

**SUDAN DIVESTMENT REPORT
TO THE
JOINT COMMITTEE ON
PENSIONS, INVESTMENTS AND
BENEFITS**



June 30, 2016

Background and Statutory Requirements

The 2007 Legislature passed Sudan Divestment legislation as part of Senate Substitute for House Bill 2457 (which is codified in K.S.A. 74-4921c). This statute stipulates that the Board of Trustees (“the Board”) of the Kansas Public Employees Retirement System (“KPERS”) shall not invest KPERS funds in a company with business operations in Sudan which meets the following criteria: 1) the company is engaged in active business operations in Sudan. If that company is not engaged in oil-related activities, that company also lacks significant business operations in the eastern, southern and western regions of Sudan; and 2) either of the following apply: a) the company is engaged in oil-related or power-related activities and the company fails to take substantial action related to the government of Sudan because of the Darfur genocide; or b) the company has demonstrated complicity in the Darfur genocide. Also, the statute directs the Board not to invest KPERS funds in a company that supplies military equipment within the borders of Sudan. Key statutory requirements of the Sudan Divestment legislation are summarized below.

Research and Engagement

The Board may contract with a research firm or firms to determine those companies that have business operations in Sudan. On or before September 30, 2007, such research firms may report any findings to the Board and may submit further findings to the Board if there is a change of circumstances in Sudan. In addition, by September 30, 2007, the Board must take all of the following actions: 1) review publicly available information regarding companies with business operations in Sudan, 2) contact other institutional investors that invest in companies with business operations in Sudan, and 3) send a written notice to a company with business operations in Sudan that the company may be subject to divestiture under the statute. Any applicable company has 90 days to respond as to what substantial action they have taken regarding the Darfur genocide or detailing how they have made sufficient progress towards substantial action before the 90-day period expires.

Board Investment Actions and Fiduciary Responsibilities

After 90 days, if no substantial action or if sufficient progress towards substantial action has not been made, then the Board is required to 1) make no additional or new investments in that company and 2) liquidate the investments in that company no later than 18 months after the 90 day response period expires. The statute further provides that the Board is not required to take any divestment actions unless the Board determines the action is consistent with its fiduciary responsibilities.

Commingled Fund Exception

If any investment in a company that meets the criteria established in K.S.A. 74-4921c is held in an externally and actively managed commingled fund, the Board shall contact that fund manager in writing and request that the fund manager remove that company from the KPERS fund. If the fund manager creates a fund devoid of Sudan-related investments, the transfer to the new fund will satisfy the requirements of the statute. The Board is not required to divest passively managed commingled funds when the estimated annual costs of divestment exceed 5% of the

total value of scrutinized companies with active business operations held in the fund and the ratio holds for at least six months time.

Private Equity Investments

The Board shall make a good faith effort to identify any private equity investments that involve companies with significant business operations in Sudan. If the board determines that a private equity investment involves a company with significant business operations in Sudan, the Board shall consider if those private equity investments shall be subject to creating a separate account devoid of such investments. If the Board does not take this action, it must report the reasons for its decision.

Annual Report

On or before June 30, 2008, and every year thereafter, the Board shall file a report with the Joint Committee on Pensions, Investments and Benefits. The report shall include the following: 1) a list of investments the Board has in companies with business operations in Sudan, 2) a detailed summary of the business operations a company has in Sudan and whether the company meets the criteria for “significant business operations” in Sudan, 3) whether the Board has reduced KPERS fund investments in a company that satisfies the criteria for divestment, 4) if the Board has not completely reduced KPERS fund investments in a company that meets the divestment criteria established, when the Board anticipates that they will reduce all investments in that company or why a sale or transfer of investments is inconsistent with the fiduciary responsibilities of the Board and 5) a detailed summary of investments that were transferred to funds or accounts devoid of companies with business operations in Sudan.

KPERS Divestment Activity

The following sections summarize the actions KPERS has taken to comply with the Sudan Divestment legislation through June 30, 2016.

Pre-Fiscal Year 2016 Activity

In the early part of 2007, KPERS staff contacted other public pension plans that also had current or pending Sudan divestment legislation. Plans such as California State Teachers Retirement System, Colorado Public Employees Retirement Association and Missouri State Employees Retirement System were contacted to gather information regarding what resources they used to comply with their state laws, how the law was implemented across the plan, and what procedures were created or are being created to ensure compliance with their applicable state law.

Also during the early part of 2007, KPERS staff researched different vendors that could provide a list of companies with significant business operations in Sudan that may be subject to the statute. After a thorough review process, KPERS entered into a contract with Institutional Shareholder Services/Risk Metrics (“ISS”) to provide, on a monthly basis, a list of companies that have significant business operations in Sudan. KPERS’ staff uses this list in conjunction with a list provided by the Conflict Resolution Network, now known as “EIRIS” Conflict Risk

Network, to create and update the “KPERS Active Business Operations Meeting Divestment Criteria List.” The initial list was developed in September 2007 and adopted by the Board. The Board then directed staff to send engagement letters to the companies on the list.

After fiscal year 2007, KPERS continued to monitor the list of scrutinized companies and remain in compliance with the statute. During fiscal years 2008-2015, staff engaged new companies that were subject to divestiture and deleted companies off the “KPERS Active Business Operations Divestment Criteria List” that were no longer restricted based on compliance with statutory requirements. During each fiscal year, the Board of Trustees adopted a new “KPERS Active Business Operations Divestment Criteria List” and directed staff to 1) direct the managers to review the additions to the “KPERS Active Business Operations Meeting Divestment Criteria List” and for any applicable security that is held by the manager direct them to a) begin searching for a substitute security to replace those holdings, and b) if a suitable replacement security is found to replace the holding or if a replacement cannot be found to liquidate the holding within eighteen months and 2) notify managers that any security that was deleted from the list is now available for investment. All of the System’s separate account investment managers liquidated their applicable holdings by June 30 of each fiscal year, except for fiscal year 2011. In fiscal year 2011, PTT, held by Morgan Stanley, was not able to be liquidated until July 6, 2011. Staff also continued to monitor the commingled fund statutory exemption and remained in compliance each fiscal year. For more detail regarding divestment activity during fiscal years 2008-2015, please refer to the Sudan Divestment Report to the Joint Committee on Pensions, Investments and Benefits filed with the Joint Committee on Pensions, Investments and Benefits at the end of each fiscal year.

Fiscal Year 2016 Activity

In July 2015, four current companies had a total of six subsidiaries deleted from the list. Two companies were deleted from the list. One new company had a total of two new subsidiaries added to the list. The new company was Shanghai Electric Group Co. Ltd. Also, one current company, China Hydraulic and Hydroelectric Construction Group (Sinohydro), had one new subsidiary added to the list.

In November 2015, one current company had one subsidiary deleted from the list. One company, Statesman Resources Limited, was deleted from the list. Two current companies, China Petrochemical Corp (Sinopec Group) and Glencore PLC had a total of four subsidiaries added to the list. There were no holdings in the System’s portfolio for any of the new companies added to the list. There was one holding in the System’s portfolio of Shanghai Electric Group Co. Ltd. The company was included on the System’s Divestment Criteria List which, after approval by the Board in July, was sent to each of the System’s managers. Once notice was received, Morgan Stanley identified the System’s holdings in this company (which were acquired in April, 2015) and began to take steps to liquidate the position. The System currently has no investments in Shanghai Electric Group Co. Ltd.

In May 2016, five current companies had a total of eleven subsidiaries deleted from the list. Two companies, Alstom and Reliance Industries Ltd. were deleted from the list. Six current companies, China PetroChemical Corp (Sinopec Group), Petroliam Nasional Berhad (Petronas), China North Industries Group Corp, Managem, Trafigura Beheer Group, and GAZ Group had a

total of eight subsidiaries added to the list. One new company had a total of two new subsidiaries added to the list. The new company was KamAZ OJSC. There were no holdings in the System's portfolio for any of the new companies added to the list.

Investment staff are currently reviewing the new EIRIS list of scrutinized companies, and preparing information for the Board's July meetings.

The "KPERS Active Business Operations Divestment Criteria List" continues to evolve and grow mainly due to the addition of subsidiaries to the main companies on the list. In addition to the addition or deletion of main companies, our sources continually add and remove numerous smaller subsidiaries to these main companies (some of which are not publicly traded) throughout the year which adds volatility to the quantity of names on the divestment list. In addition to the name matching search process used to identify companies held in the investment portfolio which require engagement, the System has added another screen, using ISIN numbers, to strengthen the process used to identify those companies. Currently, all engagements reported in this report refer to new main companies or subsidiaries of main companies in which KPERS holds a position.

Communication with KPERS' Investment Managers

In May, 2016, the Board of Trustees authorized KPERS staff to 1) direct the managers to review the additions to the most current "KPERS Active Business Operations Meeting Divestment Criteria List" and for any applicable security that is held by the manager direct them to a) begin searching for a substitute security to replace those holdings, and b) if a suitable replacement security is found to replace the holding or if a replacement cannot be found to liquidate the holding, and 2) notify managers that any security that was deleted from the list is now available for investment. This notice along with the updated "KPERS Active Business Operations Meeting Divestment Criteria List" was sent to the System's publicly traded investment managers.

- **Public Manager Response** - All public equity managers have acknowledged the restriction placed on any additional or new investment in any company on the "KPERS Active Business Operations Meeting Divestment Criteria List." One separate account public investment manager held one company included on the "KPERS" Active Business Operations Meeting Divestment Criteria List." At February 29, 2016, the System held \$22,268 of Shanghai Electric Group Co., Ltd in a separate account. This company was identified on the May 2015 EIRIS Scrutinized Company List and reported to the Board in July 2015. The manager began to take steps to divest at that time (as afforded within the 18 month timeframe for managers to effect prudent divestments) and as of May 31, 2016 the System had no investment in Shanghai Electric Group Co., Ltd.
- **Commingled Fund Exemption** – The statute allows an exemption from divestiture for commingled funds that currently meet a maximum 5% cost to divest test. KPERS currently has holdings in two international equity commingled funds that meet this statutory test.

1. Based on 5/31/16 market values, and the estimated annual additional management fee of 0.125% for separate accounts, the Barings international equity commingled part of the portfolio currently meets the statutory exemption. (\$545,372/\$1,978,258 in Sudan holdings = 27.6% vs. 5% threshold.)
2. Based on 5/31/16 market values, the State Street Global Advisors ACWI Ex US index commingled account meets the statutory exemption due to the potential for tracking error costs of a separate account outweighing the cost to divest test. (\$4,603,176 tracking error cost/\$4,891,991 in Sudan holdings = 94.1% vs. 5% threshold.)

The State Street Global Advisors ACWI Ex US index commingled fund is a passive index investment. Investing in a Sudan free fund as well as not being able to invest in some countries directly in a separate account due to custodian issues will cause significant tracking error to the benchmark estimated to be 30-50 bps. As a result of the potential for a significant increase in tracking error and cost to the System, the tracking error costs have been applied to the 5% cost to divest test to meet the statutory exemption.

Summary of KPERS Sudan Investment Exposure

The table below provides a summary of how KPERS' Sudan exposure has changed since June 30, 2015.

	May 31, 2016		May 31, 2015		June 30, 2007	
	Market Value	% Portfolio	Market Value	% Portfolio	Market Value	% Portfolio
Separate Account	\$0.00	0.00%	\$0.00	0.00%	\$9,681,285	0.07%
Commingled Account	\$6,870,249	0.04%	\$12,879,706	0.09%	\$5,524,380	0.04%
Total	\$6,870,249	0.04%	\$12,879,706	0.09%	\$15,205,665	0.11%

KPERS' exposure to securities on the Divestment List is \$6,870,249 or 0.04% of the total KPERS portfolio as of May 31, 2016. Currently, this amount is held in two commingled funds. As mentioned previously, both funds are exempt from divestiture under the law due to the costs of divestment, as measured by additional costs of divestment. KPERS' absolute and percentage exposure to Sudan has remained low and fairly consistent over the past five years.

Appendix B includes a detailed list of KPERS' security investments in companies on the "KPERS Active Business Operations Meeting Divestment Criteria List" that KPERS currently owns and the current market value of those investments. Appendix C contains a list of each Sudan-related investment the KPERS fund owns that meet the criteria for significant business operations in Sudan established by K.S.A. 74-4921c along with a detailed summary of their business operations.

Conclusion

KPERS has met the statutory requirements of the Sudan Divestment legislation required through June 30, 2016.

Key highlights to date include:

- The exposure to investments with significant business operations in Sudan has remained low and fairly consistent over time, and is currently \$6.870 million or 0.04% of the total KPERS investment portfolio.
- The Board has directed no new or additional investment in any companies that are included on the updated “KPERS Active Business Operations Meeting Divestment Criteria List”.
- In July 2015, four current companies had a total of six subsidiaries deleted from the list. Two companies were deleted from the list. One new company had a total of two new subsidiaries added to the list. The new company was Shanghai Electric Group Co. Ltd. Also, one current company had one new subsidiary added to the list.
- In November 2015, one current company had one subsidiary deleted from the list. One company was deleted from the list. Two current companies had a total of four subsidiaries added to the list. There were no holdings in the System’s portfolio for any of the new companies added to the list. There was one holding in the System’s portfolio of Shanghai Electric Group Co. Ltd. The manager began the process to divest after notification. The System currently has no investments in Shanghai Electric Group Co. Ltd.
- In May 2016, five current companies had a total of eleven subsidiaries deleted from the list. Two companies were deleted from the list. Six current companies had a total of eight subsidiaries added to the list. One new company had a total of two new subsidiaries added to the list. There were no holdings in the System’s portfolio for any of the new companies added to the list.
- The System currently owns two international commingled funds: the Barings international equity account and the State Street Global Advisors ACWI Ex US passive index fund. Both funds currently meet the statutory commingled fund exemption from divestiture due to the costs of divestiture.

Attachments: Appendix A: KPERS Active Business Operations Meeting Divestment Criteria List

Appendix B: KPERS Ownership Interests in Companies on Active Business Operations List

Appendix C: Description of Current Business Operations in Sudan of Companies on Active Business Operations List

Appendix A
KPERS Active Business Operations
Meeting Divestment Criteria List

Approved May, 2016

China National Petroleum Corp (CNPC)

Petrochina Co. Ltd.
 Kunlun Energy Co. Ltd.
 Daqing Huake Group Co. Ltd.
 Jinan Diesel Engine Co. Ltd.
 CNPC HK Overseas Capital Ltd.
 CNPC General Capital Ltd.

Petroliam Nasional Berhad (Petronas)

Petronas Gas Bhd
 Petronas Dagangan Bhd
 Petronas Capital Ltd.
 Malaysia International Shipping Company (MISC Berhad)
 Gas District Cooling Putrajaya Sdn Bhd
 Petronas Chemicals Group Bhd
 Putrajaya Holdings Sdn Bhd
 Malaysia Marine and Heavy Engineering Holdings Bhd
 Engen Botswana Ltd.
 KLCCP Stapled Group
 Petronas Global Sukuk Ltd.

Oil & Natural Gas Corp Limited (ONGC)

ONGC Videsh Ltd. (OVL)
 Mangalore Refinery & Petrochemicals (MRPL)

China PetroChemical Corp (Sinopec Group)

China Petroleum & Chemical Corp
 Sinopec Shanghai Petrochemicals Ltd.
 Sinopec Kanton Holdings Ltd.
 Sinopec Group Overseas Development 2012 Ltd.
 Sinopec Capital 2013 Ltd.
 Sinopec Engineering Group Co. Ltd.
 Sinopec Group Overseas Development 2013 Ltd.
 Sinopec Group Overseas Development 2014 Ltd.
 Sinopec Group Overseas Development 2015 Ltd.
 Sinopec Oilfield Equipment
 Sinopec Oilfield Service Corp

China Hydraulic and Hydroelectric Construction Group (Sinohydro)

Power Construction Corporation of China Ltd.
 Sinohydro Bureau 7 Co. Ltd.
 Sinohydro Engineering Bureau 8 Co. Ltd.
 PowerChina Hydropower Development Group Co. Ltd.

Shanghai Electric Group Co. Ltd.

Shanghai Mechanical and Electrical Industry Co. Ltd.
 Shanghai Electric Group Corp

Dongfeng Motor Group Co.

Indian Oil Corporation Ltd.

Lanka IOC PLC
 Chennai Petroleum Corporation Ltd.

Scomi Group Berhad

Scomi Engineering Berhad
 KMCOB Capital Berhad
 Scomi Energy Services Bhd

Egypt Kuwait Holding Co

China North Industries Group Corp

NORINCO International Coop Ltd.
 North Huajin Chemical Industries Co. Ltd
 Sichuan Nitrocell Co. Ltd.
 AKM Industrial Co. Ltd.
 North Navigation Control Technology Co. Ltd.
 North Lingyun Industrial Group Co. Ltd.

JX Holdings Inc.

Nippo Corporation
 Toho Titanium Co.

Andritz AG

Bharat Electronics Limited

Bharat Heavy Electricals Limited

Energy House Holding Co. K.S.C.C.

ASEC Company for Mining (ASCOM)

KamAZ OJSC

KamAZ PJSC
 Neftekamsky Avtozavod aka NefAZ

Managem

ONA S.A.
 Societe Metallurgique D'imiter
 Societe Nationale D'Investissement

Glencore PLC

Glencore Funding LLC
 Glencore Finance (Europe)
 Viterra Inc.
 Glencore Canada Corp.
 Glencore Canada Financial Corp.
 Glencore Finance Canada Ltd.
 Glencore Finance Dubai Ltd.
 Glencore Australia Holdings Pty Ltd.

Oil India Ltd.

Trafigura Beheer Group

Trafigura Group Pte Ltd.

China Gezhouba Group Company Ltd.

Jiangxi Hongdu Aviation Industry Co. Ltd.

LS Industrial Systems

Pertamina Persero PT

Harbin Electric Company Ltd.

Orca Gold Inc.

GAZ Group

GAZ OAO
 Pavlovo Bus JSC

China Poly Group Corporation

Poly Energies Holding Co. Ltd
 Poly Property Group Co. Ltd.

Appendix B
KPERS Active Business Operations
Meeting Divestment Criteria List
Current Holdings List
Holdings as of 5/31/2016

Separate Accounts

None

Commingled Accounts

Company	Barings	State Street	Total
Andritz AG	\$ 13,695	\$ 200,104	\$ 213,799
Bharat Heavy Electricals	\$ 29,228	\$ 56,847	\$ 86,075
China Petroleum & Chemical aka Sinopec Corp	\$ 513,914	\$ 939,647	\$ 1,453,561
Dongfeng Motor Group	\$ 84,130	\$ 163,266	\$ 247,396
Glencore PLC	\$ 186,916	\$ 1,227,763	\$ 1,414,679
JX Holdings Inc.	\$ 252,658	\$ 441,455	\$ 694,113
Kunlun Energy Company Ltd.	\$ 78,661	\$ 142,688	\$ 221,348
Malaysia International Shipping Company aka MISC BHD	\$ 36,649	\$ 112,574	\$ 149,223
Oil & Natural Gas Corp. Ltd.	\$ 73,748	\$ 144,804	\$ 218,552
Petrochina Co. Ltd.	\$ 438,879	\$ 782,921	\$ 1,221,800
Petronas Chemicals Group Bhd	\$ 72,994	\$ 206,357	\$ 279,351
Petronas Dagangan Bhd	\$ 22,961	\$ 60,853	\$ 83,813
Petronas Gas Bhd	\$ 59,146	\$ 195,836	\$ 254,982
Shanghai Electric Group Co Ltd.	\$ 33,797	\$ 65,540	\$ 99,338
Sinopec Engineering Group Co.	\$ 32,912	\$ 58,846	\$ 91,758
Sinopec Shanghai Petrochemical	\$ 47,969	\$ 92,492	\$ 140,461
	\$ 1,978,258	\$ 4,891,991	\$ 6,870,249

Appendix C

Description of Current Business Operations in Sudan of Companies on Active Business Operations List

The information provided regarding the current business operations of KPERS investments in companies with significant business operations in Sudan is referenced from research provided by EIRIS. Subsidiaries on the list are noted in parenthesis.

Andritz AG

Andritz AG (Andritz Group) is incorporated in Austria and supplies plants, equipment and services for hydropower stations, the pulp and paper industry, the metal forming and steel industries and solid/liquid separation in municipal and industrial sectors. It also offers technologies for other sectors, including automation, the production of animal feed and biomass pellets, pumps, machinery for nonwovens and plastic films, steam boiler plants, biomass boilers and gasification plants for energy generation, flue gas cleaning plants, plants for the production of panel boards, thermal sludge utilization and biomass plants.

Its subsidiary, Andritz HYDRO, supplies electro-mechanical systems and services for hydropower plants and hydraulic power generation. Andritz HYDRO, formerly known as VA TECH HYDRO, began business with Sudan's National Electricity Corporation (NEC) in 1968. The NEC was reportedly dissolved and restructured in 2010. Andritz HYDRO held contracts for the Roseires Dam, which has been associated with the displacement of local communities. EIRIS Conflict Risk Network sent inquiries to Andritz HYDRO in January 2009, April 2013 and January 2014, requesting dialogue and further information on the company's Sudan-related operations. The company responded in April 2014 with information regarding its ongoing sales to Sudan, specifically with regard to the Roseires and Jebel Aulia dams. The EIRIS Network remains in dialogue with the company.

ASEC Company for Mining - (ASCOM)

ASEC Company for Mining (ASCOM) is primarily focused on geology, mining and manufacturing. ASCOM has two subsidiaries operating in the mining sector in Sudan: NEBTA for Geology & Mining Ltd and ASCOM Precious Metals Mining, S.A.E. (APM). Since 2010, APM has held rights to a mining concession in the Blue Nile region in Sudan. The concession covers approximately 3,000 square kilometers and is located in the southeastern corner of the country. APM has actively explored the concession since at least 2011. The company recorded a goal to produce between 150,000 and 200,000 ounces of gold annually by 2016. ASCOM is classified as "Scrutinized" under the targeted Sudan divestment legislative model for involvement in mineral extraction activities. EIRIS requested further information from ASCOM in March 2015. No response from the company has been received to date.

Bharat Electronics Limited

Bharat Electronics Limited (BEL) is a defense equipment firm that is majority owned by the Indian government. The company manufactures and supplies electronic products for the defense services sector, including radars, communication transmitters and receivers, electro-optic equipment and electronic components. As of August 2013, the company reportedly had a

workforce of 10,305 employees. The company has been linked to Sudan-related business since 2005, when it was involved in the sale of battlefield radars to the Sudanese government.

In February 2005, BEL announced that it had signed a contract to supply the Government of Sudan with ten battlefield radars. The company secured an additional contract to supply communication and night vision equipment, worth U.S. \$16.8 million in April of that year. The company also has sold civilian equipment, including solar modules, to the Sudanese government. Sudanese delegations to BEL's stall at an army and navy equipment exposition in Delhi in 2008 suggest the Government of Sudan may have remained a potential customer for BEL's products beyond 2005. In April 2011, the Indian government's Ministry of External Affairs included BEL in a list of companies that had a presence in Sudan, indicating that its operations in the country continued. In January 2015, BEL was reporting growing overseas business with several Asian and African countries buying its opto-electronic defense devices.

Although the existing UN arms embargo prohibits the sale of military materials for use in Darfur, it allows other arms sales to the Sudanese government. There is therefore a risk that BEL's products will ultimately be used in military actions in the states of Darfur, South Kordofan and Blue Nile. The Sudanese government has regularly moved weapons and military equipment into Darfur despite the UN embargo, and a UN Panel of Experts concluded in October 2009 that numerous other armed actors in Darfur also continued to violate the embargo. It appears that BEL continues to sell military equipment to the Sudanese government, as it retained a presence in country after the embargo was enforced. EIRIS Conflict Risk Network has sent inquiries to BEL since 2007 requesting dialogue and information regarding the company's Sudan-related operations. BEL has not responded.

Bharat Heavy Electricals Limited

Bharat Heavy Electricals Limited (BHEL), majority owned by the Indian government, is an integrated power plant equipment manufacturing and engineering company. It engages in the design, engineering, manufacture, construction, testing, commissioning and servicing of products and services for the power, transmission, industry, transportation, renewable energy, oil and gas and defense sectors. The company has 47,525 employees and reported total revenue of INR 38,389 crore (U.S. \$6,233.7 million) in fiscal year 2013-14.

BHEL's work in Sudan began in 2005 when it shipped several locomotives and associated parts to Sudan Railways. In 2006, BHEL contracted with the NEC to build a 500 megawatt (MW) steam power station at Kosti, south of Khartoum, and transmission lines between Jebel Awlia, Rank and Al Obeid. The contract was valued at U.S. \$457 million, making it one of the largest contracts ever signed between Sudan and India, and BHEL's largest single export order.

Construction of the Kosti power station began in February 2006 and was initially scheduled to be completed by 2009. In July 2009, BHEL told EIRIS Conflict Risk Network that the project was in an advanced stage and that the company expected to complete it by the end of 2010. The timeline for commissioning all four units of the power station was later revised to sometime in 2011. However, BHEL was still conducting tests on Kosti station and inviting bids for parts in the fall of 2012 and it is unclear whether construction has been finished. Following construction, the company will have a two-year contract to supervise operations. In early 2012, the company was accused of failing to pay the wages of, or provide appropriate food and shelter to, Indian workers on the Kosti station project.

BHEL has received other orders for supplies, services and power generating equipment for unidentified Sudanese power projects. In March 2008, a BHEL official stated that the company had received contracts to provide transformers to coal-fired power plants in Sudan. These contracts may be for power projects outside of the company's work at the Kosti power station. In May 2010, senior company executives announced that a memorandum of understanding (MOU) signed by the NEC and BHEL in 2006 was likely to be revised. Sudan reportedly dissolved the NEC in 2010 and restructured its state-owned electricity enterprises. It is unclear how the restructuring affected this MOU, which called for BHEL to set up a 1,000 MW power plant in Port Sudan in exchange for crude oil or cash. This project is believed to require an investment of U.S. \$1 billion. Reports indicated that BHEL may approach ONGC Videsh (a subsidiary of India's state-owned Oil and Natural Gas Company, ONGC) to facilitate an exchange of crude oil. ONGC Videsh confirmed it would be interested in assisting BHEL; however, as of November 2013 there has been no update on the venture. In May 2013 and December 2014, the Network reached out to BHEL to request updated information on its business related to Sudan. The company did not respond.

China Gezhouba Group Company Limited

The China Gezhouba Group Company Ltd. (CGGC) is a listed subsidiary of China Gezhouba Group Corporation, a state-owned construction company with a long history of work on hydropower projects. In 2010, CGGC signed a contract with the Government of Sudan to build the Shereik Dam. Hydroelectric projects in Sudan have been associated with forced displacement, human rights violations and negative environmental impacts.

Hydropower projects in Sudan have historically been problematic. In addition to association with mass forced displacement and human rights violations, they have been linked to negative environmental impacts, including damage to downstream ecosystems and the destruction of nearby farmland. These concerns require that dam- and power-related projects be preceded by environmental impact assessments, as stipulated by Sudanese law, and by the World Commission on Dams.

The Fichtner Group, a German engineering company specializing in power plant consulting, is believed to have prepared an environmental study of the Shereik Dam. Among other topics, this study reportedly includes measures to avoid or minimize negative environmental impacts. It is unclear, however, how CGGC has acted on the study or plans to implement the measures it recommends. EIRIS Conflict Risk Network reached out to CGGC in May 2011 and March-April 2013 requesting dialogue and further information regarding the company's Sudan-related operations. CGGC has not responded.

China Hydraulic and Hydroelectric Construction Group – (Sinohydro)

The China Hydraulic and Hydroelectric Construction Group (Sinohydro; formerly known as the China National Water Resources and Hydropower Engineering Corporation) is a Chinese state-owned engineering and construction company. Sinohydro's services include financing, engineering, purchasing, implementing and operating power, water conservancy, transport infrastructure and civil works projects, with a historical focus on hydropower project contracting. It has 12 holdings and 20 wholly-owned subsidiaries based in China, with 91 overseas offices in 69 countries. The company has 387 international projects under construction in more than 60

countries with a total contract value of approximately U.S. \$35 billion. Sinohydro's hydropower projects in Sudan began in 2003 and have been associated with forced displacement, human rights violations and negative environmental impacts. Sinohydro's involvement in hydropower projects in Sudan constitutes "Power Production Activities" under the targeted Sudan divestment legislative model, and the company is therefore classified as "Scrutinized."

Rebel groups have frequently targeted Chinese companies and attacked their workers due to their perceived links to the Government of Sudan. In January 2012, Sinohydro employees were kidnapped by the SPLA-N from a road construction site in South Kordofan. During the attack one worker was killed while seventeen others escaped. The kidnapped workers had been working on a road building project for Chinese state-owned Power Construction Corporation of China, which is affiliated with Sinohydro, between the towns of Abbasiya and Rashad in northern South Kordofan. Government forces and the rebels had reportedly been fighting near the area. It was the third well publicized attack on Chinese workers in Sudan in a year, and attacks there and in other countries have prompted some public outcry in China. The Chinese government and Sinohydro responded to the attack by sending a six-member mission to Sudan to help free the 29 kidnapped workers. They were released unharmed by the rebels in February 2012, following international mediation.

China National Petroleum Corp – (CNPC, Jinan Diesel, Daqing Huake Group Co. Ltd., Kunlun Energy, Petrochina)

The Chinese government-owned CNPC is the largest player in Sudan's oil industry, with operating stakes in multiple exploratory and oil producing concessions and subsidiaries involved in the construction of critical oil infrastructure. CNPC is classified as "Scrutinized" under the targeted Sudan divestment legislative model due to its extensive exploration, production and other "Oil-Related Activities" in Sudan. The company itself is not publicly traded, but its subsidiary, PetroChina Co. Ltd., gives it broad exposure to international financial markets.

CNPC has been accused of creating PetroChina with the explicit purpose of gaining access to western capital markets while shielding itself financially from public discontent over its Sudan operations during Sudan's civil war. CNPC pledged that PetroChina would have no involvement in its Sudan-related activities, but meetings with Sudanese oil officials in early 2013 and an admission in December 2013 to the U.S. Securities and Exchange Commission regarding Sudanese crude oil imports suggest otherwise. In July 2014, BNP Paribas disclosed to U.S. investigators that it had provided CNPC trade financing for Sudanese oil, likely through PetroChina.

China North Industries Group Corporation – (NORINCO)

China North Industries Group Corporation (CNIGC) is a state-owned enterprise under the direct administration of the Chinese central government. Its subsidiary, China North Industries Corporation (NORINCO) is the largest weapons manufacturer in China, producing weaponry ranging from small arms to anti-aircraft and anti-missile systems. Through NORINCO, CNIGC markets and exports NORINCO brand weapon systems. In October 2013, NORINCO was included on a list of companies that the Chinese government asked the United States to remove from its sanctions list.

Prior to the UN arms embargo, NORINCO sold WZ-551 armored personnel carriers to Sudan for use by its armed forces. While the Panel found that most weapons in use in Darfur were manufactured before the implementation of the UN arms embargo (and so may have arrived in Sudan as part of legitimate shipments to the Government of Sudan), it also found that almost all ammunition documented in Darfur had been manufactured post-arms embargo. Furthermore, sales of 155mm howitzers by NORINCO to the Government of Sudan were reported as recently as January 2009. In an attempt to determine at what point weapons had been transferred to Darfur, the UN Panel of Experts requested NORINCO's assistance in tracing the chains of ownership. At the time the 2009 report was released, NORINCO had not responded to the UN's request. A report by the Panel of Experts in October 2010 revealed that twelve of eighteen types of bullet casings found at scenes of attacks on UN/African Union peacekeepers in Darfur were manufactured in China. The names of the bullets' manufacturers were not included in the report, but given its prior sales to Sudan, there is concern that NORINCO may be one of those manufacturers.

According to Amnesty International, some South Sudanese rebel groups stated in 2013 that they had been armed by Sudan with Chinese-manufactured ammunition for Chinese-manufactured assault rifles; JEM fighters have been found with Chinese heavy machine gun ammunition. This report also noted that NORINCO directly provided South Sudanese rebel groups with 1,000 tons of weapons and munitions, which included rocket systems, automatic rifles, grenade launchers, 20,000 grenades, pistols, machine guns, and several million rounds of ammunition, in early July 2014.

China PetroChemical Corp – (Sinopec Group)

The China Petrochemical Corporation (Sinopec Group) is wholly-owned by the Chinese government and is one of the largest oil companies in China. Sinopec Group's oil and gas construction services in Sudan began in 2004 as part of a contract to build a section of the oil and gas pipeline extending from Blocks 3 and 7 to Port Sudan, which was completed in 2005. In 2011, Sinopec purchased approximately 78.8% of the crude oil required for its refinery business from international suppliers, some of which are located in Sudan.

Sinopec Group is classified as "Scrutinized" under the targeted Sudan divestment legislative model due to the company's involvement in exploration, infrastructure development and other "Oil-Related Activities" within the model's definition. Sinopec Group has carried out a number of oil infrastructure and development projects through its subsidiary, Zhongyuan Petroleum Exploration Bureau International.

China Poly Group Corporation - (Poly Energies Holding, Poly Property Group)

China Poly Group Corporation is a state-owned Chinese enterprise under the supervision and administration of the Assets Supervision and Administration Commission of the State Council. China Poly Group holds a mining license in Sudan and has reportedly been involved in petroleum exploration and the sale of weapons to Sudan. The company has also undertaken civil engineering and construction projects in Sudan, including the Rufaa Bridge (also known as Rufua Bridge), the Duweimu Bridge (also known as the "Ad-Duwaym Bridge)), and the Sudan Umm Kadada Road, which will link the capital of North Darfur with Um Kadada town.

China Poly Group is classified as “Scrutinized” under the targeted Sudan divestment legislative model due to its involvement in “Mineral Extraction Activities,” “Military Equipment” and “Oil-Related Activities” in Sudan.

Dongfeng Motor Group Co. Ltd.

Dongfeng Motor Group Co., Ltd. (DFG), part of Dongfeng Motor Corporation, is a China based producer and exporter of commercial and passenger vehicles and equipment as well as finance and other automotive-related business. Various reports suggest that DFG and its subsidiaries have sold military-grade vehicles to the Government of Sudan. DFG is classified as “Scrutinized” for the sale of military-grade transport vehicles to the Sudanese military, which meets the targeted Sudan divestment legislative model’s definition of “Military Equipment.” While different reports relating to this matter have used multiple company names (for example, Dongfeng Automobile Import and Export Limited, Dongfeng, and Dongfeng Motor Corporation), EIRIS believes DFG is the relevant entity involved in the Sudan-related activities discussed below.

In 2006, the United Nations Panel of Experts established to monitor the arms embargo in Darfur reported that a shipment of 212 military trucks of model EQ2100E6D and 10 chassis workshop of model EQ1093F6D were procured by the Sudan Ministry of Defense from Dongfeng Automobile Import and Export Limited. The presence of DFG military vehicles in Darfur was documented in July 2008, when military vehicles, with plates and markings showed a post-embargo manufacture date, were found carrying anti-aircraft guns in the possession of a Darfur rebel group. These vehicles were from a set of army trucks that the UN determined had arrived in Sudan after the arms embargo was put in place in 2004.

EIRIS also found that other corporate entities linked to DFG may be involved in Sudan-related joint ventures. According to a source, a joint venture between Nissan and a Dongfeng entity, “Chinese Dongfeng Motor,” reportedly supplied military trucks to the Sudanese government in 2006. EIRIS has sent inquiries to DFG requesting dialogue and information regarding its Sudan-related operations since 2007, most recently in April 2013. DFG has failed to respond.

Egypt Kuwait Holding Company

Egypt Kuwait Holding Company (EKH) is an Egyptian based private equity firm, operating in Africa and the Middle East. Through its majority-owned subsidiary, Tri-Ocean Energy, EKH holds a stake in the Petrodar Operating Company (Petrodar) consortium. This stake leads to potential association with numerous concerns, including insecurity and other negative environmental and social impacts of exploration and production activities. EKH’s holdings in producing oil blocks are considered “Oil-Related Activities” under the targeted Sudan divestment legislative model. EKH is therefore considered “Scrutinized” under the model. In January 2008, EKH’s Tri-Ocean Energy subsidiary acquired a 5% stake in the Petrodar Operating Company (Petrodar), which has operated oil Blocks 3 and 7 since 2000. Petrodar’s fields produce nearly 300,000 barrels of Dar Blend crude per day. EKH also has established a greenfield paints manufacturing complex, Africa Paints, in Sudan. The factory, which has an estimated annual capacity of 10,000 tons, was inaugurated in August 2010.

In January 2013, attorneys representing EKH contacted the Network, requesting that the company be removed from the Sudan Company Report under the OFAC general license

allowing for activities relating to the petroleum and petrochemical industries in the RSS as an exception to the targeted Sudan divestment legislative model. While it is EIRIS Conflict Risk Network's understanding that neither the general license nor the exception apply to EKH's particular situation, EIRIS has maintained communication with EKH's attorneys through November 2014, and intends to continue dialogue on how EKH may avoid "Scrutinized" classification into the first quarter of 2015.

Energy House Holding Co. K.S.C.C.

The Energy House Holding Company K.S.C.C. (Energy House) is a Kuwait-based investment company that changed its name from AREF Energy Holding Company in May 2013. Energy House holds a majority stake in private, Sudan-based Hagleig Petroleum Services and Investment Co. Ltd (HPSIC). As of December 2013, Energy House held a 64.25% stake in HPSIC. Due to its ownership of a majority stake in HPSIC, which conducts "Mineral Extraction Activities" and is involved in "Oil-Related Activities," Energy House is considered to be "Scrutinized" under the targeted Sudan divestment legislative model.

HPSIC has served as a contractor or sub-contractor for, and provided numerous services to, multiple oil and power companies in Sudan. In 2013, Energy House reported that it owned 50% stakes in the Sudan-incorporated Al Dindir Petroleum International Company Ltd. and in the Resources Development Group. Both of these companies are actively involved in Sudanese oil and gas technology, services and exploration activities. Energy House has not responded to any inquiries for dialogue and further information by the EIRIS Network.

GAZ Group – (Pavlovsky Bus Plant)

GAZ Group is a Russian producer of light and medium duty commercial vehicles, buses, trucks, passenger cars, powertrains and auto components. The company has been involved in Sudan since 2008, when the Sudanese government bought 50 of its 6WD Ural-4320 trucks. These trucks have been used by other customers for military purposes and oil exploration, among other things. The company's Head of Public Relations acknowledged that Ural had a truck assembly plant in Sudan as of 2009, stating that the location was chosen based on geo-political factors and favorable market conditions. GAZ Group was reportedly counting on Ural truck sales and manufacturing in Sudan to compensate for a decline in sales in Russia. GAZ Group has listed the Sudanese military as a main export customer, leading to concern that its products will facilitate military activities or be used in violation of the UN arms embargo on Darfur. There is also evidence that commercial trucks exported to Sudan have been retrofitted for offensive use in Darfur. Eyewitnesses alleged that, during a December 2007 attack by government soldiers in West Darfur, vehicles fitted with anti-aircraft guns were used to fire at civilian dwellings, killing a number of women.

GAZ Group is classified as "Scrutinized" under the targeted Sudan divestment legislative model for the supply of military-grade transport vehicles that meet the model's definition of "Military Equipment" to Sudan. The AWD Ural Trucks that GAZ Group's subsidiary has supplied to the Sudanese government are military-grade vehicles that have been used by armed forces in multiple countries.

Glencore PLC – (Viterra)

In May 2013, Glencore International PLC merged with Xstrata PLC, becoming Glencore Xstrata PLC (Glencore Xstrata). In May 2014, the company dropped ‘Xstrata’ and changed its name to Glencore PLC. Prior to the merger, Glencore International PLC (Glencore), headquartered in Switzerland, was one of the world’s largest suppliers of industrial commodities and raw materials. In addition, the company was one of the world’s largest non-integrated oil suppliers, handling 3% of the world’s daily oil needs. The company went public in May 2011 with a U.S. \$11 billion initial public offering. Glencore PLC has been one of the world’s leading mineral exploration and extraction companies, with operations in over 20 countries. The Glencore Xstrata merger structures the company’s interest in both extraction and commodity trading through an integrated business model unique to the industry. Glencore PLC’s Sudan-related operations appear to have begun in September 2003 and are concentrated on the purchase of crude oil and associated oil products. Glencore PLC’s purchase of Nile Blend crude constitutes “Oil-Related Activities” under the targeted Sudan divestment legislative model. Therefore it is classified as “Scrutinized.”

EIRIS reached out to Glencore several times in the period 2013-2015 but received no response until December 2015. Glencore contacted EIRIS in order to begin a dialogue to review the company’s “Scrutinized” classification; however, the Network received no response in regards to follow up questions clarifying Glencore’s operations in Sudan. EIRIS reached out to Glencore in April 2016 to clarify its Sudan-related operations but received no response.

Harbin Electric Company Ltd.

Harbin Electric Company Ltd. (HEC) is an investment holding company incorporated in China. Through its subsidiaries, HEC manufactures and sells power equipment and provides power station engineering services. The company’s operations cover thermal and hydro power. Prior to 2011, HEC was known as Harbin Power Equipment Company Limited. As of June 2014, the company had 19,235 employees.

The company’s subsidiary, Harbin Power Engineering (HPE), began working in Sudan in 2002 when it was commissioned to build a power plant. HPE’s operations in Sudan also include transmission lines for the Merowe Dam project, which has been associated with human rights violations and negative environmental impacts. Another HEC subsidiary, Harbin Electric International Company Limited (HEI), is involved in the Sudan River Nile State Transmission EPC Project. Harbin Electric Company Ltd. is publicly traded on the Hong Kong Stock Exchange. The company’s involvement in hydropower projects in Sudan constitutes “Power Production Activities” under the targeted Sudan divestment legislative model, and the company is therefore classified as “Scrutinized.” HEC has failed to provide evidence that 75% of its activities in Sudan include projects intended to provide power or electricity to “Marginalized Populations,” which would allow the company to avoid a “Scrutinized” classification.

Indian Oil Corporation Limited – (Chennai Petroleum, Lanka IOC)

Indian Oil Corporation Limited (IOCL) is involved in upstream and downstream oil and gas activities spanning the hydrocarbon value chain, including refining, pipeline transportation, marketing of petroleum products, natural gas and petrochemicals, and the exploration and production of crude oil and gas. The company is majority owned by the Indian government and

began seeking oil-related contracts in Sudan in 1999. IOCL provides training and assistance for petroleum pipeline and refinery operations, activities defined as “Oil-Related” under the targeted Sudan divestment legislative model, and the company is therefore classified as “Scrutinized.”

The bilateral petroleum trading relationship between India and Sudan puts an emphasis on the training of Sudanese technicians in the petroleum sector. In 2006-2007, Greater Nile Petroleum Operating Company (GNPOC) contracted with IOCL to provide two lengthy training programs for pipeline operators and consortium supervisors. IOCL has served Sudan through providing training on various facets of downstream petroleum production, including on-the-job training, through its Indian Oil Institute of Petroleum Management. IOCL has also sent experts to train executives of various Sudanese oil companies on pipeline operations and maintenance.

The EIRIS Network has reached out to IOCL to discuss issues of security and revenue transparency, most recently in January 2013. IOCL has failed to respond. Since then the Network has regularly reached out to IOCL to discuss issues of security and revenue transparency, most recently in April 2016. IOCL has failed to respond.

Jiangxi Hongdu Aviation Industry Co. Ltd.

Jiangxi Hongdu Aviation Industry Co. Ltd. (Hongdu Aviation) is a Chinese company that is principally engaged in the research, development, manufacture and sale of aerospace products, especially attackers, trainers and light utility aircraft. Hongdu Aviation was formerly a majority held subsidiary of AviChina, the largest helicopter manufacturer in China and one of the country’s major aircraft manufacturers. Hongdu Aviation is now a joint stock limited company traded on the Shanghai Stock Exchange, currently with a minority interest of 43.63% being directly held by AviChina. Hongdu Aviation has been doing business with Sudan since at least 2005, when it began deliveries of military aircraft to the government. There is concern that Hongdu Aviation’s aircraft will facilitate military activities in Sudan. The K-8 fighter trainer aircrafts that Hongdu Aviation delivered to Sudan reportedly demonstrate “impressive attack power against land-based targets.” It is reported that these aircraft are specially fitted for land attack purposes with 23-mm machine gun pods.

Hongdu Aviation is classified as “Scrutinized” under the targeted Sudan divestment legislative model for the company’s supply of military-grade aircraft to Sudan, which meets the definition of “Military Equipment.” Hongdu Aviation has failed to provide information showing either that the products it has supplied to the Sudanese Government are not capable of being used to facilitate offensive military actions or that the company has implemented rigorous and verifiable safeguards to prevent their use by forces actively participating in armed conflict.

JX Holdings, Inc.

JX Holdings, Inc. (JX Holdings) is a fully-integrated oil and gas company formed through the July 2010 merger of Nippon Oil Corporation (Nippon Oil) and Nippon Mining Holdings (Nippon Mining). The company’s operations in Sudan are limited to the purchase of crude oil produced in the country. Though JX Holdings does not appear to have a physical presence within Sudan, its transport of crude oil may assist the Sudanese government in generating revenue from its oil industry. JX Holdings’ purchase of Sudanese crude oil constitutes “Oil-Related Activities” under the targeted Sudan divestment legislative model, and is classified as “Scrutinized.” As early as October 2002, Sudan was cited as one of Nippon Oil’s top suppliers

in Africa. By 2007, Nippon Oil was importing an estimated 70,000 to 80,000 barrels of Sudanese Nile Blend oil per day. At the time, this represented between 5% and 6% of Nippon Oil's overall refinery capacity of nearly 1.32 million barrels per day. As recently as 2009, Nippon Oil confirmed on its website its purchases of Sudanese crude oil, which it valued for its cost and low-sulfur content. However in communications with the SDTF, Nippon Oil reported its purchases of Sudanese crude oil were made through international traders and "other entities," and that it "has never entered into direct contracts with the Sudanese government or Sudan's state-owned oil company Sudapet." In the past, the company has stated that it would have difficulty finding adequate replacements for its Sudanese sources of crude oil. However, the company is "working diligently today to secure alternative sources." Given these statements, it is likely that Nippon Oil (now JX Holdings) continues to purchase Sudanese crude oil.

EIRIS Conflict Risk Network reached out to JX Holdings on four separate occasions in 2015 and in February 2016 to confirm this information, and ascertain whether the company would refrain from purchasing Sudanese oil in the future. JX Holdings did not respond.

KamAZ OJSC

KamAZ OJSC is a truck manufacturer that operates through a group of subsidiaries known as KamAZ Group. In July 2015, KamAZ OJSC changed its name to KamAZ PJSC. KamAZ's product portfolio includes trucks, trailers, buses, tractors, engines, power units and tools. KamAZ conducts its Sudan-related business through a local dealer, Gezira Trade & Services Co. Ltd. (GTS). In 2005, KamAZ OJSC's Director General acknowledged exporting vehicles to Sudan, and that the company had short term plans to begin assembly of KAMAZ OJSC trucks in Sudan; however, it is unclear whether these assembly plans in Sudan were enacted. The company representative also mentioned "supplies" to Sudan in the context of explaining the company's trucks' appeal to armed forces, but the representative did not explicitly name the recipient of the supplies in Sudan and did not elaborate on what was meant by "supplies." However, the Sudanese military reportedly sent a delegation to spend a day at a KamAZ OJSC truck factory in Tatarstan in the same year.

KamAZ OJSC stated that its Sudanese dealer built service centers in 2006, although it was not clear that this claim referred to GTS. KamAZ indicates on its website that it has become "more active" in vehicle sales on the Sudanese market, but it has not stated whether the vehicles were intended for civilian or military use.

LS Industrial Systems

LS Industrial Systems (LSIS) is a South Korean electric power and automation company. The NEC has awarded the company several power-related contracts, including for the Khartoum North Power Station and AFRA power substation. LSIS's involvement in power projects commissioned by the NEC is considered "Power Production Activities" under the targeted Sudan divestment legislative model, and the company is therefore classified as "Scrutinized."

LSIS has supplied Sudan's NEC with ultra-high voltage transformers. The company is also part of a consortium with Daedong Industrial Machinery Co.,Ltd. which has won a number of projects with the Sudanese power authority. In 2008, this consortium was awarded a €10 million contract to supply all facilities and materials for the NEC's AFRA power substation. LSIS is responsible for layout design and providing equipment and materials. The consortium, with

Korea Plant Service & Engineering, also contracted to refurbish the Khartoum North Power Station. Located in an industrial area of Khartoum, the 30 megawatt oil-fired power plant will generate electricity for the Sudanese national grid. The company appears to be interested in widening its involvement in Sudan. LSIS's executive director in charge of overseas system business said the company "will continue to proactively push to win" projects in Sudan and neighboring countries. The head of the Sudanese power authority visited LSIS in 2009, as did Sudan's economic attaché in 2012, to discuss the company's ability to help Sudan address its power needs.

Managem – (ONA S.A.)

Managem is Morocco's largest mining firm and is majority held by the Moroccan conglomerate Groupe ONA. The company holds two gold mining concessions in relatively unpopulated areas in Sudan, and its exploration activities qualify it as "Scrutinized" under the targeted Sudan divestment legislative model.

In September 2008, Managem obtained gold mining concessions from Sudan's Ministry of Energy and Mining; Managem's exploration reportedly began that month. The concession areas are located in the Wadi- Gigiya region of Red Sea State and the Al-Sharif area of River Nile State. According to Sudanese government releases, Managem holds the Gabgaba, Sheraik and Nigeim concessions, an area of 26610 square kilometers. The company launched a feasibility study in the second half of 2011, with the goal of starting gold production in 2013. As of November 2013, Managem has not announced any results of exploration. Managem opened an office in Khartoum during 2009 to assist with its exploration work. It was predicted that the company ultimately would spend up to U.S. \$3 million setting up operations in Sudan.

Oil India Limited

Oil India Limited (OIL) is India's second-largest state-run oil explorer. It is majority owned by the government and has been listed on the National Stock Exchange of India since an Initial Public Offering (IPO) in September 2009. The company specializes in the exploration, development, production and transportation of crude oil and natural gas. OIL holds a 10% "participating interest" in the pipeline running from the Khartoum oil refinery to Port Sudan, which was completed in 2005 after 15 months of construction. The other 90% of the participating interest is held by ONGC Videsh Limited (OVL), a wholly owned subsidiary of Oil and Natural Gas Corporation Limited (ONGC). OIL's pipeline and exploration activities are considered "Oil-Related Activities" under the targeted Sudan divestment legislative model, so the company is classified as "Scrutinized."

Oil & Natural Gas Corp – (ONGC, Mangalore)

Oil and Natural Gas Corporation Limited (ONGC) is majority owned by the Indian government. The company is extensively involved in Sudan's oil industry and potentially associated with numerous negative environmental and social impacts from exploration and production activities. ONGC is involved in exploration, production and other activities defined as "Oil-Related Activities" under the targeted Sudan divestment legislative model, and is therefore classified as "Scrutinized."

ONGC Videsh Limited (OVL), an ONGC subsidiary, acquired a 25% stake in the Greater Nile Petroleum Operating Company (GNPOC) from Canada's Talisman Energy Inc. for U.S. \$771 million (CAD \$1.13 billion) in March 2003. GNPOC operates Blocks 1, 2, and 4. Before the 2012-2013 production shut down, the blocks produced between 180,000 and 200,000 barrels per day (bpd). If recently discovered fields had come online in 2012, there was hope for a 20,000 bpd increase. In January 2014, OVL halted production in Unity state, where parts of Blocks 1, 2 and 4 are located, as a result of an outbreak of deadly violence in the RSS. Mangalore Refinery and Petrochemicals Ltd (MRPL), an ONGC subsidiary, is also involved in the purchase of Nile Blend crude on the international spot market.⁵¹ According to MRPL, it loaded one shipment of 600,000 barrels of Nile Blend crude in 2011-2012, and two shipments of 600,000 barrels each in 2013.

Orca Gold Inc.

Orca Gold Inc. (Orca Gold), previously Canaco Resources Inc. (Canaco), is a publicly traded Canadian company engaged in the acquisition and exploration of mineral properties in Africa. On December 14, 2012, Shark Minerals Inc. (Shark) entered into a binding share purchase agreement with Canaco. Canaco obtained all of the common shares of Shark in exchange for common shares of Canaco; the Shark acquisition was completed in early April 2013. Orca Gold is now 63% owned by former Canaco shareholders and 37% owned by former Shark shareholders. The company has over 100 employees active on its permits in Northern Sudan. Orca Gold holds at least two properties in northern Sudan (Blocks 14 and 68). The company is involved in "Mining-Related" activities under the targeted Sudan divestment legislative model. In addition, Orca Gold does business directly with the Sudanese government through its interest in Block 14. As of April 2013, the acquisition by Canaco is complete; therefore, Orca Gold is now classified as "Scrutinized" under the model.

Petroleum Nasional Berhad / Petronas – (Petronas Gas, Petronas Dagangan, MISC BHD, Petronas Chemicals Group)

Petronas, Malaysia's state-owned oil company is a major player in the Sudanese oil industry. The company holds stake in nine Sudanese oil blocks and is involved in an ongoing US \$1 billion refinery project in Port Sudan. It pumped 81,600 bpd of oil from Sudan in the year ending March 2006, approximately one-fifth of the company's total international oil and gas production. As of April 2007, Petronas had invested approximately US \$1.45 billion in the country. Petronas first entered Sudan in December 1996, when it acquired a 30% stake in the Greater Nile Petroleum Operating Company (GNPOC) through a wholly-owned subsidiary, Petronas Carigali Nile Ltd. In February 1997, the company won a 28.5% stake in Block 5A. Its stake increased to 68.875% when Sweden-based Lundin sold its interest in the block in 2003. Also in 1997, the company signed an Agreement of Cooperation and Technical Assistance with Sudan's Ministry of Energy and Mining, which, according to a press release by the company, "covers the cooperation on upstream and downstream studies, the development of training programmes and the establishment of a training centre and laboratory facilities for the Ministry as well as the enhancement of Sudanese capabilities in managing its petroleum operations." Subsequently, the company acquired a 41% stake in Block 5B in May 2001 and a 70% stake in Block 8 in August 2003. In 2004, the Petrodar consortium, in which Petronas has a 40% stake, signed an agreement with the government of Sudan to develop Blocks 3 and 7. In August 2005, Petronas acquired a 35% stake in the Red Sea Petroleum Operating Company (RSPOC), which has a contract to develop Block 15 in the Red Sea basin. Lundin, Petronas' partner for Block 5B, announced in

February 2008 that drilling on the block has begun. The first exploration well was drilled in a dry area of the block, and its gross unrisks recoverable prospective resource is estimated at 176 million barrels of oil. In addition preparations to drill in the swamp area of Block 5B are progressing. This drilling will take place in the Sudd, a vast wetlands area in which several oil blocks, including Block 5B, are located. Oil and oil-related development in the Sudd already has damaged the delicate ecosystem. Further exploration and production may lead to additional environmental degradation, which in turn harms the local communities that depend on the Sudd for their economic survival. Historically, Petronas has not displayed regard for the social or environmental impact of its oil operations. In addition to its Exploration & Production operations and the other various activities mentioned above, Petronas has been and continues to be involved significantly in infrastructure and downstream oil projects in Sudan. For example, in August 2005, Petronas gained a 50% stake in the new Port Sudan Refinery Project. The refinery is undergoing expansion and will have a 150,000 bpd capacity when it becomes fully operational. Initially scheduled for completion by 2009, it now has been delayed until 2010. Petronas also is involved in retail sale of gasoline in Sudan. In March 2003, the company acquired Mobil International Petroleum Corporation's subsidiary, Mobil Oil Sudan, and began participating in retail and marketing for Petroleum products in the country. In August of that year, Petronas opened its first service station in Khartoum. Its operations since have expanded to encompass 63 retail stations as of 2007. In 2006, Petronas' subsidiary Petronas Marketing Sudan Limited (PMSL) acquired Royal Dutch Shell's aviation refueling business, which involves into-plane service for the Khartoum and El-Obeid airports. It is relevant to note that there is no firewall preventing PMSL from refueling Sudanese military aircraft. Indeed, Shell sold its Sudan aviation business to Petronas under pressure from human rights groups specifically because of this concern. Another wholly-owned subsidiary of Petronas, OGP Technical Services Sdn Bhd, also had extensive operations related to Sudan's oil industry. OGP entered Sudan in 1996, the same year that Petronas first won stake in a Sudan oil block, when it was awarded the management and consultancy contract for Sudan's main export pipeline, which now connects GNPOC's oil-fields to Port Sudan. The pipeline, completed in 1999, enabled the first oil exports from Sudan. It won a second contract from Sudan's Ministry of Energy and Mines soon thereafter, to work on the Fula project. It is unclear whether OGP continues to bid for work in Sudan.

PT Pertamina Persero

PT Pertamina Persero (Pertamina) is Indonesia's state-owned oil and gas company. In 2013, Pertamina was the second largest crude oil producer in Indonesia. The company holds a 20% stake in Block 13, located offshore in northeastern Sudan and operated by the Coral Petroleum Operating Company (CPOC). Pertamina has expressed interest in acquiring additional oil-related assets in Sudan and discussed this topic with the Government of Sudan and Sudapet on multiple occasions from 2009 through 2013. Because of Pertamina's involvement in oil exploration in Sudan, it is classified as "Scrutinized" under the targeted Sudan divestment legislative model.

Scomi Group Berhad – (KMCOB Capital Berhad)

Malaysia-based Scomi Group Berhad (Scomi) is a global services provider, primarily catering to oil and gas industries. The company and its subsidiaries have provided oil drilling supplies and training for Sudanese oil consortia. Scomi's provision of oil exploration supplies and training in Sudan is defined as "Oil-Related Activities" under the targeted Sudan divestment legislative model. Therefore, the company is classified as "Scrutinized."

Between 2003 and 2006, Scomi Oiltools provided drilling fluids for GNPOC and the Sudd Petroleum Operating Company (SPOC; formerly White Nile Petroleum Operating Company [WNPOC]). By 2006, the company reported facilities in Port Sudan, Thar Jath (in the SPOC concession) and Heglig (in the GNPOC concession). The company appears to have closed these facilities, but continues to operate an office in Khartoum. In 2010, the company marketed itself at the Sudanese Association of Petroleum Geo-Scientists exhibition. Scomi Oiltools has held trainings in Sudan for operators including the former WNPOC, GNPOC, Sudapet, Petrodar, Red Sea Petroleum Operating Company (RSPOC), the Oil Exploration and Production Administration (the national oil regulatory body of Sudan) and others. It reportedly continues to train chemists, engineers and technologists in the field of oil drilling fluid technologies, including training for Sudanese nationals.

Shanghai Electric Group Co. Ltd.

Shanghai Electric Group Co.'s (SEC) work in Sudan began with an initial contract in 2006 that was valued at U.S. \$51 million and was one of the largest overseas contracts taken on by a Chinese company that year. Multiple reports indicate that Shanghai Electric has since undertaken engineering, procurement and construction activities (EPC) for at least nine 220 kilovolt (kV) power substations in Sudan; exact dates for the individual projects are unclear. Other projects include engineering for five transformer substations, engineering for three transformer substations, a 220kV double-loop partition project in the Rabak substation and the Freezone 200kV power transformation project of the Giri Phase II 2x55 megawatt power plant for petroleum coke. It is likely that all of these projects were commissioned by the Government of Sudan through the National Electricity Corporation (NEC) of Sudan, or its successor following NEC's dissolution and restructure by the Sudanese government in 2010.

SEC has indicated that, since 2008, it has facilitated training in China for at least seven teams of NEC engineers (around 40 people). To increase the professional technology level of local staff in Sudan, SEC provided professional training on location in China for technicians involved in its overseas power projects. It is unclear whether this training is ongoing.

SEC also reported that it provides professional consulting service to clients during preliminary stages of projects, including feasibility reports, environmental assessment reports and project concept design, among other things. It is likely that SEC has offered such services in Sudan.

Trafigura Beheer Group

Based in the Netherlands, Trafigura Beheer (Trafigura) is the second-largest independent non-ferrous trading company and the third-largest independent oil trader in the world. The company's Sudan-related business dates back to at least 2003, when it marketed Sudanese oil through a contract with Canada-based Talisman Energy Inc. (Talisman). Though the company does not appear to have a physical presence within Sudan, its transport of crude oil may assist the Sudanese government in generating revenue from its oil industry. Trafigura's purchase of Sudanese crude oil constitutes "Oil-Related Activities" under the targeted Sudan divestment legislative model and the company is therefore classified as "Scrutinized."

In January 2012, the company found itself in the middle of tensions between Sudan and the RSS over oil transit fees. Trafigura bought one of three shipments of oil valued at a total of U.S. \$815 million that South Sudan claimed was illegally seized by Sudan. Sudan claimed it was collecting

compensation for unpaid transit fees. The tanker Ratna Shradha carrying the disputed 630,000 barrels of Nile Blend crude was stranded off the coast of Japan until a court ruling in London allowed for it to be unloaded in February 2012. The U.S. \$75 million proceeds of the sale were deposited in escrow with the London High Court of Justice. One of the provisions of the agreements signed between Sudan and the RSS in October 2012 was that South Sudan be repaid for the shipment. South Sudanese officials threatened that the country would not do any future business with Trafigura if it was proven to have purchased that oil knowing it was stolen. The status of this investigation remains unclear. Despite the pending threat, in March 2013 Trafigura signed a fuel supply agreement with the RSS for the purchase of Dar Blend crude oil. The crude oil was scheduled to be delivered via pipeline to Port Sudan for export after the resumption of RSS crude oil production, which occurred in late May 2013. The oil export deal was originally slated to go to Glencore Xstrata (formerly Glencore); however, the RSS reportedly declined the deal due to what it considered unfavorable terms of agreement. Later reports suggested that the RSS was reconsidering Glencore pending an investigation of Trafigura's alleged purchase of oil from Sudan. It remains unclear which company ultimately received the contract.