MEMORANDUM

To: Joint Committee on Pensions, Investments, and Benefits

From: Alan D. Conroy, Executive Director

Date: November 27, 2017

Subject: Sudan Divestment Report

Sudan Divestiture Requirement

In 2007, legislation was passed and signed into law which served to restrict the Retirement System's investments in companies which engage in certain business operations in Sudan. The statute also imposed a series of reporting requirements on the Retirement System, which included providing an annual report to the Joint Committee on Pensions, Investments and Benefits on the Retirement System's investments in Sudan and divestment activities.

Annual Report

Attached to this memorandum is the required KPERS annual report to the Joint Committee on Pensions, Investments, and Benefits regarding the System's investments in Sudan and divestment activities. The attached report represents the final Sudan Divestment Report to the Joint Committee on Pensions, Investments and Benefits. It contains information for fiscal year 2018, for the time period ending September 30, 2017.

To summarize the full report, KPERS has met the statutory requirements of the Sudan Divestment legislation since its inception. The exposure to investments with significant business operations in Sudan has remained low and fairly consistent over time, and is currently \$55.7 million or 0.29% of the total KPERS investment portfolio.

Repeal Provision

The statute also contained a repeal provision which would be triggered when "the United States revokes its current sanctions against Sudan." The Retirement System's General Counsel has determined that for KPERS purposes, the Executive Order issued by President Trump on October 12, 2017 revokes the sanctions as set forth in Kansas statute. The KPERS outside legal counsel (Ice Miller) agreed that such an interpretation of revocation was also appropriate. However, the firm did indicate that the Legislature for clarifications sake may wish to consider repeal of the KPERS Sudan related statutes.

If you have any questions, I would be pleased to respond.

Attachment

KPERS

SUDAN DIVESTMENT REPORT TO THE

JOINT COMMITTEE ON PENSIONS, INVESTMENTS AND BENEFITS

KPERS

November 27, 2017

Executive Summary

In 2007, legislation was passed and signed into law which served to restrict the Retirement System's investments in companies which engage in certain business operations in Sudan. The statute imposed a series of reporting requirements on the Retirement System which included providing an annual report to the Joint Committee on Pensions, Investments and Benefits on the Retirement System's investments in Sudan and divestment activities. The statute also contained a repeal provision which would be triggered by the taking of certain actions by the United States Government. Those actions have been taken and the Retirement System's General Counsel and external legal counsel have determined that the Sudan statute is repealed effective October 12, 2017.

This report represents the final Sudan Divestment Report to the Joint Committee on Pensions, Investments and Benefits. This report contains information for fiscal year 2018, for the time period ending September 30, 2017.

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 September 30, 2017.

Pre-Fiscal Year 2018 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 2008-2017, 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 and fiscal year 2017. In fiscal year 2011, PTT, held by Morgan Stanley, was not able to be liquidated until July 6, 2011. In fiscal year 2017, Atlas Copco AB, held by Baillie Gifford, was placed on the divestment list on May 19, 2017 and was not liquidated by June 30, 2017. Baillie Gifford had eighteen months to effect prudent divestment and remained within these guidelines as of fiscal year end 2017. 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 2008-2017, 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 2018 Activity

In July 2017, Two current companies had a total of three subsidiaries deleted from the list. One company, JX Holdings Inc., was deleted. Two current companies, China Petrochemical Corp (Sinopec Group) and Power Construction Corporation of China Ltd. (PowerChina), each had a subsidiary added to the list. Two new companies had a total of five new subsidiaries added to the list. The new companies were Rostec State Corporation and Siemens AG. One new company held within the System's portfolio, Siemens AG, qualified for inclusion on the EIRIS Scrutinized Companies List. The company was sent an engagement letter and based on the response from Siemens AG, staff determined that Siemens AG had not taken "substantial action" as defined within K.S.A 74-4921c. Therefore, Siemens was subject to divestment by the System. There are three holdings of Siemens AG in the System's portfolio.

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, 2017, 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 28, 2017, the System held $15,050,040 of Atlas Copco AB in a separate account. This company was identified on the November 2016 EIRIS Scrutinized Company List and reported to the Board in May 2017. The manager was notified that the System's holdings were subject to divestment (as afforded within the 18 month timeframe for managers to effect prudent divestments) and as of September 30, 2017 the System had a $19,641,167 investment in Atlas Copco AB. The increase in the investment value of the company was due to market value changes. No new shares have been acquired.

At May 31, 2017, the System held $21,626,748 of Siemens AG in two separate accounts. This company was identified on the May 2017 EIRIS Scrutinized Company List and reported to the Board in July 2017. The managers were notified that the System's holdings were subject to divestment (as afforded within the 18 month timeframe for managers to effect prudent divestments) and as of September 30, 2017, the System had a $21,331,628 investment in Siemens AG in two separate accounts. The decrease in investment value was due to market value changes. No new shares have been acquired.

- **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 9/30/17 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. ($5,024,692 tracking error cost/$14,717,729 in Sudan holdings = 34.1% 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, 2017.

	September 30, 2017		May 31, 2017		June 30, 2007	
	Market Value	% Portfolio	Market Value	% Portfolio	Market Value	% Portfolio
Separate Account	$40,972,796	0.22%	$16,800,960	0.09%	$9,681,285	0.07%
Commingled Account	$14,717,729	0.07%	$9,021,538	0.04%	$5,524,380	0.04%
Total	$55,690,525	0.29%	$25,822,498	0.14%	$15,205,665	0.11%

KPERS' exposure to securities on the Divestment List is $55,690,525 or 0.29% of the total KPERS portfolio as of September 30, 2017. Currently, this amount is held in one commingled fund and three separate accounts. As mentioned previously, the commingled fund is 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 September 30, 2017.

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 $55.7 million or 0.29% 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 2017, Two current companies had a total of three subsidiaries deleted from the list. One company, JX Holdings Inc., was deleted. Two current companies, China Petrochemical Corp (Sinopec Group) and Power Construction Corporation of China Ltd. (PowerChina), each had a subsidiary added to the list. Two new companies had a total of five new subsidiaries added to the list. The new companies are Rostec State Corporation and Siemens AG. There are three current holdings of Siemens AG in the System's portfolio
- The System currently owns one international commingled fund the State Street Global Advisors ACWI Ex US passive index fund. The fund currently meets 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

REPEAL OF SUDAN DIVESTMENT REQUIREMENTS

On January 13, 2017, President Obama signed Executive Order 13761 which, subject to certain conditions, would revoke the United States' sanctions against Sudan effective July 12, 2017. On July 11, 2017, President Trump signed Executive Order 13804 which extended the effective date of Executive Order 13761 to October 12, 2017. On October 6, 2017, the U.S. Government announced that, in accordance with Executive Order 13761 and 13804, the sanctions on Sudan would be revoked effective October 12, 2017. KPERS' General Counsel, and its external counsel Ice Miller, have advised that these actions served to repeal K.S.A. 74-4921c, effective October 12, 2017.

Once advised by legal counsel that the Sudan divestment statute was repealed by the U.S. Government' actions, investment staff notified the requisite KPERS' public markets investment managers that the statute has been repealed, that the July 21, 2017 Appendix A is no longer in effect and that any divestment activity that may be underway could, at the manager's discretion, cease since the System's investment portfolios are no longer subject to any divestment requirements under Kansas statutes. On November 17, 2017, the Retirement System's Board of Trustees took formal action to revoke the KPERS Active Business Operations Meeting Divestment Criteria List dated July 21, 2017.

Appendix A
KPERS Active Business Operations
Meeting Divestment Criteria List
Approved July, 2017

China National Petroleum Corp (CNPC)
- Petrochina Co. Ltd.
- Kunlun Energy Co. Ltd.
- Daqing Huake Group 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)
- ONGC Videsh Vankorneft

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
- Sinopec Group Overseas Development 2016 Ltd.
- China Petrochemical Corp
- Sinopec Goup Overseas Development 2017 Ltd.

Power Construction Corporation of China Ltd. (PowerChina)
- Dianjian Haixing Ltd
- Powerchina Real Estate
- Sinohydro 11 Bure Co.
- Sinohydro 8 Bureau Co.
- Sinohydro Bureau 14
- Sinohydro Bureau 4
- Sinohydro Bureau 7
- Sinohydro Tianjin
- Hydrochina Corp
- SepcoIII Elec Pwr Constr*
- Power Construction Corp of China
- PowerChina Hydropower Development Group Co Ltd.

Dongfeng Motor Group Co.

Indian Oil Corporation Ltd.
- Lanka IOC PLC
- Chennai Petroleum Corporation Ltd.

Egypt Kuwait Holding Co

China North Industries Group Corp
- NORINCO International Coop Ltd.
- North Huajin Chemical Industries Co. Ltd
- North Navigation Control Technology Co. Ltd.
- North Lingyun Industrial Group Co. Ltd.

Andritz AG

Bharat Electronics Limited

Bharat Heavy Electricals Limited

Energy House Holding Co. K.S.C.C.
- Kuwait Finance House

KamAZ PJSC
- Neftekamsky Avtozavod aka NefAZ

Engie
- Parisienne Chauffage Urbain
- Engie Romania SA

China Three Gorges Corp
- China Three Gorges New Energy Corp
- Hubei Energy Group Co Ltd.
- Hubei Qingjiang Hydropower Development Co Ltd.
- Three Gorges Finance I Cayman Islands Ltd.
- Three Gorges Finance II Cayman Islands Ltd.

Atlas Copco AB

Rostec State Corporation
- OPK Oboronprom OAO/Russian Helicopters JSC
- OPK Oboronprom OAO/United Engine Corp JSC

Siemens AG
- Siemens Ltd
- Siemens Pakistank Engineering Co Ltd
- Siemens Financieringsmaatschappij NV

Managem
- 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.
- Trafigura Funding SA

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 PJSC
- Pavlovo Bus PJSC

China Poly Group Corporation
- Poly Energies Holding Co. Ltd
- Poly Property Group Co. Ltd
- Poly Permanent Union Holding Group Ltd

Power Construction Corp
- Power Construction Corp of -A

Shanghai Electric Group Co. Ltd.
- Shanghai Mechanical and Electrical Industry Co. Ltd.
- Shanghai Electric Group Corp
- Shanghai Elc Grp Inv
- Shanghai Electric Newage

Appendix B
KPERS Active Business Operations
Meeting Divestment Criteria List
Current Holdings List
Holdings as of 9/30/2017

Separate Accounts

Company	Baillie Gifford	Franklin Templeton	JP Morgan
Atlas Copco AB	$ 19,641,167		
Siemens AG		$ 8,987,338	$ 12,344,291

Commingled Accounts

Company	State Street
Andritz AG	$ 204,368
Atlas Copco AB	$ 2,049,515
Bharat Heavy Electricals	$ 55,927
China Petroleum & Chemical aka Sinopec Corp	$ 943,570
Dongfeng Motor Group	$ 178,946
Engie	$ 1,461,748
Glencore PLC	$ 2,652,848
Indian Oil Corp Ltd.	$ 175,383
Kunlun Energy Company Ltd.	$ 155,766
Malaysia International Shipping Company aka MISC BHD	$ 112,151
Oil & Natural Gas Corp. Ltd.	$ 165,625
Petrochina Co. Ltd.	$ 670,804
Petronas Chemicals Group Bhd	$ 200,722
Petronas Dagangan Bhd	$ 69,301
Petronas Gas Bhd	$ 142,220
Shanghai Electric Group Co Ltd.	$ 61,418
Siemens AG	$ 5,196,457
Siemens Ltd	$ 63,634
Sinopec Engineering Group Co.	$ 54,584
Sinopec Shanghai Petrochemical	$ 102,745
	$ 14,717,729

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. In July 2016, Andritz Group provided the Network with fiscal 2015 revenue figures from its operations in Sudan.

Atlas Copco AB

Sweden-based Atlas Copco AB (Atlas Copco) is an industrial group that provides compressors, vacuum solutions and air treatment systems, construction and mining equipment, power tools and assembly systems. DAL Group and Quest Qualitas are Atlas Copco's distributors for air compressors, mining equipment and construction equipment in Sudan. Quest Qualitas is responsible for launching Atlas Copco's range of flexible technical plant machinery, including portable drilling equipment.

Atlas Copco is classified as "Scrutinized" for its sales of mining equipment in Sudan that meet the definition of "Mineral Extraction Activities" under the targeted Sudan divestment legislative model. Atlas Copco was classified as "Scrutinized" for the first time in May 2013, however the company was reassessed as taking "Substantial Action" in November 2013 and therefore its activities in the mining sector were no longer subject to the model's divestment measures. The company met the criteria for "Substantial Action" as a result of the information it provided on its humanitarian efforts in Sudan. Atlas Copco reported to EIRIS Conflict Risk Network on its participation in Water for All, an initiative founded by Atlas Copco employees in 1984, to fund humanitarian projects targeting marginalized populations. One project, implemented in partnership with Deutsche Welthungerhilfe, focused on digging wells and tapping water springs in order to provide 12,500 residents in Sudan's Red Sea State with access to clean drinking water. Another project, implemented in partnership with International Aid Services (IAS) in Jonglei State in South Sudan, included the construction and distribution of 200 filters, and community training on the use and maintenance of the filters.

In May 2015, Atlas Copco confirmed its "Substantial Action" projects were still ongoing, and requested guidance on how to meet the requirement to secure an independent, third party-assessment of their impacts and significance. In June 2015 and February 2016, the Network shared with the company guidance regarding the independent, third-party audit. Although Atlas Copco has remained in dialogue with the Network, the company has failed to provide substantive evidence that it has ongoing or new efforts in Sudan that meet the model legislation's criteria for "Substantial Action." Therefore, the company was classified as "Substantial Action: Under Review" in August 2016 and as "Scrutinized" in November 2016.

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. 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 a contract to supply the Government of Sudan with ten battlefield radars. The company also secured an additional contract to supply communication and night vision equipment, worth U.S. $16.8 million, in April of that year. BEL has also sold civilian equipment, including solar modules, to the Sudanese government.

In 2008, Sudanese delegations attended BEL's stall at an army and navy equipment exposition in Delhi, suggesting that 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 continued operations as well as the possible sale of military equipment to the Sudanese government after the 2005 arms embargo.

In January 2015, BEL was reporting growing overseas business with several Asian and African countries buying its opto-electronic defense devices. A marketing representative of the company indicated that during the financial year 2013-14 his unit had registered a record turnover of Rs. 450 crore with countries such as Sri Lanka, Sudan, Israel and a few other African nations being the major buyers of BEL opto-electronic products. The marketing representative stated that "The demand for night vision devices such as Passive Night Weapon Sight for INSAS/LMG/AK-47 weapons and Passive Night Vision Binoculars is high in these conflict-stricken countries."

EIRIS Conflict Risk Network has sent inquiries to BEL since 2007, most recently in October 2016, 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 44,905 employees and reported total revenue of INR 309,470 million (U.S. $4,964.6 million) in fiscal year 2014-15.

BHEL's work in Sudan began in 2005 when it shipped several locomotives and associated parts to Sudan Railways. In 2006, BHEL obtained a U.S. $457 million contract with the NEC to build a 500 megawatt (MW) crude oil-fired steam power station at Kosti, south of Khartoum, and transmission lines between Jebel Aulia, Renk (now located in the Republic of South Sudan [RSS]) and Al Obeid. The contract was one of the largest ever signed between Sudan and India, and BHEL's largest single export order.

The construction of the Kosti power station began in February 2006 and was initially scheduled to be completed by 2009. However, the completion date was pushed back once in 2010, again in 2011, and the company was accused of failing to pay the wages of, or provide appropriate food and shelter to, Indian workers on the Kosti project in 2012. BHEL reportedly commissioned the project in July 2015. The company was retained to begin a two-year contract to supervise operations after construction was completed. The Kosti thermal power plant was inaugurated in February 2016 as one of the largest oil-fired thermal power plants and the first crude oil-fired thermal power plant in Africa.

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, which may be for power projects other than BHEL's work at the Kosti power station. In May 2010, the company announced a revision of the memorandum of understanding (MOU) it signed with the NEC in 2006 to erect a 1,000 MW power plant in Port Sudan in exchange for crude oil (facilitated by ONGC Videsh, subsidiary of India's Oil and Natural Gas Company) or cash. Sudan dissolved the NEC later in 2010 and restructured its state-owned electricity enterprises; it is unclear how this restructuring affected BHEL's MOU with the NEC and there has been no update on this venture.

In May 2013, December 2014 and September 2015, the Network reached out to BHEL to request updated information on its business related to Sudan. The company did not respond directly to any of the Network's requests. BHEL has occasionally communicated to EIRIS Conflict Risk Network member-subscribers regarding its ongoing operations in Sudan, most recently in August 2015 and May 2016. In May 2016, the company reported that it had completed construction activities at the Kosti thermal power station but remains open to projects "in its chosen areas of products, services & activities (mainly power generation)." The company also communicated that its operations in Sudan are humanitarian in nature by virtue of producing power for Sudanese citizens. However, the company has failed to provide evidence that at least 75% of its operations provide power to "Marginalized Populations" as defined by the targeted Sudan divestment legislation. In July 2016, the Network reached out to BHEL during routine engagement, but 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 June 2010, CGGC won a U.S. $711 million contract with Sudan's Dam Implementation Unit (DIU) to build the Shereik Dam. The dam's six turbines will generate 420 megawatts (MW) of electricity and will be located approximately 300 kilometers (km) upstream of the Merowe Dam on the fifth cataract of the Nile River, in Sudan's Nile State. The 3,300-meter-long, 39-meter-high dam will create a 420 square km reservoir upstream of the dam site.

CGGC is responsible for the civil construction of the dam, including the irrigation canal and power station premises, as well as the installation and commissioning of electromechanical equipment. The contract also calls for CGGC to conduct a trial run and a test of the entire station upon completion. At the time of the contract signing, the DIU's executive officer expressed a hope that CGGC would be involved in future hydropower projects in Sudan.

In November 2015, Saudi Arabia signed agreements with Sudan to finance several water infrastructure projects in the African country, including the construction of the Kajbar, Dal and Shereik dams. The details of the financing agreements as well as the construction timeline remain unclear. Protests against the construction of the three dams have intensified after Saudi Arabia agreed to provide the financing, with members of the Nubian community voicing concerns about the negative impact that the building of the dams will have on the inhabitants and the preservation of the region's cultural heritage. As of July 2016, it is unclear whether construction has begun, but reports note that floodwaters would not be released from the Shereik Dam until 2018.

EIRIS Conflict Risk Network has reached out to CGGC on several occasions since May 2011 requesting dialogue and further information regarding the company's Sudan-related operations. CGGC has not responded. The Network reached out to CGGC again in July 2016, but the company did not respond.

China National Petroleum Corp – (CNPC, 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. In July 2015, China's ambassador to Sudan, committed to increasing its investments in Sudan's oil industry and supported a program to increase oil production in the country.

Since 2007, EIRIS Conflict Risk Network has requested dialogue and information regarding CNPC's Sudan-related operations and its relationship with its publicly traded subsidiaries. The company has not responded to these requests. This lack of response parallels CNPC's engagement vis-à-vis other international non-governmental organizations. CNPC remains an EIRIS Conflict Risk Network priority engagement target.

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. In September 2014, the Chinese government intervened directly to stop NORINCO from shipping any further weapons to South Sudan after it emerged that, in early July 2014, NORINCO 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.

EIRIS Conflict Risk Network has sent regular inquiries since 2007 requesting dialogue and further information regarding NORINCO Group's Sudan-related operations. In May 2013, NORINCO responded to routine outreach by the Network; however, the company has not replied to follow up questions. In October 2016, the Network sent a new query to the company, but NORINCO did not respond.

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 2014, Sinopec purchased approximately 82.5% 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.

Since 2007, EIRIS Conflict Risk Network has repeatedly requested dialogue and information regarding the Sudan-related operations of Sinopec Group and its publicly traded subsidiaries, but the company failed to respond. In May and June 2016, China Petroleum and Chemical Corporation (Sinopec Corp) and Sinopec Engineering Group Co., Ltd. (Sinopec Engineering), both publicly traded subsidiaries of Sinopec Group, responded separately to a member-subscriber query, each asserting that the company has no current operations in Sudan. Sinopec Corp reported that it has never had business operations in Sudan and Sinopec Engineering stated that it has had no projects in Sudan within the last five years. Both subsidiaries' claims are consistent with the Network's research, but are irrelevant to Sinopec Group's "Scrutinized" classification under the targeted Sudan divestment legislative model. Other Sinopec Group subsidiaries, not including Sinopec Corp or Sinopec Engineering, continue to conduct "Oil-Related Activities" in Sudan. Therefore, Sinopec Group remains in the Sudan Company Report for its prolonged "Oil-Related Activities" in Sudan. In January 2017, the Network contacted the company again, but received no response.

China Poly Group Corporation – (Poly Energies Holding Co. Ltd, Poly Property Group Co. Ltd., Poly Permanent Union Holding Group Ltd.)

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.

EIRIS Conflict Risk Network has sent regular inquiries since 2009 requesting dialogue and further information regarding China Poly Group's Sudan-related operations. In October 2016, the Network sent a new query to the company, but China Poly Group failed to respond.

China Three Gorges Corporation – (Hubei Energy Group)

CWE's operations in Sudan date back to at least 1996, when it constructed several water pumping stations along the Nile. Through its subsidiary CWE, CTG's hydroelectric projects in Sudan have had problems with forced displacement, human rights violations and negative environmental effects. Due to its long-time presence in the country, CTG is likely to obtain additional power-related business opportunities in Sudan in the future.

CTG is classified as "Scrutinized" under the targeted Sudan divestment legislative model for its work on power projects commissioned by the Government of Sudan, which constitutes "Power Production Activities" under the model. CTG has provided construction services at the Upper Atbara and Setit dam complex in Sudan. CWE has also worked on the Upper Atbara and Setit dam complex, as well as the Merowe and Roseires dams.

EIRIS Conflict Risk Network reached out to CWE in November 2008, April 2013 and December 2015, but received no response from the company. The Network contacted CTG in July 2016, but the company did not respond.

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. Finally, according to a 2015 report, the Sudanese state-owned Military Industry Corporation (MIC) produces military vehicles based on Dongfeng pick-up trucks.

EIRIS Conflict Risk Network has sent inquiries to DFG requesting dialogue and information regarding its Sudan-related operations since 2007, most recently in December 2015. DFG has failed to respond.

Egypt Kuwait Holding Company

Egypt Kuwait Holding Company (EKH) is an Egyptian-based investment company. EKH holds a 5% stake in the Petrodar Operating Company (Petrodar) consortium through its 60% indirect ownership of Tri-Ocean Exploration and Production. The remaining 40% of Tri-Ocean Exploration and Production is held by Sudapet, Sudan's state-owned oil company.

EKH is classified as "Scrutinized" under the targeted Sudan divestment legislative model for its holdings in Petrodar, an entity responsible for the transportation of oil and management of oil pipelines in Sudan, and for its indirect partnership with Sudapet, which are considered "Oil-Related Activities." EKH's interest in Petrodar's Sudan-related activities does not currently fall within the purview of an OFAC general license nor qualifies as an exception to the targeted Sudan divestment legislative model.

In April 2017, the Network contacted EKH again but received no response. Therefore, the company's classification remains unchanged until the company provides the Network with further updates.

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 Higleig Petroleum Services and Investment Co. Ltd (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. The company's projects in the petroleum sector include mechanical and electrical field surface facilities work for the Greater Nile Petroleum Operating Company (GNPOC), as well as a power distribution project for Petrodar.20 In addition, HPSIC has provided a range of oil field and related services to the China National Petroleum Corporation (CNPC), the White Nile Petroleum Operating Company and the China Petroleum Engineering Company, an affiliate of CNPC.

EIRIS Conflict Risk Network has sent regular inquiries since 2007 requesting dialogue and further information regarding Energy House's Sudan-related operations. The Network reached out to Energy House in October 2010 to discuss issues of security, revenue transparency and the January 2011 referendum on southern independence. Most recently, the Network attempted to engage the company in January 2017, however Energy House has not responded to date.

ENGIE – (Parisienne Chauffage Urbain)

ENGIE is an energy services provider, focused on producing and marketing natural gas and electricity and other energy services worldwide. In April 2015, GDF Suez changed its name to ENGIE. ENGIE is classified as "Scrutinized" under the targeted Sudan divestment legislative model. Its Lahmeyer subsidiary is involved in power generation projects commissioned by the Government of Sudan, which constitutes "Power Production Activities" under the model. Lahmeyer has designed, engineered and provided additional related services for many of Sudan's major power infrastructure projects, including the Khartoum North Power Station, the Merowe Dam and the Al Fula crude oil and natural gas-fired power plant project, among others. ENGIE asserts that 100% of the company's "Power Production Activities" include projects whose intent is to provide power or electricity to "Marginalized Populations" of Sudan, but has not provided evidence to support this claim.

The Network informed ENGIE of its "Scrutinized" classification in June 2016, but the company failed to respond. The Network reached out to ENGIE again in July 2016 but received no response.

GAZ PJSC – (Pavlovo Bus PJSC)

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. 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.

EIRIS Conflict Risk Network has sent inquiries to the company since 2008, most recently in October 2016, requesting dialogue and further information regarding GAZ Group's Sudan-related operations. GAZ Group has not responded.

Glencore PLC – (Viterra Inc.)

Glencore PLC produces and markets diversified commodities, including metals and minerals, energy products and agricultural products, as well as related marketing and logistics advice. 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 (Glencore). Before its merger with Xstrata, Glencore was one of the world's largest non-integrated oil suppliers handling 3% of the world's daily oil needs. Glencore's Sudan-related operations appear to have begun in September 2003 and are concentrated on the purchase of crude oil and associated oil products.

The Network reached out to Glencore several times in the period 2013-2015 but received no response until December 2015. Glencore contacted the Network in order to begin a dialogue to review the company's "Scrutinized" classification; however the company did not respond to follow up questions clarifying its operations in Sudan. The Network reached out to Glencore again in April 2016 and April 2017 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.

HEC is classified as "Scrutinized" under the targeted Sudan divestment legislative model due to its involvement in hydropower projects in Sudan, which constitutes "Power Production Activities." HEI has had extensive operations in Sudan, including Engineering, Procurement and Construction (EPC) contracts for multiple hydropower projects, substations and transmission lines, as well as ongoing service to power plants around the country through its Sudan service center.

The Network reached out to HEC for an update in July 2016. HEC responded in August 2016 with information on the company's contracts and various humanitarian initiatives that the company has carried out in Sudan. The Network contacted HEC with follow up questions to clarify its work on the Upper Atbara Hydropower project, the Kajbar Dam and the Red Sea Coal Fired Power Plant. The company indicated that, due to company policy, it could not respond to further questions, because they were related to HEC's "business secret which [could not] be disclosed."

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. 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.

In September 2007, IOCL replied to an inquiry from EIRIS Conflict Risk Network requesting dialogue and further information regarding the company's Sudan-related operations. Since then the Network has regularly reached out to IOCL to discuss issues of security and revenue transparency, most recently in April 2017. 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 43.77% 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.

From 2005 to 2008, Hongdu Aviation delivered a total of 12 K-8 military training aircraft to the Sudanese Air Force. These jets could be used by the Sudanese Air Force "not only for training missions such as take-offs, landings, spin and night flights, but also for armed operations training," and the jets were reputed to be suited for land attack purposes with specially fitted 23 millimeter machine gun pods. Along with the trainer planes, HF-20 rocket launchers were also exported to Sudan.

From 2007 until April 2013, EIRIS Conflict Risk Network sent inquiries to AviChina, which formerly held a majority stake in Hongdu Aviation, requesting dialogue and further information regarding its Sudan-related operations. The company did not respond. In October 2016, the Network sent a new query to the company, but Hongdu Aviation failed to respond.

KamAZ PJSC

KamAZ PJSC 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). KamAZ conducts its Sudan-related business through local and regional dealers. In 2005, KamAZ PJSC's Director General acknowledged exporting vehicles to Sudan, and that the company had short term plans to begin assembly of KamAZ PJSC 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."

In 2016, news reports emerged that, in 2012, KamAZ was implicated in in the sale of armored vehicles between Streit Group, a Canadian armored vehicle manufacturer, and the Sudanese government. UAE-based Kamaz International Trading, KamAZ's distributor for the Middle East and Africa, acted as an intermediary between the Government of Sudan and Streit Group, enabling the latter to avoid the arms embargo.

In August 2007, KamAZ responded to EIRIS Conflict Risk Network's initial request for dialogue and further information regarding the company's Sudan-related operations, but it has failed to respond to the Network's subsequent inquiries, most recently in October 2016.

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, as part of a consortium with Daedong Industrial Machinery Co., Ltd. (DIMCO), was awarded a contract to supply all facilities and materials for the NEC's AFRA power substation in 2009 and a similar contract for the BANAT substation in 2010.6 Following the dissolution of the NEC in 2010, the Sudanese Electricity Transmission Co. (SETCO) took over the BANAT and AFRA projects. The consortium, together with Korea Plant Service & Engineering, completed a contract to rehabilitate and modernize the Khartoum North Power Station's electrical and mechanical works in February 2010. At the time of its first contract in Sudan, LSIS was aggressively pursuing contracts in Sudan and neighboring countries. In 2012, Sudan's economic attaché met with LSIS representatives to discuss the company's ability to help Sudan address its power needs. However, as of June 2016 it is unclear whether the company has secured any further power projects within Sudan.

EIRIS Conflict Risk Network reached out to LSIS in 2011, 2013, 2014 and 2016 requesting dialogue and further information regarding the company's Sudan-related operations.11 LSIS has not responded.

Managem

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.

EIRIS Conflict Risk Network has sent several inquiries to the company since 2009, most recently in October 2016, requesting dialogue and further information regarding Managem's Sudan-related operations. Managem has not responded to date.

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."

In February 2017, OIL responded to the Network's routine engagement providing information about its Sudan-related operations. EIRIS Conflict Risk Network remains in dialogue with the company.

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 classified as "Scrutinized" under the targeted Sudan divestment legislative model for involvement in exploration, production and other "Oil-Related Activities" in Sudan. ONGC subsidiary OVL owns a majority of the Khartoum-Port Sudan oil pipeline and holds a stake in the consortium that operates Blocks 2 and 4 in Sudan. ONGC also markets Sudanese crude on the international market.

Since April 2015, the Network has sent several inquiries to the company, most recently in January 2017, requesting dialogue and further information regarding ONGC's Sudan-related operations. ONGC has not responded to date.

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). Orca Gold is classified as "Scrutinized" under the targeted Sudan divestment legislative model for involvement in "Mineral Extraction Activities." Orca Gold does business directly with the Sudanese government through its 70% interest in Block 14.

The Network reached out to the company in October and December 2015, but received no response. In October 2016, a company representative responded to routine engagement to inform the Network that its subsidiary, Ghazal, is currently dormant.

Petroliam Nasional Berhad / Petronas – (Petronas Gas, Petronas Dagangan, Petronas Chemicals Group, Petronas Global Sukuk)

Petroliam Nasional Berhad (Petronas) is Malaysia's state-owned oil company. Petronas is a major player in Sudan's oil industry, with operating stakes in multiple producing and exploratory oil concessions and with subsidiaries involved in the construction of critical oil infrastructure. In 2014, it had 596 employees in Sudan, of whom 566 were Sudanese nationals. Petronas has not provided updated figures for employees in Sudan.

Petronas is considered "Scrutinized" under the targeted Sudan divestment legislative model for its involvement in oil exploration, production and other activities, defined as "Oil-Related Activities," and its supply of fuel to the Sudanese military, defined as "Military Equipment." Petronas has been involved extensively in the oil and gas industry in Sudan through stakes in oil blocks as well as the supply of oil- and gas-related services. In addition, the company has sold aviation fuel for military purposes in Darfur.

In January 2017, the Network sent Petronas a new inquiry to clarify its Sudan-related activities, but the company did not respond.

Power Construction Corporation of China Ltd. – (Dianjian Haixing, Sinohydro, PowerChina)

PowerChina is classified as "Scrutinized" due to its subsidiaries' involvement in engineering, procurement and construction activities for thermal, coal- and gas-fired and hydropower generating plants in Sudan, which constitutes "Power Production Activities" under the targeted Sudan divestment legislative model.

Specifically, its subsidiary SEPCO (formerly known as Shandong Electric Power Construction Corporation) was involved in the construction of power plants in Sudan and continues to provide operational support for the Merowe Substation Project at the Merowe Dam. Another subsidiary, Sinohydro, a company formerly classified as "Scrutinized" under the targeted Sudan divestment legislative model, is also involved with hydropower projects in Sudan, including four of Sudan's major hydropower projects such as the Merowe Dam, the Roseires Dam, the Kajbar Dam and the Upper Atbara and Setit dam complex. In addition, Sinohydro's West Asia & North Africa headquarters are located in Khartoum. Sinohydro no longer has public exposure and has been incorporated into PowerChina's corporate structure as a private subsidiary with Sudan-related operations.

EIRIS Conflict Risk Network reached out to PowerChina in April 2016 in regards to its Sudan-related operations but received no response. The Network contacted the company again in July 2016 and September 2016, but the company failed to respond.

<u>PT Pertamina Persero</u>

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 15% stake in Block 13, located offshore in northeastern Sudan and operated by the Coral Petroleum Operating Company (CPOC).

Pertamina is classified as "Scrutinized" under the targeted Sudan divestment legislative model because it retains rights to an oil block in Sudan, which is defined as "Oil-Related Activities." Though wholly owned by the Indonesian government, Pertamina issued bonds in 2011. Pertamina has also indicated that it intends to transform itself into a public company. In August 2014, a government official supported an initial public offering (IPO) by Pertamina. In addition, Pertamina has previously discussed publicly listing some of its oil & gas sector subsidiaries, and, although these plans appeared to have been abandoned in 2013, they resurfaced again the following year. In January 2016, it was reported that the company was considering listing three non-oil & gas sector subsidiaries, which according to recent reports, are now due to be listed on the Indonesian Stock Exchange in 2017.

EIRIS Conflict Risk Network has sent regular inquiries since 2007 requesting dialogue and further information regarding Pertamina's Sudan-related operations. In March 2016, Pertamina briefly responded to the Network informing that they were sending the query to the "person in charge." The company has failed to follow up. In January 2017, the Network contacted the company again, but received no response.

<u>Rostec State</u>

Evidence of the Russian export of helicopters to Sudan start as early as 2005, where reports showed that the Russian Federation had exported U.S $13.7 million worth of helicopters to the

Sudanese government, which, in violation of UN Resolution 1591(2005), are reported to have subsequently been deployed by the Sudanese military in Darfur. Moreover, between 2007 and 2009, a total of 36 Mi-24 attack helicopters were delivered to Sudan from the Russian Federation. During this time, numerous Mi-24s were again spotted operating in Darfur, many for the first time, suggesting they were part of Russia's recent shipment of aircraft.

Since 2009, the trade of military aircraft between the two countries has continued. In 2011, Russia and Sudan signed several agreements for the sale of Mi-24 attack helicopters and 14 Mi-8 transport helicopters. The following year, 12 Mi-24 attack helicopters and 6 Mi-8 transport helicopters were shipped to Sudan, after the aircraft had been removed from the Russian Air Force, refurbished and sold to the Sudanese government. In 2013, a second contract was signed for the supply of additional 12 Mi-24 and 12 Mi-8 helicopters and auxiliary repair and renovation services. By 2016, Sudan's fleet increased to 23 Mi-8s and 41 Mi-24s.

In April 2017, EIRIS Conflict Risk Network sent an inquiry to Rostec to learn more about the company's contract with the Sudanese government and the use of Rostec-supplied helicopters in military operations in Darfur. The company did not respond.

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.

In July 2015, SEC signed a U.S. $50 million contract with the Sudanese Electricity Transmission Company to link Darfur to the national electricity grid via the Babanusa-Adila power line.11 The project was reportedly funded by the Jedda branch of the Saudi Arabian Islamic Development Bank, as well as funds from Beijing and private donors, and is scheduled to be completed within two years. 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.

Since 2007, EIRIS Conflict Risk Network has sent numerous inquiries requesting dialogue and further information regarding SPTD's Sudan-related operations, most recently in April and June 2015. SEC has failed to respond to any of these requests. The Network reached out again to SEC in July 2016, but the company did not respond.

Siemens AG

Siemens AG (Siemens) is a global company with core activities in the areas of electrification, automation and digitalization and a major supplier of power generation systems. Siemens operates globally in over 200 countries and has 289 production and manufacturing plants worldwide

Siemens had business activities in Sudan from 1999 until January 2007 when it announced a company-wide withdrawal due to "moral and political grounds." Before it ceased operations in 2007, Siemens was involved in at least five major projects in Sudan, mainly in the power generation sector, and derived an annual turnover of tens of millions of euros in the country. In December 2016, Siemens signed an agreement with STPGC to supply five SGT5-2000E gas turbines. Three of these turbines are destined for the Garri Power Station in Khartoum, while the other two will be sent to Port Sudan. Alongside the turbines, Siemens will also supply five associated SGen5-100A generators as well as SPPA-T3000 control systems. The turbines and the associated generators are expected to be able to generate an extra 850 megawatts for the Sudanese national grid and plan by the end of 2017.

EIRIS Conflict Risk Network sent an inquiry to Siemens in April 2017 to learn more about the company's Sudan-related activities. In May 2017, Siemens briefly replied to the Network to ask for an extension to submit information and comments, which the Network provided. However, Siemens has not followed up.

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).

Trafigura Group is classified as "Scrutinized" under the targeted Sudan divestment legislative model due to its purchase of Sudanese crude oil, which constitutes "Oil-Related Activities" under the model. Trafigura Beheer, the direct parent company of Trafigura Group, has purchased Nile Blend crude from Sudan.

Since 2007, EIRIS Conflict Risk Network has sent inquiries to Trafigura Beheer requesting dialogue and further information on the company's Sudan-related operations. In January 2013 and in June 2014, the Network requested updated information on the company's Sudan-related business. Trafigura Beheer responded to the Network in July 2014 and provided details on its oil export deal with the Republic of South Sudan. Most recently, the Network reached out to Trafigura Group in April 2017 during routine engagement, but the company did not respond.