of 31 December 2003)

Code	Contract	Signing (dd/mm/yy)	Approval (dd/mm/yy)	Contractor
1	Yinggehai	19/09/1982	11/10/1982	Arco China Inc. KUFPEC (China) Inc.
2	15/11	29/11/1983	12/12/1983	Phillips China Inc. Shell Offshore China Partnership
3	16/08	02/12/1983	03/01/1984	Agip China B.V. Chevron Overseas Petroleum Texaco China B.V.
4	16/06	08/11/1985	24/12/1985	Japex New Nanhai Ltd. New Huanan Development Company Ltd. Pearl River Mouth Oil Development Company Ltd.
5	15/22	17/12/1983	30/12/1985	Phillips China Inc. Shell Offshore China Partnership
6	11/19	07/04/1992	13/05/1992	Texaco China B.V.
7	17/22	15/04/1992	13/05/1992	Statoil (ORIENT) Inc.
8	WAB-21	08/05/1992	22/05/1992	Crestone Energy Corp.
9	04/36	17/08/1994	14/09/1994	Kerr-McGee China Petroleum Ltd. Sino-American Energy Corp.
10	11/05	07/12/1994	13/12/1994	Phillips China Inc. Phillips Petroleum Bohai Ltd.
11	32/32	12/12/1994	27/12/1994	Primeline Petroleum Corp. Primeline Energy China
12	05/36	23/01/1996	26/02/1996	Kerr-McGee China Petroleum Ltd. New Field China LDC Sino-American Energy Corp.
13	15/35	02/12/1996	31/12/1996	Santa Fe Energy Resources of China Ltd.
14	15/34	16/01/1997	26/02/1997	Santa Fe Energy Resources of China Ltd. Berlington Resources China Ltd.

**Table 3**  
Offshore petroleum contracts (as of 31 December 2003) (*Continued*)

Code	Contract	Signing (dd/mm/yy)	Approval (dd/mm/yy)	Contractor
15	Chao-Tai	16/05/2002	20/12/2002	Overseas Petroleum and Investment Corp.
16	16/19	03/04/1998	20/05/1998	Agip China B.V. Chevron Overseas Petroleum Texaco China B.V.
17	QHD 32-6	18/09/1998	29/09/1998	Arco China Ltd. Texaco China B.V.
18	22/12	21/12/1999	29/02/2000	Bligh Oil & Minerals N.L.
19	09/18	15/09/2000	20/10/2000	Kerr-McGee China Petroleum Ltd.
20	WC13-1/2	13/10/2000	24/10/2000	Husky Oil China Ltd.
21	27/10	10/05/2001	19/07/2001	Santa Fe Energy Resources of China Ltd. Energy Development Corp. (China)
22	39/05	26/07/2001	06/09/2001	Husky Oil China Ltd.
23	BZ26-2/28-1	31/08/2001	01/10/2001	Shell Exploration (China) Ltd.
24	11/26	11/12/2001	04/04/2002	Shell Exploration (China) Ltd.
25	23/13	23/09/2002	12/11/2002	Husky Oil China Ltd.
26	23/20	23/09/2002	12/11/2002	Husky Oil China Ltd.
27	40/30	06/12/2002	13/01/2003	Husky Oil China Ltd.
28	09/06	17/06/2003	23/06/2003	Kerr-McGee China Petroleum Ltd.
29	chun-xiao	19/08/2003	05/09/2003	CNOOC China Petrochemical Corp. Pecten Orient Company LLC Unocal East China Sea Ltd.
30	baoyunting	19/08/2003	01/09/2003	CNOOC China Petrochemical Corp. Pecten Orient Company LLC Unocal East China Sea Ltd.

(Table continues next page)

**Table 3**  
Offshore petroleum contracts (as of 31 December 2003) (*Continued*)

Code	Contract	Signing (dd/mm/yy)	Approval (dd/mm/yy)	Contractor
31	27/05	19/08/2003	01/09/2003	CNOOC China Petrochemical Corp. Pecten Orient Company LLC Unocal East China Sea Ltd.
32	12/21	19/08/2003	01/09/2003	CNOOC China Petrochemical Corp. Pecten Orient Company LLC Unocal East China Sea Ltd.
33	20/14	19/08/2003	01/09/2003	CNOOC China Petrochemical Corp. Pecten Orient Company LLC Unocal East China Sea Ltd.
34	20/14	19/08/2003	01/09/2003	Husky Oil China Ltd.

*Source:* Adapted from CNOOC website, <http://211.154.167.192:81/servlet/Node?Node=10896> (accessed 24 February 2004).

by more than 7% (40 million cubic meters of oil equivalent) by 2008 from the level in 2003 (37 million cubic meters of oil equivalent). By 2010 CNOOC's domestic production should reach 50–55 million cubic meters of oil equivalent, and overseas production should reach 20 million cubic meters of oil equivalent, together accounting for 20% of China's total petroleum production.<sup>38</sup> As Wei Liuchen, the then-General Manager, revealed in 2000, CNOOC planned to build a gas pipeline along the coast from the Gulf of Tonkin to the Bohai Bay in the next 10–15 years.<sup>39</sup> Though successful, the CNOOC faces a number of challenges, including the lack of sufficient resources for sustainable development and technologies for oil development; problems in management and training; and a low level of research and development.<sup>40</sup>

The Chinese model for foreign cooperation in offshore petroleum activities has some advantages. The contract signed between a foreign company and the CNOOC is a commercial contract, not a government agreement. This helps the Chinese government avoid any state responsibility if there is a dispute concerning the implementation of the contract. Second, the government has to set conditions which are attractive enough for oil companies to invest. The creation of company–government tensions has been seen in the North Sea, where governments claimed that companies avoided their obligations, while the companies counterclaimed that the governments were inhibiting the development of the offshore resources by dint of their regulatory and fiscal policies.<sup>41</sup> Particularly for big transnational companies, the government is concerned about whether they will abide by the national rules and regulations. With the CNOOC as an intermediary, the Chinese government has no need to directly contact the foreign oil companies so that there is little chance for tension to occur as long as the government's general policy

remains correct. Finally, it is noted that the participation of the CNOOC represents an international trend where the host government uses a national state oil company to participate in oil or gas development.

### ***Contracts***

According to Chinese law, foreign investors enjoy mining rights as granted by the Chinese authorities, and such rights are to be realized through the execution of petroleum contracts. The mining rights mainly comprise two categories: the right to exploration and the right to exploitation, and they are defined in the detailed implementing rules for the Law of Mineral Resources. The former refers to the right to explore mineral resources within the prescribed scope of the license, whereas the latter refers to the right to exploit and acquire mineral resources within the prescribed scope of the granted license.<sup>42</sup>

The form of petroleum contracts used in China is called a “risk contract,” which is designed to attract investment from foreign companies through providing exploration capital and taking all the risks in exploration. If the exploration fails, the investment is not recoverable; if oilfields with commercial values are found, both the Chinese and foreign sides jointly provide the exploitation capital to develop and produce the oil/gas fields.<sup>43</sup> China made a careful study before choosing this contract model. During 1978 and 1979, China sent delegations to various countries, including the United States, the United Kingdom, France, Brazil, Norway, and Japan, and invited 23 foreign oil companies to China. The risk contract was chosen after an analysis of more than 120 contract samples and legal materials from 125 countries.<sup>44</sup> Some scholars call this form of contract a “compound contract”<sup>45</sup> or “hybrid contract” because it contains various elements from other internationally-used contracts (such as concession, risk service, joint venture, and production sharing) but differs from them so as “to serve the specific needs and interests of a producing state.”<sup>46</sup> China’s official term for these contracts is Production Sharing Contracts (PSCs), which is the model contract formalizing cooperation.<sup>47</sup> For example, the CNOOC signed a PSC with Santa Fe Energy Resources (China) Ltd. in May 2001, which covers the exploration area of Block 27/10 in the Pearl River basin of 6,546 square kilometers.<sup>48</sup> The PSC is flexible such that improvements can be made through the incorporation of additional terms and mechanisms to meet actual circumstances.

This formality of cooperation through a PSC (which incorporates the risk contract) is suitable for a producing country such as China, which lacks capital, management experience, and technology, since the risk contract possesses several advantages: (a) use of foreign investment for exploration, with the foreign side bearing the risks, with the result that China has no need to cover exploring costs; (b) due to the close relations between the foreign interest and exploration results, the foreign investor can speed up the exploration work; (c) after the discovery of oilfields, the foreign side has to reduce investment for higher economic returns and to use advanced technology from which the Chinese side can learn; and (d) the sharing of profits is from the products minus operation costs, so that the foreign side can recover its costs.<sup>49</sup> This form of contract has been incorporated into the 1982 Regulations, which provide that

unless otherwise stipulated by laws and administrative regulations or specified in a petroleum contract, the foreign enterprise which is one party to the petroleum contract (hereinafter “foreign contractor”) shall provide the in-

vestment to carry out exploration, be responsible for exploration operations and bear all exploration risks; after a commercial oil(gas) field is discovered, both the foreign contractor and the China National Offshore Oil Corporation shall provide the investment for their cooperative development, and the foreign contractor shall be responsible for development operations and production operations until the China National Offshore Oil Corporation takes over the production operations when conditions permit as provided in the petroleum contract. The foreign contractor, in accordance with the provisions of the petroleum contract, may recover its investment and expenses and receive remuneration out of the petroleum produced.<sup>50</sup>

In this form of petroleum contract, most of the terms and conditions are not negotiable, and only three areas are open for further discussion: the work program, the X factor (which determines the percentage of production a company receives as profit), and other contributions.<sup>51</sup> Once a contract is signed, it is subject to a government approval and will run for a period as agreed by both parties. However, the maximum period for an exploration contract is 7 years and for production 30 years from the effective date of the contract.<sup>52</sup>

For the exploitation contract, the foreign company is required to cooperate with CNOOC, which has the right to own 51% of the shares in the joint venture or joint project.<sup>53</sup> But CNOOC maintains the option of sharing less percentage of working interest. Moreover, the CNOOC has the right to take over the production operations at any time after the foreign contractor has recovered its full development costs. The contract requires the contractor to bear, *inter alia*, the following contractual obligations: (a) to apply advanced technology and managerial skills; (b) to prepare a work program and budget; (c) to be responsible for procurement and subcontracting; (d) to establish insurance programs; (e) to prepare a training program and budget; (f) to provide CNOOC with all information and samples relating to the operations; (g) to minimize damage and destruction to the environment; and (h) to minimize the danger to human safety and health. In the meantime, CNOOC assists the contractor in opening accounts with the Bank of China; expediting foreign exchange formalities; obtaining office space and supplies, accommodations, and communications; dealing with customs; obtaining permits to export data and samples for analysis or processing; and arranging purchases of data available from relevant Chinese departments.<sup>54</sup> The CNOOC "has hardly any substantive obligations towards foreign companies."<sup>55</sup> Regarding the profits generating from joint operations, they are divided between CNOOC and the foreign company after the deduction of taxes and cost recovery.<sup>56</sup> Usually, CNOOC shares 51% of the allocable remainder oil, while the foreign company obtains 49%. For example, CNOOC owns 51% interests in the Penglai 19-3 oilfield, while Phillips China Ltd. acts as the operator.<sup>57</sup>

There are several signs that deviation from the above model of contract and cooperation is taking place. First, with its increased strength in capital, technology, and experiences, the CNOOC has started its own offshore operations without the participation from foreign partners. The development of the gas fields in the Xihu Trough in the East China Sea is an example. It cooperates with Sinopec for exploration, though foreign investors were later involved.<sup>58</sup> CNOOC owned 100% of the rights and interests in a gas field located in the Fanyu 34-1 area in the estuary basin of Pearl River in the South China Sea.<sup>59</sup> Second, since 1999 CNOOC has been acting as the operator for some oilfields. The first is the Qinghuangdao 32-6 Oilfield, which was jointly developed with the Japanese and also the first Sino-foreign cooperative offshore petroleum project based

on the contract signed in 1980.<sup>60</sup> Finally, a new trend developed by CNOOC is the so-called "reverse PSCs," in which foreign companies join in developing oil and gas reserves discovered by CNOOC since it needs foreign capital to quickly bring commercial reserves into production.<sup>61</sup>

### *Tax Regime*

In addition to the general tax laws and regulations which are applicable to foreign oil companies, there are a number of specific regulations governing royalties and taxes concerning offshore oil and gas exploitation. The 1991 Income Tax Law on Enterprises with Foreign Investment and Foreign Enterprises imposes the rate of 33% on foreign enterprises. The 1982 Regulations provide that all Chinese and foreign enterprises have to pay taxes and mining royalties, and their employees should pay individual income taxes.<sup>62</sup> The Provisions on the Payment of Royalties for the Exploitation of Offshore Petroleum Resources promulgated by the Ministry of Finance in 1989 under the approval of the State Council list some details on how to calculate the royalties for offshore petroleum exploitation by either Chinese enterprises or foreign enterprises.<sup>63</sup> For the foreign enterprises, royalties are to be paid in kind and made via the CNOOC. However, this kind of royalty can be paid in installments and the terms are determined by the Chinese tax authorities. Table 4 illustrates the progressive rates of royalties. It is said that the rate of royalties payments in China ranks below the median of those of other countries.<sup>64</sup>

Resource taxes are also levied on mineral products in China. The rates for oil is 8.30RMB per ton, and for gas 2.12RMB per 1,000 m<sup>3</sup>. However, there is a tax exemption for crude oil used in the production process.<sup>65</sup> In order to encourage foreign investment in offshore petroleum exploration and development, some kinds of taxes, such as customs duties and consolidated industrial and commercial tax (CICT), are exempted for the imported goods and materials directly used in offshore petroleum exploration and exploitation. Export taxes for crude oil exported in accordance with the relevant contracts are also exempted.<sup>66</sup>

**Table 4**  
Royalties for offshore petroleum exploitation

	Production	Royalty rates
1. Oil (million tons/yr)	<1.0	0%
	1.0–1.5	4%
	1.5–2.0	6%
	2.0–3.0	8%
	3.0–4.0	10%
	>4.0	12.5%
2. Gas (billion m <sup>3</sup> /yr)	<2.0	0%
	2.0–3.5	1%
	3.5–5.0	2%
	>5.0	3%

*Source:* Prepared by the author based on the Provisions.

The tax reform which began in 2002 did not affect the tax regime for the oil industry. While there is a division of local and central tax revenues, the income revenues generating from offshore oil and gas exploitation is considered to be a central tax revenue.<sup>67</sup> One important fact which now affects the tax regime is China's entry into the WTO. China recently announced that different tax regimes for domestic enterprises and foreign enterprises will be merged into a unified regime in the near future. That means the preferential tax treatment for foreign investors is no longer valid and the principle of national treatment embodied in the WTO regime will apply.

### *Dispute Settlement*

If a dispute arises between the Chinese side and the foreign side as regards an offshore matter, the dispute should first be settled through friendly consultation. If consultation has failed, the dispute may be referred to a mediation or arbitration body within China or to arbitration as agreed-upon in the contract. This means that lawsuits are not an option for a dispute arising from the execution of a contract. The applicable law for petroleum contracts is Chinese.<sup>68</sup> However, according to the Chinese law, the Chinese Maritime Court has the jurisdiction over cases involving ocean development and uses, including the development and use of the continental shelf, such as offshore oil and gas exploitation.<sup>69</sup> In the event that there is a pollution incident caused by an oil platform, the victim may bring the case to the Maritime Court for settlement. It is reported that so far there have been no disputes resulting from the execution of petroleum contracts between Chinese and foreign parties.

### **Environmental Management**

Due to the environmental risks associated with offshore oil and gas development, environmental considerations have always been a priority within the legal framework of offshore petroleum laws and regulations. Pollution resulting from offshore activities is one of the five sources of marine pollution under the LOS Convention and within the category of "pollution from seabed activities," including drilling mud, drill cuttings, produced water and other sources, such as deck drainage, domestic waste and garbage, and chemical waste. As early as 1983, China promulgated the Regulations Concerning Environmental Protection in Offshore Oil Exploration and Exploitation,<sup>70</sup> which became the first such specific regulations in the overall Chinese environmental law. This is remarkable since in the international arena, regulation of pollution from offshore installations had a late start after the regulation of shipping was well underway.<sup>71</sup> The 1983 Regulations were adopted in line with the 1982 Law of Marine Environmental Protection (MEPL) which contains a chapter on the prevention of pollution from offshore petroleum activities. This Law was amended substantially in December 1999.<sup>72</sup> Accordingly, oily waste water and oil mixtures from offshore oil drilling vessels and platforms and oil extraction platforms may be discharged into the sea only after proper treatment and in compliance with discharging standards, but residual or waste oil should not be discharged into the sea (art. 51). Oily industrial garbage should not be disposed of at sea from offshore activities and oil and gas should be burned thoroughly during offshore well testing (arts. 52–53). Contingency plans for oil spill should be prepared (art. 54). The State Oceanic Administration (SOA) is responsible for the preparation of the national contingency plan (art. 18). Effective measures should be taken in exploring, exploiting, and transporting offshore petroleum so as to prevent oil spills (art. 50).



The 1983 Regulations further detail the stipulations provided in the MEPL. There are a number of important environmental requirements which apply to all the offshore petroleum activities. First, any enterprise or operator has to prepare an environmental impact assessment report, including: (a) the name, geographical location, and size of the oilfield; (b) the natural environment and condition of natural resources in the sea area where the oilfield is located; (c) the types, components, quantity, and disposal methods of the wastes that need to be discharged during the oil exploitation; (d) the assessment of environmental impacts of oil exploitation on the natural environmental and marine resources in the surrounding seas, on marine fisheries, navigation, and other offshore activities and proposed environmental protection measures to avoid or mitigate various adverse impacts; (e) the unavoidable impacts and their degree and causes; and (f) the measures to prevent serious oil pollution accidents including anti-accident procedures, personnel and technological equipment, and communications.<sup>73</sup> It should be pointed out that this is required not only by the 1983 Regulations, but also by the MEPL, as well as the Law on Environmental Impact Assessment.<sup>74</sup> To assist offshore operators in better preparing such environmental assessment reports, the SOA issued the Procedures on the Management of Environmental Impact Assessment for Offshore Petroleum Development Projects on 17 May 2002.<sup>75</sup> The enterprise or operator, when preparing the overall development scheme, is to engage a qualified environmental company to assess the environmental impact. The outline should be submitted to the SOA for review and further revised in accordance with the suggestions and requirements made by the SOA. The revised outline, once approved, becomes the basis for the work on environmental impact assessment towards the formulation of the final report. The draft report is subject to preliminary review by CNOOC or PetroChina or Sinopec or the SOA branch bureau where the oilfield is located and then submitted to the SOA for approval. It is interesting that such procedures were issued almost two decades after the 1983 Regulations entered into force.

In 2001 the SOA examined and approved several such environmental impact reports for the following oilfields: Panyu 4-2/5-1, Zhaodong Block C/D in the Bohai Sea, Huizhou 19-3, Penglai 19-3/25-6, and Caofeidian 11-1/2.<sup>76</sup> In addition, the postproduction environmental assessment has been undertaken. According to the Provisional Provisions on the Management of Environmental Protection for the Offshore Petroleum Exploration and Exploitation, reassessment should be taken for oilfields which have been in production for more than four years.<sup>77</sup>

A second important environmental requirement is that an enterprise or operator should possess the capability of emergency response and development of emergency plans. In the event of pollution accidents such as an oil spill or leakage, prompt measures should be taken to control, mitigate, and eliminate the pollution. Any serious accidents are to be immediately reported to the competent authorities that will investigate and deal with such accidents (art. 16). In 1990 the SOA adopted the Implementing Measures for the Regulations concerning Environmental Protection in Offshore Oil Exploration and Exploitation, which required that the oil spill emergency response plans should contain information regarding the platform operations, marine environment and resources, and an analysis of oil spill risks and the response capacity (art. 9). The preparation and submission for approval for emergency plans is subject to a set of detailed procedures.<sup>78</sup> In addition, the operator is to report within 24 hours if the quantity of a spill exceeds 1 ton and is within 20 nautical miles from the coast or 10 tons beyond 20 nautical miles from the coast.<sup>79</sup> The use of anti-oil chemicals in response to oil spill incidents is strictly controlled and should be reported to the SOA.<sup>80</sup>

A third important environmental requirement is that oil platforms, whether fixed or mobile, should be equipped with antipollution appliances including oil–water separators, oily water treating equipment; monitoring devices for oil discharges; recovery facilities for residual and waste oils, and garbage-reducing equipment (art. 7). The above equipment should be certified by China's Vessel Inspection Agency. Untreated oily water should not be discharged into the sea and the treated water to be discharged must meet with the State discharge standards (art. 11). Effective measures should be taken in using dynamite or conducting other operations harmful to fishery resources and use of chemical dispersant should be controlled. The operator has the responsibility to make a detailed and accurate record in the antipollution book (art. 18) and to submit the antipollution book to the competent authorities each quarter of a calendar year.

Finally, as to liabilities, the Regulations provide that each enterprise or operator should have insurance or other financial guaranties in respect of civil liabilities for pollution damages (art. 9). Any enterprise or operator who has violated the Chinese environmental law and regulations should remedy the pollution damage within the prescribed time decided by the competent authorities and pay the clean-up expenses and compensation for losses sustained by the State (art. 26). In addition, administrative punishments, including warnings or fines, will be imposed on those who have breached environmental standards. The Regulations provide the amount of fines for different breaches. In January 2001, a gas-leak accident happened in Shuizhong 36-1 Oilfield in the Bohai Sea. As a result, the CNOOC Tianjin Branch was forced to pay 198,000 RMB as discharging fees.<sup>81</sup> However, one factor which should be noted is that while the MEPL has been amended, the 1983 Regulations, though still valid, were enacted based on the old provisions of the Law. This raises the question of consistency and as to whether the Regulations should be amended as well. It is acknowledged that after the implementation of the amended Law, the contradiction between the Law and the Regulations is very salient and more rules and standards should be worked out.<sup>82</sup>

Apart from the MEPL and the 1983 Regulations governing the prevention of pollution from offshore oil and gas exploitation, other environmental laws and regulations are also relevant. For example, the Regulations on the Dumping of Wastes at Sea adopted in March 1985<sup>83</sup> applies to waste dumping from oil platforms and disposal at sea of wastes or other matters arising from or related to the exploration and exploitation of seabed mineral resources. Foreign vessels or platforms which explore or exploit mineral resources in China's sea areas and intend to dump wastes arising from their activities are to report to the competent authorities for approval in accordance with prescribed procedures (art. 9). It should also be noted that crude oil and its wastes, refined petroleum products, oily residues, or any mixtures containing oil are prohibited substances for dumping at sea. The Regulations on Inspection of Ships and Offshore Installations deal with the inspection of offshore installations to determine whether they meet with the safety standards so as to minimize the potential accidents including environmental pollution.<sup>84</sup> The Regulations concerning Prevention of Pollution Damage to the Marine Environment by Coastal Construction Projects promulgated in 1990 are relevant in the sense that these regulations apply to coastal oil terminals and depots as well as processing sites of offshore petroleum located in coastal areas.

According to the *Monthly Bulletin of the Management of National Marine Engineering Projects Environmental Protection and Ocean Dumping* published in November 2003, there were 94 offshore oil platforms in Chinese waters; discharged production waste water was 6.6 million m<sup>3</sup>, drilling mud 4,436 m<sup>3</sup>, oily and nonoily drilling dust 37.2 m<sup>3</sup> and 4791 m<sup>3</sup>, respectively.<sup>85</sup> The law enforcement agency concerned is the

China Ocean Surveillance Agency. It regularly inspects and monitors offshore petroleum activities to see whether they are in compliance with relevant Chinese environmental laws and regulations. In October 2000, the law enforcement officers from the Beihai General Brigade of the China Ocean Surveillance Agency boarded the SEDCO-602 platform which belonged to Singapore and was being rented by the U.S. Chevron Overseas Oil Company to explore oil in the Bohai Exploring Zone. The inspection team examined the antipollution certificates, antipollution equipments, and their operations. It is reported that this inspection was the first time in ten years that a foreign platform operating in the Bohai was inspected.<sup>86</sup> This indicates that China seldom inspects foreign oil platforms. The inspection of oil platforms in the South China Sea only began in 2003.

The China Ocean Surveillance Agency exercises the power of on-spot supervision and inspection. One example is the case regarding oil platform pollution in the Bohai in 2001: the monitoring aircraft of the Beihai Brigade of the Agency discovered an oil belt 1,000 meters long and 200 meters wide near an oil platform. After discovery, the platform sent a vessel to sail through the belt, trying to destroy the evidence. As a result, the CNOOC Tianjin Branch got a warning and was fined.<sup>87</sup>

Another issue which is related to environmental management is the decommissioning of offshore oil facilities, which has become a serious issue in the international arena. For China, most of the early oil platforms are now gradually being abandoned after thirty years of service, particularly in the South China Sea. For this reason, China adopted the Provisional Measures on the Management of Abandoned Offshore Oil Platforms in 2002.<sup>88</sup> The measures apply to the abandoning activities of all platforms, including fixed and mobile platforms, their appended appliances, and other floating equipment within China's jurisdictional waters. Abandonment can be divided into three forms: abandonment in the original place, abandonment in another place, or turning the abandoned platform into other uses (art. 5). Any abandoning activity must comply with environmental requirements so as to prevent the marine environment from being harmfully affected, and the owner of the platform should demolish all devices and equipment which would pollute the marine environment during the course of abandoning activities (art. 4). The platform owner who wishes to cease operation should apply in writing for approval from the SOA 90 days before the halt of operations. A report on environmental impact assessment should be submitted at the same time for abandonment in the original place. Where the abandonment takes place in another location, a report on determining a dumping site is to be submitted instead. Platform abandonment should be undertaken within a year from the halt of the operation and abide by the requirements approved by the SOA.

The Chinese measures reflect the international practices and standards regarding the decommissioning of offshore oil platforms. The 1982 LOS Convention obliges states to take the responsibility to remove any installations and structures which are abandoned or unused so as to ensure the safety of navigation as well as protection of the marine environment. The International Maritime Organization (IMO) adopted the Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone in 1988.<sup>89</sup>

Before the adoption by China in 2002 of the Provisional Measures, abandonment of oil platforms was only provided for in the Waste Dumping Regulations. The 2002 Measures thus fill the gap in this field. However, loopholes remain. For example, there is no provision on postabandonment surveys and monitoring. In general practice, once a decommissioning operation is complete, a survey of the site to a radius of 500 meters around the location of the platform must be carried out, and any debris must be re-

moved; moreover, monitoring of levels of hydrocarbons, heavy metals, and other contaminants in sediments and biota must be undertaken.<sup>90</sup> This international practice has now been incorporated into such legal arrangements as the Convention on the Protection of the Marine Environment of the North East Atlantic (OSPAR Convention).

In 2002, China prepared the National Marine Functional Zoning Program, which divides China's seas into ten functional zones. Two of these zones are related to offshore petroleum activities: one is the mineral resources use zone where activities which would cause interimpacts on oil and gas exploring and exploiting operations should be minimized; and the other is the offshore project use zone, where offshore oil platforms and their surrounding areas, as well as pipelines connecting areas, should be protected from other sea use activities.<sup>91</sup>

Despite Chinese efforts in marine environmental protection, a recent survey reveals that the state of the marine environment continues to deteriorate. According to the 2003 Statistical Bulletin issued in February 2004, red tides increased drastically in 2003: 119 times and 50.6% higher than in 2002, causing economic loss of more than 42 million RMB.<sup>92</sup> Second, while there has not yet been serious oil pollution from offshore petroleum activities, the potential risk of environmental pollution is increasing with the continuing expansion of such activities. Third, the existing model petroleum contract in China represents a policy of "rapid resource development and depletion,"<sup>93</sup> despite the environmental clauses contained in the contract.

## Joint Development

Interstate cooperation on hydrocarbon exploration and development can be realized through joint development. Joint development refers to "an agreement between two States to develop so as to share jointly in agreed proportions by inter-State cooperation and national measures the offshore oil and gas in a designated zone of the seabed and subsoil of the continental shelf to which both or either of the participating States are entitled in international law."<sup>94</sup> Joint development as defined here differs from unitization which is the practical situation of developing a structure (hydrocarbon field) which straddles a boundary or permitted area of two oil companies or joint ventures which can be mandated to occur between Chinese and foreign investors. Joint development carries a special meaning and should not be misunderstood as something equivalent to joint cooperation either. Joint development contains several characteristics: (a) it is an arrangement between two countries; (b) it concerns an overlapping claimed maritime area; (c) it is a provisional arrangement pending the settlement of a boundary between the countries concerned; and (d) it is designed to jointly develop the mineral resources in the disputed area. In this sense, joint development is a mechanism for cooperation pending the settlement of the territorial and/or maritime dispute raised by overlapping claims.

In international practice, there are many precedents which create joint development arrangements. The earliest example of a joint development regime was between Kuwait and Saudi Arabia in 1922. Based on the 1922 Aqeer Agreement, the two countries were co-tenants in the Neutral Zone, holding shares equally and jointly in a condominium; they later consented to a joint development by their concessionaires.<sup>95</sup> In the East Asian region, there are the Japan-South Korean Arrangement in the Sea of Japan and the East China Sea, the Malaysia-Thailand Joint Development Area in the Gulf of Thailand, and, at one time, the Australian-Indonesia Joint Development Zone for the Timor Gap.<sup>96</sup>

Encouraged by these developments in East Asia, China has also put forward the idea of joint development in its disputed sea areas. As early as the 1980s, Deng Xiaoping,

the former paramount Chinese leader, made the famous statement regarding China's policy towards disputed areas in China's adjacent seas by joint development. Deng regarded "joint development" as one of the two most important peaceful means for international dispute resolution.<sup>97</sup> Since then, China has been pushing actively to realize the goal of joint development and reiterated on many international occasions its proposal. When Wu Bangguo, Chairman of the National People's Congress, visited the Philippines in August 2003, he proposed to his Philippine counterpart to jointly develop petroleum in the South China Sea.<sup>98</sup> It is said that the successful experiences accumulated from China's cooperation with foreign oil companies since the promulgation of the 1982 Offshore Regulations is part of the reason for the favorable view China has of joint development.<sup>99</sup>

While not *per se* a state-to-state joint development arrangement, on 11 November 2003, the CNOOC and the Philippine National Oil Company agreed to jointly explore oil and gas in the South China Sea through a letter of intent. A joint committee will be set up to select exploration areas in the South China Sea. The two companies also agreed to establish a program to "review, assess and evaluate relevant geographical, geophysical and other technical data available to determine the oil and gas potential in the area."<sup>100</sup> Of interest, of course, is the area covered by the letter of intent. As said by the Philippine side, the joint exploration will be conducted in the Northwest Palawan offshore area, "not even close . . . to the Spratlys."<sup>101</sup> While there is this initial agreement, there is still a chance that such an agreement might not be executed or will fail in the end. It is recalled that China and Russia signed an agreement to build an oil pipeline from Angarsk in East Siberia to Daqing in Northeast China, but the Russians suspended their approval for the project.<sup>102</sup> In February 2004, the Philippines unilaterally announced international bidding for oil development in the South China Sea near its offshore Malampaya gas field close to the southern island of Palawan. It is reported that 16 foreign firms submitted bids, and contracts were expected to be awarded in May 2004.<sup>103</sup> The complicated situation in the South China Sea indicates that joint development may be the only feasible means for regional cooperation for offshore oil and gas development. In a document released in 2002 by the Philippines military, the Philippines realized that it could not develop oil deposits in the Kalayaan Island group because "no sensible foreign investor would come in because the government cannot guarantee a climate of security to underwrite their investments."<sup>104</sup>

While there is some prospect for joint development in the South China Sea, the picture of the East China Sea remains gloomy. In July 1979, when Gu Mu, then Vice Premier, visited Japan, he proposed to the Japanese Government to set aside the territorial dispute over the Diaoyu Islands and to jointly develop oil resources in the surrounding sea areas. In December 1982 China and Japan held an expert meeting in Beijing for further discussion.<sup>105</sup> It was reported that in 1991 CNOOC, through its Vice President Chen Bingqian, expressed its interest in cooperation with its Japanese counterpart respecting joint development, but the Japanese side did not respond to the offer.<sup>106</sup>

## Conclusion

China's state-owned oil companies are actively expanding their shares in the world oil market by investing in foreign countries. It is a remarkable endeavour in the sense that in the early 1980s China lured foreign investors, but now it is the other way around, with China investing overseas. For example, China has signed a government agreement on oil and gas with Algeria. In implementing this agreement, CNPC signed a \$525

million contract in 2002 to develop the Zarzaitine oil field in Algeria's Sahara desert, and in July 2003 signed a contract worth \$350 million for oil importation from Algeria. Meanwhile, the China National Oil and Gas Exploration and Development Company was contracted in 2002 to build an oil refinery near Adrar in the Algerian Sahara.<sup>107</sup> CNOOC has not lagged behind. It bought a part of interest from the fifth largest oilfield in Indonesia owned by the Repsol Co. of Spain and a 5.56% working interest in the upstream production and reserves of the Northwestern Australian Barrier Reef gas project in 2002.<sup>108</sup>

It is predicted that China's domestic oil production will decline by nearly 3.0 million b/d (barrels per day) by 2020.<sup>109</sup> This prediction mainly refers to China's onshore production. As reported, the Daqing Oilfield will slash its production by two million

**Table 5**  
China's offshore oilfields in production (1997–2005)

Name	Year	Field type	Operator
<b>1. Bohai Gulf</b>			
Jinzhou 20-2	1997	Gas	CNOOC
Qikou 17-3; Qikou 18-1	1997	Oil, gas	CNOOC
Boxi	1998	Gas	CNOOC
Jinzhou 9-3	1999	Oil	CNOOC
Qikou 17-2	2000	Oil	CNOOC
Suizhong 36-1	2000	Oil	CNOOC
Qinghuangdao 32-6	2001	Oil	CNOOC, BP, ChevronTexaco
Suizhong 36-1 Phase II	2001	Oil	CNOOC
Penglai 19-3	2002	Oil	CNOOC, Phillips
Qinghuangdao 32-6 Phase II	2002	Oil	CNOOC, BP, Chevron Texaco
Bonan	2003	Oil, gas	CNOOC
Nanbao 35-2	2004	Oil	CNOOC
Penglai 19-3 Phase II	2004	Oil	CNOOC
<b>2. South China Sea</b>			
Xijiang 24-1	1997	Oil	CNOOC, Phillips, Pecten
Lufeng	1997	Oil	CNOOC, Statoil
Huizhou 32-5	1999	Oil	CACT*
Weizhou 12-1	1999	Oil	CNOOC
Weizhou 11-4	1999	Oil	CNOOC
Huizhou 26-1N	2000	Oil	CACT
Wenchang 13-1/13-2	2002	Oil	CNOOC, Husky Oil
Dongfang 1-1	2003	Gas	CNOOC
Dongfang 1-1 Phase II	2005	Gas	CNOOC
<b>3. East China Sea</b>			
Pinghu	1998	Gas, oil	CNOOC, Sinopec

Source: "China Expects Offshore Production to Buttress Overall Output Target," *Oil and Gas Journal*, Vol. 99, 17 December 2001, at 62.

\*CACT is a consortium of CNOOC Ltd., Agip China BV, a unit of Italian oil major Agip SpA, Chevron Overseas Petroleum Ltd., and Texaco China BV.



tons in 2004, and with its drop of 1.74 million tons of oil, Daqing only produced 48.4 million tons of crude in 2003.<sup>110</sup> The production decrease in Daqing may encourage the State to exert more efforts to seek oil and gas in offshore areas. The offshore area, therefore, will become the forefront of China's oil industry in the years to come (see Table 5). The Bohai Oilfield will become the second largest oilfield in China, and by 2010 it is expected to produce 30 million tons of oil equivalent out of the 55.5 million tons of oil equivalent expected from offshore areas.<sup>111</sup>

In order to attract more foreign investors to China for mineral resources development, China is now preparing to revise again its Law on Mineral Resources so as to provide more protection for the property rights of investors.<sup>112</sup> The revision of this Law has been influenced by China's entry into the WTO.

Energy security has become a big concern for the Chinese government. China began to prepare the China's Strategy on Sustainable Development of Oil and Gas Resources in May 2003, initiated by Prime Minister Wen Jiabao, and the draft team completed the initial report (outline) in October.<sup>113</sup> China has realized the necessity to set up its own oil reserves following the experiences of Japan and the United States and that over-reliance on imported oil could potentially cause great risks. A sudden price rise or a disruption of supplies would cause a big problem for China.<sup>114</sup> Competition for energy in East Asia may constitute another factor that fuels China's worries and could bring China into conflict with other major energy importers, such as Japan.<sup>115</sup> The setback of the Angarsk-Daqing deal with Russia was partly due to competition from Japan. To avoid this, more domestic resources should be developed and utilized. By 2005 the oil reserve capability should have reached 8 million cubic meters. The current effort exerted by China in offshore oil and gas development is part of China's grand energy strategy. Structurally, the State Oil Reserves Office was established and affiliated with the National Development and Reform Commission in 2003.<sup>116</sup>

To realize China's energy strategy, legal certainty is indispensable. The current legal system governing offshore oil and gas appears not to be sufficient to cope with the developing situation. The Law of Mineral Resources was difficult to apply to the special needs of the oil and gas industry. This is why there was a need for a law specifically on oil and natural gas.<sup>117</sup> It is sure that China will continue to improve its legal system, including the laws and regulations governing offshore petroleum development, so as to meet the requirements of legal certainty.

## Notes

1. See International Energy Agency, *Oil Market Report: A Monthly Oil Market and Stocks Assessment*, 10 October 2003, at 12.
2. *CCH Asia China E-News Alert*, No. 43, February 2004.
3. *CCH Asia China E-News Alert*, No. 43, February 2004.
4. See Wang Shanshu, "Our Exploration for and Exploitation of Offshore Oil and Gas Resources," in China Institute for Marine Development Strategy (ed.), *Law and Policy in Marine Affairs*, Vol.2 (Beijing: Ocean Press, 1992)(in Chinese), at 152.
5. "China to Invest Heavily to Explore Offshore Oil Resources," *China Economic News*, 8 January 2001, at 6.
6. See Zeng Chengkui and Luo Yuluo (eds.), *Marine Affairs of Contemporary China* (Beijing: China Social Sciences Publisher, 1985)(in Chinese), 206–209.
7. See Kim Woodard, "Development of China's Petroleum Industry: An Overview," in Fereidun Fesharaki and David Fridley (eds.), *China's Petroleum Industry in the International Context* (Boulder and London: Westview Press, 1986), at 103. Also see C. Paul Hallwood, *Transaction*



*Costs and Trade between Multinational Corporations: A Study of Offshore Oil Production* (Boston: Unwin Hyman, 1990), at 163. China's indigenous oil technology was inferior to that which could be purchased from the international oil industry, so inferior in fact that offshore oil gathering in deeper waters could not be tackled.

8. "More oil found in the South China Sea," available at [www.chinadaily.com.cn](http://www.chinadaily.com.cn), 14 June 2001.

9. See "Oil and gas reserves in our sea areas could amount to more than 40 billion tons of oil equivalent," *People's Daily* (in Chinese), 26 February 2004, at 1.

10. "China expects offshore production to buttress overall output target," *Oil and Gas Journal*, Vol. 99, Issue 51, Dec. 17, 2001, at 58.

11. See Article 28 (2) of the Regulations on the Exploitation of Onshore Petroleum Resources in Cooperation with Foreign Enterprises, in *People's Daily* (in Chinese), 11 October 2001, at 5. The Regulations were first adopted in 1993 and revised in 2001 together with the Regulations on the Exploitation of Offshore Petroleum Resources in Cooperation with Foreign Enterprises.

12. See "Offshore Oil and Gas Industry," *China Ocean Yearbook 2002* (Beijing: Ocean Press, 2003)(in Chinese), at 123.

13. See *China Ocean Yearbook 2002* (Beijing: Ocean Press, 2003)(in Chinese), at 123.

14. See Article 9 of the Constitution.

15. English text is available in Office of Policy, Law and Regulation, State Oceanic Administration (ed.), *Collection of the Sea Laws and Regulations of the People's Republic of China* (Beijing: Ocean Press, 1998), 233-252.

16. See Article 3 of the Law of Mineral Resources.

17. Texts of the regulations are available at <http://www.mlr.gov.cn> (accessed 25 February 2004).

18. English text is available in Office of Policy, Law and Regulation, State Oceanic Administration (ed.), *supra* note 15, 186-190.

19. See Article 11 of the Law on the Territorial Sea and Contiguous Zone, *supra* note 18.

20. English version is available in Maritime Institute of Malaysia, *MIMA Bulletin*, Vol. 7(1), 1999, 27-29.

21. See Articles 3-4 of the Law on the Exclusive Economic Zone and Continental Shelf, *supra* note 20.

22. Article 7 of the Law on the Exclusive Economic Zone and Continental Shelf, *supra* note 20.

23. Information Office of the State Council, "China's Policy on Mineral Resources," *People's Daily* (in Chinese), 24 December 2003, at 6.

24. See "National Program on Marine Economic Development," *China Ocean News* (in Chinese), 6 February 2004, at 2.

25. See *ibid.*

26. English text of the 1982 Regulations is available in Office of Policy, Law and Regulation, State Oceanic Administration (ed.), *supra* note 15, 307-317; and the 2001 revised Regulations can be found in *People's Daily* (in Chinese), 12 October 2001, at 5.

27. Article 4 of the Law of Mineral Resources, *supra* note 15.

28. In the draft law, there was the following wording: "the state allows foreign businesspersons to invest in exploring and exploiting mineral resources according to law and protects their lawful rights and interests." This was deleted for the reason that the lawful rights and interests of all enterprises should be protected. See Li Yining, "Report on the Deliberation Result of the Draft Law of Mineral Resources of the People's Republic of China from the Legal Committee of the National People's Congress," at the 21st Session of the 8th NPC, 23 August 1996, reprinted in Jiang Ping (ed.), *The Comprehensive Explanation on Laws of the People's Republic of China* (China Democracy and Legal System Press, 2003)(in Chinese), Vol.11, at 543.

29. Compare this to a provision in the 1982 Regulations which states that "in case of war, threat of war or other state of emergency, the Chinese Government shall have the right to expropriate portion or all of the petroleum obtained or purchased by the foreign contractor."

30. See "Reply by the State Council Office on the Guiding Catalogue of Industries for Foreign Investment," 4 March 2002, at <http://www.chinalaw.gov.cn> (accessed 10 March 2004).
31. See "Reply by the State Council to the Question on Unified Work for Cooperation with Foreigners in Petroleum Exploration and Exploitation," 12 June 1980, at <http://www.chinalaw.gov.cn> (accessed 10 March 2004).
32. See Michael J. Moser, "Legal Aspects of Offshore Oil and Gas Exploration and Development in China," in Michael J. Moser (ed.), *Foreign Trade, Investment, and the Law in the People's Republic of China* (Hong Kong: Oxford University Press, 1987), at 271.
33. See *ibid.*, at 272.
34. See "Cooperation," at CNOOC website <http://211.154.167.192:81/servlet/Node?Node=10896> (accessed 24 February 2004).
35. See "Notice on Foreign Cooperative Areas and Blocks in China Seas in 2003," at <http://cnooc.chinaedn.net:81/servlet/Category?Node=10023> (accessed 6 January 2004).
36. "CNOOC's profits broke the record last year," *China Ocean News* (in Chinese), 3 February 2004. Also see *People's Daily* (in Chinese), 22 March 2004, at 6.
37. See "CNOOC strides forward into the world," *China Ocean News* (in Chinese), 25 March 2003.
38. "CNOOC outlines oil, natural gas output targets," *China Daily*, 9 March 2004 and "CNOOC sketched the mid- and long-term blueprint," *People's Daily* (in Chinese), 19 July 2003, at 6.
39. Guan Zijun and Ren Guoping, "Analysis of the Strength of China's Offshore Petroleum," *Ocean Development and Management* (in Chinese), Vol. 17 (4), 2000, at 14.
40. See "CNOOC's development faces five challenges," *China Ocean News* (in Chinese), 2 March 2004.
41. Peter Odell, "Offshore Resources: Oil and Gas," in R.P. Barston and Patricia Birnie (eds.), *The Maritime Dimension* (London: George Allen & Unwin, 1980), at 95.
42. Article 6 of the Detailed Implementing Rules, at <http://www.chinalaw.gov.cn/jsp/jalor/disptext.jsp?recno=17&ttlrec=66> (accessed 22 March 2004).
43. See Wang Shanshu, *supra* note 4, at 153.
44. Lai Wanzhong, "Launch Foreign Cooperation and Speed up Offshore Oil and Gas Development," *China Institute for Marine Development Strategy*, *supra* note 4, at 160.
45. See Zhang Zhenkai, "Formulas and Legal Characteristics of Contracts on the Exploitation of Offshore Oil with Foreign Cooperation in China," *Law and Policy in Marine Affairs*, Vol. 1 (Beijing: Ocean Press, 1990)(in Chinese), 188–189.
46. See Zhiguo Gao, *International Petroleum Contracts: Current Trends and New Directions* (London: Graham & Trotman/Martinus Nijhoff, 1994), at 158.
47. China expressly mentioned this as a foreign cooperative model in its white paper on mineral resources, see *supra* note 23.
48. See "China Oil Corp Signs Sharing Agreement with Santa Fe," *Asia Pulse*, 11 May 2001.
49. See Lai Wanzhong, *supra* note 44, at 160.
50. Article 8 of the 1982 Regulations, *supra* note 26.
51. See Zhiguo Gao, *supra* note 46, at 157.
52. See *ibid.*, at 163. Under some special circumstances, a longer period may be allowed.
53. China viewed the 2 percent equity advantage as representative of China's permanent sovereignty over its petroleum resources. See *ibid.*, at 167.
54. See *ibid.*, at 169.
55. *Ibid.*, at 170.
56. For the division of such profits, see *ibid.*, 172–176.
57. See "China's largest offshore oilfield is in production," *China Ocean News* (in Chinese), 7 January 2003.
58. It is reported that CNOOC and Sinopec signed five prospecting and exploration contracts with the Shell Group and the Union Oil Co. of California for the Xihu Trough. The two Chinese companies each hold 30% of the interests, respectively, while the two foreign companies each hold 20%, respectively. CNOOC will be the operator. See "Multi-billion oil, gas deals

clinched," *China Daily*, 20 August 2003 and "The exploration and development of oil and gas in the East China Sea welcomes a new situation," *People's Daily* (in Chinese), 20 August 2003, at 6.

59. "CNOOC enjoy 100% profit of its new findings in the South China Sea," *SinoCast China Business Daily News*, Dallas, 16 September 2002.

60. See "Chinese side takes the position of chief manager after twenty years of cooperative development of offshore oilfields," *China Ocean News* (in Chinese), 26 January 1999.

61. "China expects offshore production to buttress overall output target," supra note 10, at 58.

62. See Article 10 of the 1982 Regulations, supra note 26.

63. Text is available at <http://www.mir.gov.cn/information/info/querying/gettingInfoRecord.asp?infoIdx=493> (accessed 15 June 2001).

64. Zhiguo Gao, supra note 46, at 178. Compare the Norwegian royalties payments:

Barrels per day	Percentage of royalty
Under 40,000	8
40,000–99,999	10
100,000–224,999	12
225,000–349,999	14
Over 350,000	6

Source: David B. Keto, *Law and Offshore Oil Development: The North Sea Experience* (New York: Praeger Publishers, 1978), at 103.

65. See "Interim Regulations on Resources Taxes," which was issued by the State Council on 25 December 1993 and came into effect on 1 January 1994, at <http://www.mlr.gov.vn/project/querystat/multdocview.jsp?ICID=zyszx> (accessed 25 February 2004).

66. See "Provisions on the Exemption of Customs Duties and Consolidated Industrial and Commercial Tax for Imported and Exported Goods Used in Sino-Foreign Cooperative Offshore Petroleum Development," General Bureau of Customs and Ministry of Finance, 1 April 1982, at <http://www.chinalaw.gov.cn> (accessed 10 March 2004).

67. See "Circular of the State Council on the Distribution of the Program on Income Tax-Sharing Reform," 31 December 2001, available at <http://www.chinalaw.gov.cn> (accessed 10 March 2004).

68. See Zhang Zhenkai, supra note 45, 191-192.

69. See "Certain Provisions on the Scope of Jurisdiction for the Maritime Court to Deal with Cases," *Supreme People's Court*, 9 August 2001, at <http://www.chinalaw.gov.cn> (accessed 10 March 2004).

70. English text is available in Office of Policy, Law and Regulation (ed.), supra note 15, 331-342.

71. See Maria Gavouneli, *Pollution from Offshore Installations* (London: Graham & Trotman/Martinus Nijhoff, 1995), at 64.

72. English text is available in Office of Policy, Law and Regulation, State Oceanic Administration (ed.), *Collection of the Sea Laws and Regulations of the People's Republic of China*, 3rd Edition (Beijing: Ocean Press, 2001), 216–250.

73. Article 5 of the 1983 Regulations, *ibid.*

74. The Law on Environmental Impact Assessment was adopted on 28 October 2002 and came into force on 1 September 2003. According to it, the environmental impact assessment for offshore constructions including oil platforms and installations is based on the relevant provisions of the Law on Marine Environmental Protection. Text is available at <http://www.sdpc.gov.cn/b/b200211071.htm> (accessed 30 March 2004).

75. Text is found in *China Ocean News* (in Chinese), 25 June 2002.

76. See "Marine Environmental Protection," *China Ocean Yearbook 2002* (Beijing: Ocean Press, 2003)(in Chinese), at 330.

77. See Article 15 of the Provisional Provisions: after the production of the offshore oil/gas field, the enterprise or operator should evaluate the environmental quality of the surrounding sea areas every four years. See "Two environmental measures are implemented in the South China Sea for petroleum exploration this year," *China Ocean News* (in Chinese), 11 June 2002.

78. For details, see Procedures for Preparation and Approval of the Oil Spill Emergency Response Plan in Offshore Oil Exploration and Exploitation, 10 February 1995, SOA, available at <http://www.soa.gov.cn/hyhb/3005.htm> (accessed 20 February 2004).

79. See Article 20 of the Implementing Measures for the Regulations concerning Environmental Protection in Offshore Oil Exploration and Exploitation, available at <http://www.soa.gov.cn/hyhb/3004.htm> (accessed 20 February 2004).

80. For details, see the Provisions on the Use of Anti-oil Chemicals in Offshore Petroleum Exploration and Exploitation, 20 August 1992, SOA, available at <http://www.soa.gov.cn/hyhb/3006.htm> (accessed 20 February 2004).

81. See "Marine Environmental Protection," *supra* note 76, at 339.

82. See *ibid.*, at 343.

83. English text is available in Office of Policy, Law and Regulation (ed.), *supra* note 15, 362–372.

84. English text is available in Office of Policy, Law and Regulation (ed.), *supra* note 15, 422–430.

85. For details, see the November Bulletin, at <http://www.soa.gov.cn/hyhb/qingfei/200311/11yue.htm> (accessed 9 February 2004).

86. See "Beihai Bureau inspects foreign oil platform," *China Ocean News* (in Chinese), 24 October 2000, at 1.

87. "Introduction of high techniques to marine environmental monitoring and several pollution accidents from oil platforms were punished," *People's Daily* (in Chinese), 9 January 2002, at 6.

88. Text is available in *China Ocean News* (in Chinese), 23 July 2002, at 3.

89. Text is appended to Zhiguo Gao (ed.), *Environmental Regulation of Oil and Gas* (London: Kluwer Law International, 1998), 459–463.

90. See Patricia D. Park, *Energy Law and the Environment* (London: Taylor and Francis, 2002), at 150.

91. Text is available at <http://www.sdpc.gov.cn/b/b200212131.htm> (accessed 30 March 2004).

92. See "The Statistical Bulletin on National Economy and Social Development of the People's Republic of China in 2003," *People's Daily* (in Chinese), 27 February 2004, at 6.

93. See International Labour Office, *China and Malaysia: Social and Economic Effects of Petroleum Development* (Geneva, 1987), at 39.

94. British Institute of International and Comparative Law, *Joint Development of Offshore Oil and Gas: A Model Agreement for States for Joint Development with Explanatory Commentary* (London: British Institute of International and Comparative Law, 1989), at 45.

95. See Ibrahim F. I. Shihata and William T. Onorato, "Joint Development of International Petroleum Resources in Undefined and Disputed Areas," in G.H. Blake, M.A. Pratt, & C.H. Schofield (eds.), *Boundaries and Energy: Problems and Prospects* (London: Kluwer Law International, 1998), 436–437.

96. For details, see *ibid.*, 438–441.

97. The other is "one country, two systems." See *Selected Works of Deng Xiaoping*, Vol. 3, at 87.

98. "Wu Bangguo proposes a multiple cooperation for oil in the Spratly Islands," *Lianhe Zaobao*, 1 September 2003.

99. Lin Zhong, "Scholarly Discussion on China and Joint Development," *Modern Legal Science* (in Chinese), 1998, No. 1, at 75.

100. "Chinese, Philippine firms join forces to look for oil in South China Sea," *Agence France Presse*, 13 November 2003.

101. "RP-China oil exploration," *BusinessWorld*, Manila, 12 November 2003.

102. See Xie Ye, "Crude-oil quandary causes concern," *China Daily*, 24 February 2004.

103. See "Sixteen firms want to hunt for oil in Philippines," Reuters, 3 March 2004, at <http://www.forbes.com/business/newswire/2004/03/03/rtr1284135.html> (accessed 26 March 2004).
104. See "China accused over disputed Spratly Islands," *Energy Compass*, 18 July 2002, in <http://80-proquest.umi.com.libproxy1.nus.edu.sg> (accessed 24 February 2004).
105. Lin Zhong, *supra* note 99, at 75.
106. See David D. Peng, "China's Petroleum Industry: Oil and Gas Development Policy and Legislation," in Thomas W. Wälde & George K. Ndi (eds.), *International Oil and Gas Investment: Moving Eastward?* (London: Graham & Trotman/Martinus Nijhoff, 1994), at 103. Chen said that "when a suitable joint venture project comes forward from the Japanese, we shall recommend go ahead to the (Chinese) government," cited from "Much Needed Boost for China Offshore Industry," *Lloyd's List*, 19 October 1991.
107. *CCH Asia China E-News Alert*, No. 43, February 2004.
108. Ministry of Land and Resources, Communiqué on Land and Resources of China, at [http://www.mlr.gov.cn/project/querystat/multidocview\\_eng.jsp?ICID=2003-07-15-1099143660](http://www.mlr.gov.cn/project/querystat/multidocview_eng.jsp?ICID=2003-07-15-1099143660) (accessed 8 April 2004). See also "Offshore oil company makes slick purchase," *China Daily*, 19 January 2002 and Judy Maksoud, "Foreign cooperation and acquisitions add reserves: CNOOC brings Chinese fields into production," *Offshore*, July 2003, at 40.
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112. See "Future based on own minerals," *China Daily* (HK Edition), 24 December 2003.
113. See "Wen Jiabao chairs the meeting on reporting the study phase of the China's Strategy on Sustainable Development of Oil and Gas Resources," *People's Daily* (in Chinese), 31 October 2003, at 1.
114. See "China's oil taken hostage," *The Economist*, 14 July 2001, 28–29.
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