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CAPSTONE PROJECT REPORT

"China's Energy Policy as a Pillar of Its Peaceful Development: Strategies, Challenges and Implications of the Chinese Energy Engagement in the Oil and Hydro Power Sectors in Africa"

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ABSTRACT

China's remarkable progress on the road of national development has been both amazing and worrying to international observers. To allay global apprehensions, China presented a doctrine of "Peaceful Development Road" in its 2005 White Paper, claiming that the country aimed at harmonious and mutually beneficial relations and strove to become a responsible world player.

The current research has attempted to evaluate China's claim of peaceful development and has chosen the most vibrant and vital sector of the Chinese economy – that of the energy field. The research group have narrowed down their focus to the strategic oil and hydro power sectors in the Sino-African relations. Four major African players – Nigeria and Angola for the oil sector and Sudan and Ethiopia for the hydro power sector – typify, in their view, the strategies China uses, challenges it encounters and implications it produces in its energy dealings with other nations.

Despite a regrettable scarcity of data from all the countries included in the sample group, the research has managed to establish major lines along which the bilateral relations move and to uncover both advantages and drawbacks of China's policies in the oil and hydro power sectors on the African continent. Through piecing together dispersed data from multiple diverse sources and comparing three major instruments (economy/finance, economy/business and labour policy) that China employs in the sectors and countries under research, the authors of the current report have concluded that the analysis does not fully support the Chinese 2005 'mutual beneficiality of relations' claim, with China's business and labour practices being favourable primarily to China at the expense of its African partners; although, there have been established decidedly positive implications of the Sino-African energy engagements.

In line with the results of the conducted analysis, the research group have issued recommendations on how to improve China's business and labour practices so that the country meets its own goal of peaceful development and fits the image of a benevolent and responsible global player. Further and fuller investigation into the topic may be necessary when transparency of the analysed governments improves, and more data become available to scholarly research and analysis.



INTRODUCTION

In the 21st century, China is well on its way to becoming a sizeable global power and a major force to be reckoned with. Anxious to avoid distrust and hostility from other states and to ensure its own sustained progress, the county has been consistently promoting the famed strategy of "Peaceful Development Road" (Government 2005)ⁱ and doggedly presenting itself as a responsible global player. In order to be able to maintain its growth, China has been forced to pay particular attention to its ever-ballooning energy needs and has been strenuously engaged in cultivating relations with world regions rich in energy resources. The African continent has presented China with both multiple opportunities to pursue its energy strategies and numerous challenges to sustain its global aspirations. It has become one of the litmus tests by which the world attempts to predict whether China will actually be a benevolent global power, and whether the international community can live in harmony with this Asian giant.

Purpose of the report

In the 2005 "Peaceful Development Road" White Paper, China outlined its famous long-term foreign policy stratagem as a strict adherence to "the principle of mutual benefit and win-win cooperation" in relations with other countries (Government 2005)ⁱⁱ.

The principal question this Capstone project report aims to answer is whether China has been using its African energy policy in a mutually beneficial manner for attaining its proclaimed "peaceful development" goal. Our definitive research objectives are to investigate whether China is ultimately a country focused on peaceful development (as it claims to be), whether its actions fit the image of a responsible player, and whether we should welcome a new benevolent actor on the world stage (or, on the contrary, recommend caution over China's true intentions, should our research discover less benign elements in China's strategy).



We have grounded our research in a common assumption that a **mutually beneficial** relationship should be a win-win situation for both parties involved, for the best possible outcome to emerge. It stands to reason that any peaceful and benevolent player will search for the stratagems which bring overall benefits to both himself/herself and his/her partners. Should a player engage in power games and/or exploit asymmetry of engagement to his/her own benefit only, such a relation disqualifies him/her from a position of a successful relationship builder and disabuses observers of the optimistic perception concerning his/her true intentions.

Scope of the report

In order to prove (or disprove) China's claim that it pursues a peaceful development strategy as laid down in its 2005 White Paper, we have assessed: (a) whether China's behaviour in the African oil and hydro power sectors toward four chosen African states has been mutually beneficial and thus substantiating to China's avowed image of a peacefully developing power, and (b) whether Sino-African energy relations are fitting the image of a responsible global player the country aspires to be.

As the peaceful development goal was proclaimed by China in 2005, the researchers have limited themselves to the eight-year time frame of 2006-2013 for the project data collection and analysis. The scope of the report has also been constrained by a poor availability of many Chinese government documents, due to the confidential nature of trade and commerce agreements and a habitual opaqueness of the Chinese policies in the sensitive national interest sectors. There is also a scarcity of information from the African sources in the countries and sectors under research. The research team had to collect bits and pieces of information dispersed in multiple and diverse sources. Therefore, feasible conclusions have been drawn on available data in this research report.



Rationale for choice of African countries

China's energy engagement with Africa has had serious implications for both sides and can serve as a good model for examining what China does to pursue its energy security objectives and whether its actions correlate with the position of a responsible global player in the energy field. The African continent was also chosen as the research area, because while China draws 45% of resources for its energy needs from the Middle East, Africa occupies the second place (30%) in China's "energy diet" and hence presents the zone of strategic national interest for our rising power (Hirono 2014)ⁱⁱⁱ. Robust demand for the African oil is a means for China to diversify away from its dependence on the Middle Eastern oil. In 2011, Africa's oil exports to China comprised 14.82% (Government 2013)^{iv}, second only to the USA (23%) (Kgosana 2014)^v. In the future, there is a potential for an increase of oil flows from Africa to China, as Africa's "proven oil reserves have grown by nearly 120% in the past thirty years, from 54 billion barrels in 1980 to 124 billion barrels in 2012", with only crude oil exports grabbing nearly 20% of the world's total exports in 2012 (Kgosana 2014)^{vi}.

To narrow down our research, we will focus within the African continent on four countries which are major players in the selected energy sectors and are most representative of the kind of relations that China and Africa have developed in the energy field. In our view, Sudan and Ethiopia are such countries for the hydro power sector, and Nigeria and Angola – for the oil industry. Consequently, the energy relations between the chosen African states and China will serve as **a sample** for our analysis of the quality of China's engagement in Africa and veracity of its peaceful development claim. To further deepen our insight into the research topic, China's relations with its major competitors on the African continent – the EU and the USA – will



demonstrate the challenges that China encounters in its energy dealings within the chosen sectors and the ways it uses to overcome the obstacles.

For the purpose of clarification, it is necessary to note that only the Sub-Saharan Africa will be considered for the oil sector. The West African region, to which both Angola and Nigeria belong, is a traditional and well-developed supplier of the world oil market (Kgosana 2014)^{vii}. East Africa's oil reserves are still in the early stages of production development, while southern Africa does not have much to offer for the oil sector research (Kgosana 2014)^{viii}. On the other hand, no such regional limitations exist in the hydro power sector. Both Ethiopia and Sudan have been chosen because of the grand scope and potential of the dam building projects in these countries and due to serious implications of these endeavours for both foreign policies and national well-beings of the states in the Nile region.

Although Saudi Arabia is the principal supplier of oil to China, Angola occupies the second place (Kgosana 2014)^{ix}. Both countries together account for 33% of China's total crude oil imports, with Angola taking 14.6% share of these imports (EIA 2014)^x. Angola is a Sub-Saharan Africa's number two oil producer (Kgosana 2014)^{xi}. Moreover, Angola is prognosed to increase its oil production and to eclipse that of Nigeria (Kgosana 2014)^{xii}; so, there is a potential for the expansion of the Sino-Angolan energy relationship in the future. For now, China is already a prime destination for Angola's oil exports (EIA 2014)^{xiii}. Nigeria has the second largest oil reserves in Africa (after Libya) and is the continent's primary oil producer (Kgosana 2014)^{xiv}. Its oil sector has been a major site of application of the Chinese energy interests and a steady locus of the Chinese state oil companies' engagement in both the upstream (exploration/drilling/extraction) and midstream (refinery) ventures. While Angola has been a loval oil supplier for China and can be seen as a successful bilateral cooperation model,



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Nigeria's oscillating energy relations with the Asian giant are interesting for understanding challenges and obstacles that China faces in its energy dealings with Africa.

Both Sudan and Ethiopia are major players on the African hydro power market, due to their geostrategic location along the Nile river stream. China is a vital financier for Sudan, with the African country being designated as a rogue state and placed under sanctions regime by the West. Ethiopia is also interesting because, unlike Sudan, it is not rich in natural resources and has no oil production. Chinese investment in Ethiopia appears to break the stereotype about predominant resource acquisition intentions of China in Africa.

Rationale for choice of sectors

We have chosen oil and hydro power for our analysis of the success/failure of China's "umbrella" strategy of peaceful development on the African continent because of a globally accepted strategic significance of these energy resources. Oil and water often represent states' core interests and become instruments of (or goals of) foreign policy manoeuvres which can be abused for power gains. In addition, water resource bears an understandably special meaning for Africa and can be an important indicator of the quality of Sino-African relationship. In particular, ability to dam-control river flows on the continent serves as a powerful tool in foreign policy of any country trying to influence African policies.

The oil sector plays a vital role in a stable existence and successful development of the Chinese state. China is the world's second largest oil consumer (behind the US) (*Appendix 1*) and is projected to surpass the US as the largest net oil importer in 2014 (EIA 2014)^{xv}. Understandably, China's ever increasing dependence on oil imports relentlessly drives its foreigr policy and commercial engagements abroad. China depends on the African continent for its energy needs. In turn, the African continent depends on Chinese involvement in its hydro power construction projects. Africa has so far developed only 3% of its hydro power resources (as opposed to 80% of those in the developed world) (Brautigam 2011)^{xvi}. Such a mutual co-dependence (for China in the oil sector and for Africa in the hydro power sector) is a great platform to discover the mutual beneficiality of the relationship.

Research outline

To pursue this research project, we have committed to the following roadmap: firstly, we will give an overview of the major trends in existing literature concerning China's engagement in Africa; secondly, we will conduct a conceptualization and present a theoretical framework and methodology for our research; thirdly, we will describe major financial, business and labour policy instruments China uses in the oil and hydro power sectors of the corresponding African countries. Fourthly, we will do the analysis of the sources and data uncovered in the Sino-African oil and hydro power energy policies, in order to establish the Chinese strategies. Relevant case studies will be employed to support the scholarly investigation. Fifthly, we will outline and conduct the comparative analysis of the Chinese strategies in the oil and hydro power sectors in Africa and the strategies of its major competitors (the USA, the EU), in order to demonstrate **challenges** that China encounters in its energy dealings with Africa. In particular, a comparative view of the financial and business instruments will be presented. Sixthly, we will give an overview of the **implications** of Chinese policy in the African oil and hydro energy sectors for the chosen four African countries. Finally, we will submit our conclusions on the **success/failure** of the Chinese strategy of mutual beneficiality of the energy policy in the African oil and hydro power sectors for its proclaimed goal of peaceful development, point out major shortcomings of the existing Chinese energy strategies and recommend areas where sectorial strategy improvement is advisable.



REVIEW OF RELEVANT LITERATURE

Major literature on China in Africa has been grouped in three viewpoints: (a) China as a threat, (b) China as a mixed blessing, and (c) China as a beneficial presence. Many contemporary researchers are at odds with China's claim of peaceful development and view its relations with Africa as a threatening form of Chinese *Realpolitik*. Multiple counter-narratives of neo-colonial practices have been levelled against China. The writers critical of China's role in Africa warn any potential Chinese partners of "the Sinoization of the country" and of "the low-key economic and cultural offensive China is waging on the African continent" (Morais 2011)^{xvii}. China stands habitually accused of supporting the increasingly corrupt African autocrats (Morais 2011)^{xviii} and obliterating the spread of good governance rules, economic growth reforms and human rights norms in the region (Hirono 2014)^{xix}.

More moderate observers confess that there is nothing to suggest that China's overall influence in Africa has been malign or power-seeking and paint the picture of China's salutary influence on the continent's post-colonial recovery (Fraser 2013)^{xx}. They admit that "while the effects of the PRC's growing influence on the African continent have been mixed, this does not make China a uniquely pernicious presence" (Hirono 2014)^{xxi}. Firstly, they try to disprove the neo-colonial behaviour narrative by pointing out that China has not attempted to export its development model of authoritarian capitalism to any African state (Hirono 2014)^{xxii}. Secondly, some researchers remind the Western critics of China's African policies that the West itself "has not, on the whole, been successful in raising standards of living in Africa or fostering growth or employment" (Brautigam 2011)^{xxiii}. The moderates also tend to view the Western viewpoint of China's rising threat as "an almost knee-jerk reaction that sees any influence in Africa other than Western as immoral and undesirable" (Hirono 2014)^{xxiv}, being a challenge to the West's own



national interests on the African continent (Hirono 2014)^{xxv} and the Western "architecture for aiding Africa's development" (Brautigam 2011)^{xxvi}.

As more research on the Sino-African relations accumulates, there seem to be appearing those who take a rather benevolent view of China's role in Africa. They assert that economic neo-liberalism (albeit with a Chinese flavour) is clearly discernable in the Sino-African relations and credit China with efforts at developing a successful alternative cooperation model and bringing mutual benefits of common development and common prosperity to the region. Observers like Deborah Brautigam see the relationship between China and Africa as one of mutual help and positive engagement, especially concerning the so-called pariah states (like Sudan) faced with the West's policy of ostracism and isolation (Brautigam 2011)^{xxvii}. Some fully accept the Chinese idea of peaceful development strategy stated in the 2005 White Paper, and some even argue that China's painstaking efforts at developing a durable collaboration structure in the region will help it build lasting relationship with and even "win the battle over Africa" (Besliu 2013) ^{xxviii}.

RESEARCH CONCEPTS, THEORY AND METHODOLOGY

The research adopts the following conceptual pyramid: it moves from China's smaller objective of mutual beneficiality of international economic interactions through its larger aim of peaceful development toward an overarching goal of a responsible player status (*Appendix 2*). In common parlance, "mutually beneficial" means "advantageous to both sides, shared by two sides", and "peaceful" implies "devoid of violence or force, employing no means of coercion" (Merriam-Webster.com 2014)^{xxix}. Therefore, the peaceful development strategy, by its very definition, has to be both predominantly free of coercive means and mutually advantageous for the parties involved.



In terms of a research theory, due to absence of any contemporary universally recognized Chinese doctrine of international relations, we have chosen liberalism (particularly, the strand of commercial liberalism) as a Western alternative theoretical framework which is most suited, in our view, to analysing China's engagement in Africa. We find that there is an undeniable preference on China's part for economic partnership with the African states over military might projection and norms imposition. There is little evidence in China's global behaviour to refute the notion that the country willingly subscribes to "the liberal ideal of a world of peaceful commercial republics" (Moravcsik)^{xxx}. Absence of the Chinese regional military bases and balancing politico-military alliances with Africa, as well as lack of the *Mission civilisatrice* ideas and of any interest in coercion usage, reform promotion and ideology dissemination, may testify to China's rejection of both power relations and the normative approach and to its commitment primarily to economic transnational interactions with Africa.

According to the liberal theory of international relations, states are rational self-interested actors and committed interest-maximizers engaged in cost-benefit calculations and driven by their preferences and profit incentives. Joseph Nye and Robert Keohane assert that "states...make their decisions solely by considering the cost and benefits of various alternative policies to themselves" (Nye 1971)^{xxxi}. Economic interdependence is a foundation for peaceful cooperation and is defined by what states want to gain by it. Liberals claim that the "priority of preferences over capabilities" imbues states' behaviour (Moravcsik)^{xxxii}; furthermore, search for "convergent states' preferences begets cooperation" (Moravcsik)^{xxxiii}. They conclude that mutual wins are possible even in an anarchical system of autonomous rational states through finding jointly profitable arrangements and compromises, and mutual beneficiality of relations is the key to a durable cooperation, prosperity and successful global development.

China has been known for its pragmatic trade and commerce engagements and a 'business only' attitude in its foreign policy manoeuvres. Additionally, the Chinese state oil enterprises (SOEs), which are the dominant players in the Nigerian and Angolan energy sector and which invest abroad because they look for profits, and the Chinese construction and finance companies, which are the principal participants in the Sudanese and Ethiopian hydro power sectors and which are of private or mixed origins, are typical transnational actors of the liberal IR discipline.

The concept of China's "peaceful development" - as expressed in the 2005 White Paper – closely follows the liberal commercial peace theory line when it emphasises the following points: (a) China should develop itself through upholding world peace and contribute to world peace through its own development; (b) China should seek mutual benefit and common development with other countries in keeping with the trend of economic globalization, and (c) it should work together with other countries to build a harmonious world of durable peace and common prosperity (Government 2005)^{xxxiv}.

In line with the liberal theory, we have used, where appropriate, a descriptive approach, comparative analysis and case studies of China's patterns of engagement with the chosen African countries (Nigeria, Angola, Sudan, Ethiopia), in order to (a) analyse whether these patterns substantiate the liberal goals of mutual benefits and common prosperity stated in China's White Paper on peaceful development strategy and (b) establish strategies, challenges and implications of such engagements. We have paid particular attention to China's use of its financial and business instruments and its contributions to social (labour) policies in the chosen sectors of the four target countries. Hence, we have chosen **the mutual beneficiality** of China's engagement in the oil (Nigeria, Angola) and hydro power (Sudan, Ethiopia) sectors **as the dependent variable** and the economic and social **instruments of engagement** (financial,



business, labour policy instruments) **as the independent variables** for our comparative analysis. A further comparison between the use of major business and financial instruments by China and the Western players (its main competitor in the African energy field) has offered a deeper insight into the challenges China faces in Africa. Due to the dearth of information in published sources of the investigated countries, the research has been limited to indirect assessment, and only available and obtainable data have been analysed and the feasible conclusions drawn in our research report.

DATA ANALYSIS

The findings of this report are presented in three categories: (a) strategies that China employs in the oil sector (Nigeria, Angola) and the hydro power sector (Sudan, Ethiopia); (b) challenges that China encounters in these sectors, due to competition with the Western actors (the USA and the EU); (c) implications that the Chinese policy in the African oil and hydro energy sectors has for the African countries under research.

On the whole, our research has yielded **mixed results** as to the mutual beneficiality of China's engagement in the oil and hydro power sectors of four African countries. While China has been positively proficient in some policies (usage of financial instruments, development aid), it was largely deficient in the other approaches (poor labour standards, unfair business practices). In the findings available from both African and Chinese sources, we have not been able to uncover signs of non-peaceful actions (such as employment of coercive political and economic instruments) in China's dealings with four African counties. When vying fo the African attention, China appears to prefer using soft power methods and mutual profi incentives. It does attach commercial conditions to its entrance into the energy projects in four African countries (such as an access to oil and construction projects in Sudan and government)



construction contract awards in Angola), but it tends to accompany them with alluring financial packages and attractive infrastructure capacity building offers, the kind of approach which could be viewed as a 'mutual incentives' driven stimulation of bilateral relations.

Chinese strategies in the oil sector

In order to describe the business instrument of engagement China uses in the African oil sector, the research group have collected data on the Nigerian and Angolan cases. China in the Angolan oil sector is an example of a carefully sustained and faithfully maintained energy relation. Angolan national state company Sonangol teams up with Chinese national champions China National Petroleum Corporation (CNPC), Chinese National Offshore Oil Corporation (CNOOC) and China Petroleum Corporation (Sinopec Group), supported by Chinese Communications Construction Company Ltd (CCCC Group). China is reportedly represented in both upstream (exploration, drilling) and midstream (refineries) ventures in Angola (ANFS 2012)^{XXXV}. The legal basis China uses in the sector is provided by production sharing contracts, licence awards and interest purchases. Overall, China pursues a pragmatic strategy aiming at having a firm presence in the resource abundant energy sector and on the internal market of the Angolan state.

While China is well represented in the Angolan oil industry, its engagement with the Nigerian oil sector has been uneven (Chunrong 2010)^{xxxvi}. Nevertheless, the bilateral energy relationship has been preserved and maintained which may testify to both sides viewing it as mutually beneficial. The leading Chinese company operating in the Nigerian oil sector is CNODC Nigeria Limited (a subsidiary of the Chinese oil multinational CNPS). Its enthusiastically sounding mission statement is to strive "to develop our international business…in the spirit of mutual cooperation, mutual communication and mutual benefit"



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(Directory 2014)^{xxxvii}. In Nigeria, a Chinese SOE always works jointly with the national monopolist Nigerian National Petroleum Corporation (NNPC) under a concession system, with the national government being a concessionaire and a foreign company – an operator in the oil sector (Group 2014)^{xxxviii}.

The Chinese financial instrument in the Nigerian and Angolan oil sectors is characterized by the following features: (a) long-term view (positioning as a global player in the oil market), (b)concurrent capacity building of the host country, and (c) 'access to oil' concern over 'profit incentive' motivation. The main fiscal schemes employed are (a) oil-for-loan (commodity as security) and (b) oil-for-infrastructure (known as the Angola Mode). The typical financial tools include: a signature bonus; an aid/diplomatic charm loan (zero interest, more than 90% written off over time); a concessional loan (given an interest subsidy by MOFCOM); a commercial loan (1-2% cheaper than Western analogues and with longer grace and repayment period); and an investment (FDI) through joint ventures or acquisitions of production licenses (increasingly a counterpart of loan provision) (Reisen 2014)^{xxxix}. Concerning the labour instrument, not much information is available for the oil sector of two countries. Generally, oil sector provides little employment (less than 1%) (Brautigam 2011)^{x1} and thus has little direct social impact. Researchers do point out that China prefers bringing in its own workers, because of the local labour being expensive, especially in Angola (Brautigam 2011)^{xli}. An almost exclusive employment of low paid Chinese staff has been noted, who are apparently often living in secluded barracks at even lower standard than the African population (Flynn 2013)^{xlii}.

The underlying attractiveness of China's strategic model of engagement in the Nigerian and Angolan oil sector is well explained in the statement by the researcher Deborah Brautigam:



"China is offering a surprising bargain to many African countries today. This bargain says: your country has ample riches, but you are not using them to your advantage. You can leverage what you have and what we want... and use these resources to secure finance to build the hydro power, telecoms, and rural electrification projects you believe to be necessary for your country's modernization" (Brautigam 2011)^{xliii}. The same researcher points out that China has learned from Japan the so-called Goa formula of economic cooperation: provision of the necessary equipment, technical training and financing in exchange for raw materials (Brautigam 2011)^{xliv}. The current analysis partially supports her statement and adds the following advantageous sides of China's engagement in the African oil sector: (a) adherence to and promotion of a shared task of pursuing national development (for both China and the African partner country); (b) search for convergent mutual state interests and preferences in the process of forging a bilateral relationship, (c) employment of mutual benefit incentives (such as offering low-interest loans for building much needed infrastructure, in order to win a targeted African government's benevolence and get oil at low prices), (d) an efficient use of multiple financial instruments (with different instruments used for different purposes not limited only to the resource acquisition); (f) contribution to overall national well-being of all sides involved (the Chinese side as much as the African one).

As an example, China and Nigeria are brought together by a common task of national development and converging national interests. China invests heavily in Nigeria because it relies on it for oil. Chinese construction companies desire to establish their firm footprint in the Nigerian oil and gas landscape. Nigeria, having a vision of itself as a regional energy and trade hub and wanting to decrease its dependence on massive petroleum importations detrimental to its national evolution, needs China's FDI (Group 2014)^{xlv}. Moreover, Nigeria (and Angola, for that matter) relies heavily on oil revenues for preservation of macroeconomic stability and



economic wellbeing and is very vulnerable to oil price or crude oil production volatility. Oil and gas sectors combined account for 95% of export receipts and over 80% of fiscal revenue for Nigeria and for 96% of export receipts and around 80% of fiscal revenue for Angola (Kgosana 2014)^{xlvi}. Both Nigeria and Angola invest the windfall oil earnings in infrastructure development (via their sovereign wealth funds); in addition, both have created a sizeable oil stabilization funds to guard economies from external vicissitudes (Kgosana 2014)^{xlvii}. Consequently, Angola is heavily dependent on the demand for oil from China, its No.1 oil exports destination (EIA 2014)^{xlviii}. While Nigeria relies less on China in its oil sector, Chinese financial presence is very important, due to Nigeria's need to maintain and upgrade its mismanaged aging energy infrastructure at the expense of China's investments.

Both Nigeria and Angola use a natural resource (oil) as securities for loan issuance (the so-called commodity-secured loans given on commercial terms). The Chinese Exim bank has offered a series of oil-backed lines of credit since 2004 (Brautigam 2011)^{xlix} which allow its African partners to secure an investment with resource flow. Under this kind of credit, China also constructed hospitals, schools and fixed local water systems, roads and bridges in Nigeria and Angola. It is interesting to notice Angola's peculiarity (the so-called *Angola Mode*) (Reisen 2014)¹: such Chinese loans are never given in cash but tied to development infrastructure constructed by Chinese companies (with 30 % reserved for the Angolan contractors) (Brautigam 2011)^{II}. Resource-backed infrastructure loans allow getting infrastructure construction and upgrading for countries with weak governance, which are unable to access global finance due to poor credit ratings and which are prone to the 'resource curse'.

Another workable financial scheme is the 'loan-for-oil' type which usually involves China issuing favourable term loans in exchange for cheaper oil purchases from the African partner.



For example, in 2005 Angola was given a \$2 billion loan as a swap offer for oil deals, with another billion added by China in 2006 (Taylor 2006).^{lii} Purely commercial investment dealings are increasingly an accompaniment of loan provision and involve China buying stakes in the Nigerian and Angolan lucrative oil exploration blocks (upstream), as well as in local refineries (midstream), and acquiring drilling rights to these countries' oil fields (including offshore locations). In 2006, CNOOC negotiated a \$2.3 billion investment for a stake in Nigeria's oil field (Taylor 2006)^{liii}. Later, Sinopec offered the Angolan government a reported \$1.4 billion 'signature bonus' and took up a 40% stake in the promising oil block 18 (Taylor 2006)^{liv}.

The most notable case for analysis of China's engagement in the Nigerian oil sector is an on-going affair known as the **Greenfield Refineries Initiative**, based on a Memorandum of Understanding (MoU) between the NNPC and Chinese State Construction Engineering Corporation (CSCEC) and aiming to build three refineries in Lagos, Bayelsa and Kogi (Group 2014)^{1v}. The affair began back in 2005 and was legally settled in 2010, when the signed MoU provided for the total project cost of \$ 28.5 billion (Library 2010)^{1vi}. The China Export Credit Insurance Corporation (SINOSURE) and a consortium of Chinese banks led by the Industrial and Commercial Bank of China reportedly funded 80% of the project, with the NNPC footing only 20% of the cost of equity contribution (Library 2010)^{1vii}. The constructed midstream objects were planned to operate as import substitution refineries, supplying petro products to Nigeria's domestic consumers and exporting surplus to regional and other international markets (Group 2014)^{1viii}. Since then, the project has suffered a series of setbacks, with no fault of China as it has been patiently waiting for the Nigerian government to finish conducting re-assessments and fulfil conditions stated in the MoU (Madueke 2013)^{lix}. Here China's 'play by the local rules' approach



is on display. In the Greenfield Refineries case, the research has uncovered China's benevolent oil sector strategies via investment consortia with the host government, on commercial term loans, with the adherence to the playbook lines of the African partner. It has been deemed a mutually beneficial and viable project, with both parties maintaining long-term advantageous commercial relationship.

Chinese strategies in the hydro power sector

China has been visibly present in the hydro power energy sector of Sudan and Ethiopia. Its state-owned companies Power Construction Corporation of China (POWERCHINA), China Gezhouba Group Corporation (CGGC) and SYNOHYDRO Consortium (CWE-CWHEC joint venture), as well as Exim bank of China and Industrial and Commercial Bank of China on par with the Chinese government, have been leading players in these countries' energy market. China has been involved in two mega projects on the hydro power stations construction in Sudan (Merowe and Roseires Dams) and in several hydroelectric dam-building undertakings in Ethiopia, including the famous highest double curve Tekeze Dam and the controversial Grand Renaissance Dam. The hydro power sector is of a paramount importance for energy, irrigation and agriculture needs of both African countries; especially so for Ethiopia, since approximately 88% of its energy needs are produced by hydroelectric generation and only 12% by oil (Statistics 2009)^{1x}.

China's *modus operandi* runs under the concession system. Its hydro power energy strategy is pragmatic, based on its own economic and commercial interests, with a long-term view of getting a firm foothold in the hydro power and construction sectors of both African economies. China's business and financial instruments have been more welcomed in Sudan which has been marginalized by the West because of its skewed political reputation and which benefits hugely



from China's "there are no rogue states" stance (Taylor 2006)^{1xi}. With Ethiopia, relationship is moderately successful. Chinese investment in Ethiopia breaks the stereotype about its 'resources only' acquisitive intentions. Ethiopia is a non-natural resources country; although, some Chinese exploratory oil drilling in western Ethiopia was reported in 2006 (Taylor 2006)^{1xii}.

On the example of Sudan, the report will explore the Chinese use of financial instrument of engagement in the hydro power sector. Like in the oil sector, China's financial strategy here takes a long-term view and engages in the capacity building of the host state (via multiple public infrastructure construction projects). It offers project loans and development aid, and the financial scheme runs along the above-mentioned Goa formula, with aid often tied to petroleum guarantees and Chinese project participation. The financial tools make-up is as follows: 87% commercial loans; 5% zero-interest loans, 3% concessional loans (Nour 2014)^{1kiii}. Owing to China's involvement, Sudan was able to develop and grow even under the tight Western sanctions (Nour 2014)^{1kiv}. Because China invested much needed resources in infrastructure, the Chinese were "widely seen as the saviours of the country in terms of recovery" and advancement (Taylor 2006)^{1kv}. For China and Sudan, their bilateral relationship has been undoubtedly beneficial in terms of absolute gains by both sides (with China again getting a preferential access to oil resource).

China appears to have been advantageously wielding its labour policy instrument in the hydro power sector of Sudan and Ethiopia. For example, the Ethiopia FAN dam project employs over 50% of its long-term labourers (mechanical equipment operators, drivers, safeguards, secretaries, unskilled labourers and even managers) from the local area (CGGC 2010)^{lxvi}. On the Sudanese dam projects, China followed the following reported labour policies: provision of onsite training, allowance of equipment availability, as well as technology transfer and education grants.



The Sudanese Merowe Dam is the optimal case study of China's engagement in the African hydro power sector. It is located on the mainstream of Nile and is the longest dam in the world benefitting more than 3 million local people (SINOHYDRO 2011)^{lxvii}. Financed though commercial loans by the mega consortium of the Sudanese government funds (37.83%), the Arab Funds (58.48%) and China's Exim bank (20.65%), the Merowe Dam project included SINOHYDRO and 50 Sudanese companies as participants (D.I.U 2014)^{lxviii}. A reported participation condition from China was access to oil reserves. On the Merowe Dam site, China displayed an efficient and mutually beneficial use of its labour policy instrument through onsite training, equipment availability provision, technology transfer, education grants to local employees of all levels. A Sudanese researcher Samia Nour gives some details of the Sudanese construction contract for the Merowe Dam participants: the constructors had to enhance the capacity building for 4000 Sudanese engineers training them to operate in all fields of the project (Nour 2014)^{lxix}. China appears to have duly fulfilled the clause, providing onsite training for 600 labours and 500 engineers, as well as sharing knowledge and technology on the dam-related operating equipment (Nour 2014)^{1xx}. The Chinese company Harbin-Jilin granted \$10 million to the Merowe technological faculty; the grant stipulated as an objective the acquisition of the special equipment for the college workshops (Nour 2014)^{lxxi}. The general survey conducted by the Sudanese government among the Sudanese dam managers presented a highly favourable view of beneficiality of China's development assistance (Appendix 4). Therefore, the Merowe case can be an example of China making a good use of all three instruments of engagement (financial, business and labour), bringing mutual benefits to itself and its African partners and giving a boost to its benevolent image.



After the research has established the strategies China uses in the oil (Nigeria, Angola) and hydro power (Sudan, Ethiopia) energy sectors, the report will move onto a preliminary and indirect **assessment of mutual beneficiality** of China's employment of its financial, business and labour policy instruments in the above mentioned sectors and countries. To facilitate understanding of both advantages and disadvantages of China's engagement in the oil (Nigeria, Angola) and hydro power (Sudan, Ethiopia) fields and conduct evaluation of China's mutual beneficially claim for these energy sectors, the research group have summed up the collected and discussed information in two tables.

Table1. Business and Financial Instruments – mixed results as to benefits of engagement

Advantages	Disadvantages
• Business vs. Aid mindset	Entrenching of Rentier mindset
• Partner vs. Donor Intercourse	• Less incentives to diversify economy
• Sovereign wealth fund and oil stabilization fund creation	• Aggravation of the Dutch disease
• Build-up of Forex reserves	Damage to local businesses
• Lowering of debt indicators	
• GNP & income growth	



Table2. Labour policy instrument – mixed results as to benefits of engagement

Advantages	Disadvantages
Human competence building	Job insecurity for locals
• Training development assistance	Workplace dissatisfaction
• Knowledge transfer, experience sharing	• Popular backlash and scapegoating
• Cultural exchange, mutual confidence building	

Researcher Deborah Brautigam insists that China's business approach as opposed to the aid mentality and its use of 'partner' designation as opposed to 'donor' label differ greatly from the similar Western tactics in Africa (Brautigam 2011)^{bxxii}. The European KPMG report notes beneficiality of sovereign wealth fund and oil stabilization fund creation for both Nigerian and Angolan economies which allow them to guard their fragile economies from external oil price shocks (cite KPMG)^{bxxiii}. An OECD analyst Helmut Reisen emphasizes salutary influence on financial and macroeconmic indicators (augmentation of Forex reserves, lowering of debt indicators and aggregate national wealth growth) for major Chinese partners in Africa following their cooperation with the Asian giant (Reisen 2014)^{bxxiv}. These data testify to an obvious beneficiality of China's economic/financial instrument of engagement for the four countires under research which is also advantagous to China's economy (badly in need of energy resources and capital application sites).



On the downside part of the beneficiality scale, there is a fact that the revenue windfalls do an equally sizeable damage to the African economies, as they prolong popular rentier mentality and discourage the governing elites from strenuous efforts at diversifying state economies, aggravate the menace of all oil rich countires (the Dutch desease) and hurt local African businesses struggling to both race to the bottom with the Asian giant and withstand the microeconomic onslaught of the Dutch sickness. The business instrument reveals a balance tipped in favor of the Chinese enterprises in the crucial construction sector often linked to the resource access via infrustructure-oriented loans. For example, the lower costs of the Chinese construction material undercuts local trade. Barry Sautman reports that "a 50 kilo bag of local cement costs \$ 10 in Angola, but imported PRC cement costs \$4" (Sautman 2007)^{lxxv}. From a consumer viewpoint, it is preferable to buy cheaper Chinese stuff bypassing the local produce. In the oil and hydro power sectors and economically linked to them construction industry, the Chinese enterprise wins through both getting preferential government construction awards and pricing their competitors out of the local consumer market. Although China seems to win more in business terms, it loses out in terms of popularity, as further report data show, with popular backlash and political scapegoating being the most common blowbacks from China's business instrument failings.

The same mixed results are observed concerning the mutual beneficiality of the Chinese labour policy instrument employment. The benefit of human competence (and confidence) building through training development assistance and of cultural exchange and mutual acceptance development through cultural programs is balanced by anxiety about job losses and dissatisfaction with workplace conditions which plague the Chinese dealings with the local African labour. The data suggest that it is not the absence of work but poor working conditions



that China is blamed for in popular perceptions (Brautigam 2011)^{lxxvi}. Some documented dissatisfactory business practices and neglect for environmental effects of its activities further tarnish China's painstakingly constructed benevolent image as a peacefully engaging international actor. Therefore, such mixed evaluation results concerning three major instruments of engagement throw shadow on China's claim of joint profits and mutual benefits being accrued by its partners from choosing relationship with China. These are not the only challenges that China has to surpass in its developing energy relations with the four African countries.

Western competition: challenges for China

As a relative newcomer to the African energy and hydro power sectors, China has encountered several challenges. On one side, its professional inexperience and cultural and language barriers have hindered its deeper engagement with the African continent. On the other side, fierce competition from long- and well-established Western companies has prevented China from occupying a larger share of the African oil/hydro power market. The most notable Western competitors for China in Africa are the USA and the EU.

Nigeria and Angola are moderately important OPEC countries for the United States. Nigeria was the eighth largest oil supplier to the United States in 2013 supplying around 4% of its needs (EIA 2013)^{lxxvii}. The country saw its share of the US crude oil market fall from 10% before 2011 to 5% in 2012 (EIA 2012)^{lxxviii}. This decline is attributed to the suspension of ConocoPhillips' Trainer refinery in September 2011 and Sunoco's Marcus Hook refinery in December 2011 on the U.S. East Coast (EIA 2012)^{lxxix}. In addition, the US domestic crude oil production reached its highest level in 24 years, and the United States became a net exporter of petroleum products in 2011 for the first time since 1949 (Institute 2013)^{lxxx}. Part of the increase in oil production can be attributed to the commercial exploration of oil by energy companies through a hydraulic

fracturing method which increased the output of oil wells (King 2005-2014)^{*lxxxi*}. The Nigerian-American bilateral trade totalled \$11.7 billion in 2013 and was largely driven by the Nigerian oil imports which were worth \$11.6 billion (Representative 2014)^{*lxxxii*}.

The United States was relatively late to recognise the Angolan government in 1993, as the country became independent from Portugal in 1975 (State 2013)^{lxxxiii}. The Obama administration has identified Angola as one of the three strategic partners in Sub-Saharan Africa (with the other two being Nigeria and South Africa) (State 2013)^{lxxxiv}. In light of this, the U.S. – Angola Strategic Partnership Dialogue (SPD) was signed in July 2010 (State 2013)^{lxxxv}. The SPD was meant to facilitate the energy relationship between the two countries and also touched other areas such as security and democracy promotion. In 2013, the U.S. imports from Angola, worth \$8.7 billion, were almost entirely comprised of mineral fuel (oil) (Representative 2014)^{lxxxvi}. The high levels of corruption have been a deterrent for American investors outside the energy sector, given Angola's rank 153 of 177 on the Transparency International's Corruption Perceptions Index in 2013 (International 2013)^{lxxxvii}. The US-Angola relations became strained in November 2010 when the Bank of America closed the bank account of the Angolan Embassy in Washington (Rieker 2010)^{lxxxviii}.

China and the US do not compete commercially in their dealings with Sudan. Relations between the United States and Sudan have been strained, as the country remains on the list of state sponsors of terrorism and has no US representation by an American ambassador (Embassy 2014)^{lxxxix}. The trade between United States and Sudan is limited due to the number of economic sanctions in place. The US is not present in the dam construction projects in Sudan and Ethiopia.

The EU is predominantly a net importer of oil and thus dependent on countries outside the federation, as member states have limited crude oil deposits (Energy 2011)^{xc}. The EU



imports around 40% of its oil from the OPEC, of which Nigeria and Angola are members (Energy 2011)^{xci}. Nigeria is a major trading partner with the European Union in Africa, and much of this relationship is dominated by oil exports from the country. The EU nations' mineral fuel (oil) imports from Nigeria comprised 97% imports in 2012 (Trade 2013)^{xcii}. The European Union is interested in fostering the non-oil sectors and helping Nigeria utilise revenues gained from the oil sector more effectively. It would also like to see an improvement in security situation in the Niger Delta (EEAS 2014)^{xciii}. In 2012, the EU's mineral fuel (oil) imports from Angola comprised 93% of total imports (Trade 2013)^{xciv}.

Some EU countries have been participating in the dam building projects. Moreover, the EU allocated €644 million for Ethiopia in the 10th Development Fund (2008-2013) meant for improvement of road infrastructure and provision of basic services in water supply, among some other areas (Europeaid 2012)^{xcv}. Before the construction of the Merowe Dam in Sudan, German and French companies conducted technical assessment study (D.I.U 2014)^{xcvi}. The Italian company Salini Impregilo participated in the construction of the Grand Renaissance Dam in Ethiopia (Impregilo 2014)^{xcvii}.

On the whole, the US relationship with Africa is conditionality based and legally framed by the so-called African Growth and Opportunity Act (AGOA). Currently, 38 of 48 Sub-Saharan African countries are parties to the AGOA (ITA 2000)^{xcviii}. Nigeria qualifies for benefits from the AGOA; so do Angola and Ethiopia, but not Sudan (ITA 2000)^{xcix}. The pre-requisite to joining the AGOA include reduced barriers to U.S. trade and investment and market-based reforms (ITA 2000)^c. The countries that qualify are able to export more kinds of products under the duty-free category. However, mostly Nigerian crude oil has found room in the American marketplace. The EU relationship with Africa is also conditionality based and guided by the



2000 Cotonou Agreement (designed to foster regional integration and to create a framework for relations with 79 developing countries, including the African states under the current research) (Commission 2012)^{ci}. Therefore, the Western competitors tend to insert an obligatory conditionality clause in their energy dealings with Africa; although, Deborah Brautigam mentions that the West generally avoids attaching political conditions to its private investment in Africa (Brautigam 2011)^{cii}.

In contrast to the Western approach, China has no conditional agreements signed with any of four African countries under research. Brautigam believes that "rather than... forcing improvements through conditionality, the Chinese accept that institutional development is a long- term process" (Brautigam 2011)^{ciii}. Recalling the Western corporations' misdeeds in Africa, Sautman adds that "in comparison with other foreign interests in Africa, China today is often perceived as the lesser evil..." (Sautman 2007)^{civ}. Owing to its deep involvement in the Africa's public infrastructure development, China outcompetes European companies with the pledges to build (often jointly with the African counterparts) dams, ports, rail tracks in the quid pro quo for the access to resource projects. In addition, China's investors are both indifferent to and undeterred by high levels of long entrenched corruption plaguing all four African countries and are willing to provide financial means they need to develop. China has never employed coercive economic policies (punishment in the form of sanctions, withholding of preferences) against any politically imperfect African leadership. Chinese bilateral agreements are known to be of a purely commercial nature. For example, in the Nigerian oil sector, the Chinese state oil companies operate in partnership with the Nigerian state oil company NNPC as the so-called PSCs (production sharing companies) under the PSCs (production sharing contracts) (Group 2014)^{cv}. A typical PSC carries a profit oil money split (80% to the Nigerian government, 20% to



a foreign partner company) (Group 2014)^{cvi}. No non-commercial clauses are included in these PSCs. Therefore, China puts no political or normative constraints on its commercial oil deals with Nigeria and Angola or its construction projects with Sudan and Ethiopia and is guided purely by its energy demand and profit incentive. According to some reviewed literature, China does expect certain commercial conditions satisfied as a prelude to its entry into the energy projects, namely to be allowed to exploit oil reserves in its swap agreements in the Sudanese hydro power sectors or to be awarded government construction contracts in its trade-offs with the Angolan leadership. In Nigeria, such conditions come formulated by an African government itself, in exchange for help with infrastructure construction and modernization. Legally, the 1995 Nigerian Investment Promotion Act does not allow 100% FDI in the oil sector (only with the government being a party to any arrangement) (PLAC 2012)^{evii}. Moreover, the Nigerian government policies reportedly stipulate that foreign companies must invest in Nigeria's infrastructure and development first, before they can benefit from its oil exports and obtain a concessionary access to its oil reserves (News 2010)^{eviii}.

China's commercial aspirations in the oil and hydro power sectors have been generously buttressed by its societal contributions and developmental assistance. In 2008, China donated a hospital in Sudan's Blue Nile State (called the Hospital of the Chinese-Sudanese Friendship), the typical gesture being hailed by the Sudanese officials as "a precious present from China to the local people"(MOFCOM 2014)^{cix}. Between 2002 and 2012, a total of 294 scholarships has been granted to Sudanese students in a form of developmental assistance, with 20% going to Master and 78% to PhD levels (Nour 2014)^{cx}. Moreover, while the West has been reluctant to share technology with the countries under research, the Chinese have conducted crucial knowledge and technology transfer for their partners, and the general Nigerian perception, for

example, is that "while China's technology may be not as sophisticated as some Western governments', it is better to have Chinese technology than to have none at all" (Sautman 2007)^{cxi}.

The other common feature is Chinese preference for dealing directly with the host country's governments and its adherence to these governments' rules of game (in accordance with its political non-interference stance). It should be kept in mind that the chosen African players are least developed and low-income countries, weak authoritarian states, high on corruption and low on transparency lists, marginalized by the West, and marked by commonly reported perceptions of Western reform benchmarks set unrealistically high for them. Ian Taylor quotes a complaint from Angola: "the current international financial market…imposes conditions on developing countries that are nearly always unbearable and sometimes even politically unacceptable" (Taylor 2006)^{cxii}. On the contrary, China's role is seen as "a practical means of sustained and mutually advantageous cooperation" resulting in a rapidly growing economy (Taylor 2006). As opposed to West's conditionality, China "provides…a low-cost development solution to many African nations" (Taylor 2006)^{cxiii}.

The non-interference, non-conditional, trade oriented posturing gives China an extra edge in commercial dealings with the autocratic governments of Angola, Sudan and Ethiopia, although it has lesser effect on the engagement with the democratic Nigeria. Nevertheless, three of the African countries under research feel attracted by generous direct aid offers coming from the Western countries and their FDI promises (save for the pariah state Sudan). Therefore, Western competition presents China with some sizeable challenges in its dealings in the African oil and hydro power sectors. Higher labour, social and environmental standards and transparent well developed business practises combined with good knowledge of the continent (due to prior colonial engagement legacy) and ample finances which come with a highly developed Western



partner put an obstacle in China's wider penetration of the African market, especially in the strategic oil sector. As Ian Taylor admits, "Chinese companies must go for oil where American and European companies are not present" (Taylor 2006)^{cxiv}.

To render a deeper insight into the 'West vs. China' challenge, the research group have conducted a comparative analysis of the Chinese and the Western usage of financial (a loan) and business (an enterprise) instruments of engagement in the oil and hydro power sectors of four African countries. The results have been combined and presented succinctly in two tables below. They are pretty exhaustive in their explanatory value and offer a glimpse into why the Chinese side's engagement both merits preference and causes anxiety among the African countries under research.

China:	The West:
Controlled by Ministry of Commerce , backed by the Chinese government's good credit-rating	IMF-assessed and guided
Preferential type of a commercial loan, often tied to access to oil and to construction contract awards	Commercial loan, conditionality-tied (reforms)
 Average terms: 2% interest rate 10-15 years maturity Up to 5 years grace period* 	 Loan terms: 1-2% more expensive Shorter repayment and grace periods**

Table1. Financial instrument: Comparative view

* *Source:* the Exim bank data (Reisen 2014)^{cxv}.

** Source: Norfund report (Brautigam 2011)^{cxvi}.

Table2. Business instrument: Comparative view

A Chinese oil SOE	A Western oil company
Long term view	Short to medium term view
SOE backed by the government	Private corporation answerable to shareholders
Priority to access to oil, but expected to be profitable	Priority to profit
Allowed to spend more to outbid competitors	Profit constrained
Closed oil books	Some degree of transparency and fiscal discipline
Mutual benefit and cooperation ideology	Socially responsible behaviour ideology

As a case study of the Western challenge to China's engagement in the African energy sector, the Nigerian case presents some valuable features. While Angolan oil sector has been a loyal partner to the Chinese enterprises, Nigeria has had a fluctuating energy relationship with China concerning its national oil sector (*Appendix 2*). In 2006, oil exports from Nigeria to China suddenly plunged from 131.02 to 49.19 thousand ton per year, stayed very low for the next three years and recovered to 139.32 only by 2009 (Chunrong 2010)^{cxvii}. The research team have investigated possible explanations to such a drop in the bilateral energy relation. Primarily, competition from the West was cited in scholarly literature. Cyril Obi noted that Nigeria and the Niger Delta, "an energy rich Gulf of Guinea… [are] central to Western global strategic interests" (Obi 2008)^{cxviii}, and collision with the Western interests has been particularly fierce for such a recent entrant as China. Besides, there are still large gaps in technology, management and



scale between the Chinese and the American and European oil giants who have taken up over 50% of the Nigerian oil reserves (Chunrong 2010)^{cxix}.

Implications for four African countries

Both positive and negative implications for four African countries are discernible in China's presence in the oil sector of Angola and Nigeria and in the hydro power sector of Sudan and Ethiopia. Let us initially focus on the **positive implications**. Firstly, China's relationship pattern in Africa (including in the oil and hydro power sectors) - in the shape of non-interference help, non-conditional investment and trade-oriented approach – provides an alternative engagement model and allows its African partners to proceed along their own unique road, in order to satisfy their particular needs and preferences. As Deborah Brautigam correctly points out, developing African countries should be given "the policy space to experiment and learn on their own" (Brautigam 2011)^{cxx} and not be the passive subject of the 'one-size-fits-all' approach of the Western-backed Washington Consensus. They should have freedom to choose alternatives best suited to their stage of evolutionary economic and social development. Existence of alternatives and freedom of choice among them, are, after all, the classic cornerstones of liberal philosophy.

Secondly, China's salutary role in both infrastructure capacity building and resource development in Africa is hard to deny. According to the 2005 White Paper, "infrastructure construction is a starting point for improving the investment environment and people's livelihoods in Africa, and is of great importance for poverty reduction..." (Government 2005)^{cxx} Even more so is the chance for an uninterrupted development, despite financial marginalisation imposed on some African countries which do not approximate the image of developed liberal democracies (as three out of the four countries under the current research indeed do; namely,



the authoritarian Angola and Ethiopia and the dictatorial Sudan, with even democratic Nigeria falling far short of democratic credentials on transparency and corruption indicators).

Thirdly, Sino-African bilateral relations in the energy field carry overall mutual benefits and profits. China secures energy supplies from the African sources and sustains its growth; its invested capital works in different African energy projects; it slowly widens and deepens its presence in the region with great potential for development, while simultaneously gaining a valuable business experience; it expands international presence as a major player in the oil and hydro power markets; and it exposes itself to global responsibility tasks while its global standing as a peaceful player gradually augments. Nigeria and Angola increase their overall national economic well-being; provide support for internal stability and effect slow modernization and infrastructure development. Sudan and Ethiopia unchain their underdeveloped water resources and improve agriculture survivability by creating a powerful dam network, even despite not having a sufficient access to global financial markets and high-end technologies. Bilateral state preferences and national interest convergence occur, promoting search for jointly profitable arrangements and prompting the countries to maintain and increase further cooperation and to deepen mutual economic interdependence, as the liberal theory predicts.

Most of the negative implications (**shortcomings**) appear to stem from the facts that (a) the African countries deal with a still relatively inexperienced developing middle income country and (b) this growing giant has not yet fully embraced a responsible player's approach in its economic and social dealings with other nations. As Brautigam reminds us, poor business practises and low labour and social standards of the Chinese companies in Africa should be "a not surprising feature of global engagement from a country with a 2009 per capita income of US\$ 3,650, less than a tenth of the average income for the Euro area" (Brautigam

圖書館 出版 調整 2011)^{exxii}. Chinese ability to work equally well with both democracies (Nigeria) and authoritarian states (Angola, Ethiopia, Sudan) is a double-edge sword. On one hand, it strengthens the interstate economic relations and African countries' internal political stability; on the other hand, it also weakens the African states by perpetuating a corrupt autocratic government rule, sensitizing the local populations to it negative effects as the overall wellbeing and living standards increase, concurrently engendering political instability and endangering social peace. When the breaking point is reached, the Chinese companies tend to be among the first targets of the local popular fury (as the 2011 Libyan uprising case showed), not to mention a steadily simmering local discontent with the Chinese everyday business practices in Africa. It is fair to notice, though, that failure of the respective African governments to diversify economy properly away from the dependence on the 'oil needle' and to conduct sound and efficient economic and fiscal policies cannot be the reason to lay the blame for their countries' poor performance solely at China's door.

Among the chief negative shortcomings of China's engagement in the African energy sector are particularly discernable: (a) unfair business practices and (b) poor labour practices. The former include: (a) pricing the local business and investors out of the market (due to access to cheaper labour and cheaper capital), (b) pushing the locals out of business (because of the use of Chinese construction materials and little local sourcing and the preferential access to government contract awards via official incentives to the African government such as a signature bonus and a profit sharing under a PSC), (c) causing the persistent oil revenue-fed Dutch disease which leads to the loss of local businesses' competitiveness, and (d) engaging in shadow deals. The latter adds oil to fire through (a) lower wages and poor working conditions inside the Chinese enterprises working in the African energy sector, (b) China's business



tendency to hire contract workers (getting around mandated labor benefits for permanent staff), and (c) worksite pollution plaguing China's every *locus operandi*. To be fair, the Chinese diasporas in Africa come from the poorest section of Chinese society and compete directly for work with Africans, some 80 percent of whom fall in the 'vulnerable employment' category (Flynn 2013)^{cxxiii}. Nevertheless, local job insecurity and work dissatisfaction, as well as anger at damage to local businesses, have produced a significant local popular backlash against China and made the country an object of political scapegoating for some politicians and officials willing to distract public attention away from their own mismanagement, corruption and ineptitude. Therefore, the research into the energy sector dealings between China and four African countries points out to both positive and negative implications in their bilateral relations.

CONCLUSIONS AND RECOMMENDATIONS

While on the whole China has proven to be rather successful in its energy strategies in Africa and in the maintenance of its oil and hydro power energy sub-pillar (part of its general energy pillar) of peaceful development on the African continent, and its energy dealings with the four African target countries have demonstrated preference for mutually beneficial and mutually profitable arrangements and for mostly peaceful cooperation tactics, there are certain areas that need a significant care and improvement lest further development of the peaceful road line be undermined and China's soft power tarnished.

In the conceptual checklist of China's engagement with the African energy sector, China can be marked largely positive on its financial instrument usage, but mostly negative on its business and labour policy instrument employments. While Sino-African energy relations can be qualified as peaceful in general terms (mostly free of coercive means), they do not meet fully the requirement of mutual beneficiality (advantageousness to both sides) stated in China's own



2005 White Paper. While being mostly two-way beneficial in absolute terms, the energy sector relations do seem to favour more the Chinese side and lever sizeable disadvantages on the African group. Unfair business practices, poor labour policies and negative implications of China's engagement in the chosen energy sectors of the sample set of the four African countries have prompted the researchers to arrive at **the conclusion** that the peaceful development concept box for China should be marked negative for now, with the possibility of it being assessed as positive sometime in the future when (and if) China improves on the mutual beneficiality indicator.

Among **recommended policies**, the research group would like to include: (a) improvement in business attitude and avoidance of unfair business practices, (b) rise in labour standards and work conditions, (c) attribution of more attention to workers' rights and workplace environment. Tactical details as to how to develop and implement the particular steps are a subject of another study. In the current report, it will suffice to note the researchers' conviction that these steps, if taken diligently and consistently, cannot but demonstrate to the world China's strict adherence to the "Peaceful Development Road" and boost China's image as a responsible global player in the international energy field and on the international economic plane.

At the same time, the research group recognize the **limitations** of their current analysis caused by the poor data availability from the countries chosen for this Capstone project; yet, they would like to point out that the combination of the countries and sectors chosen for this Capstone research is original and has not been present in any previous scholarly literature. Further and fuller investigation into the topic may be necessary when transparency of the analysed governments improves, and more data become available to scholarly research and analysis. The researchers presume that, perhaps, grant-facilitated field visits to the four African countries



and China will allow greater access to the workings of and shed more light on the manoeuvres of major players in the strategic oil and hydro power sectors of the African continent. The topic chosen for this Capstone project research is undoubtedly fascinating and merits further scholarly attention from those who are genuinely interested in the successful development of Sino-African relations.



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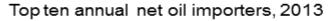
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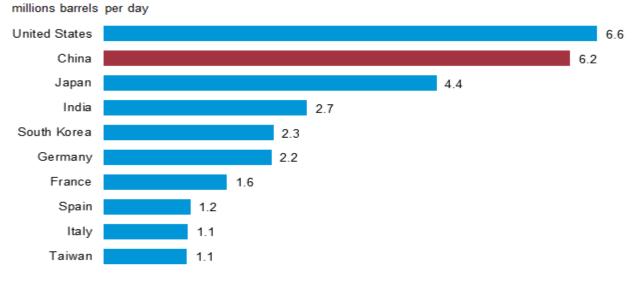
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Appendix 1: Top net oil importers

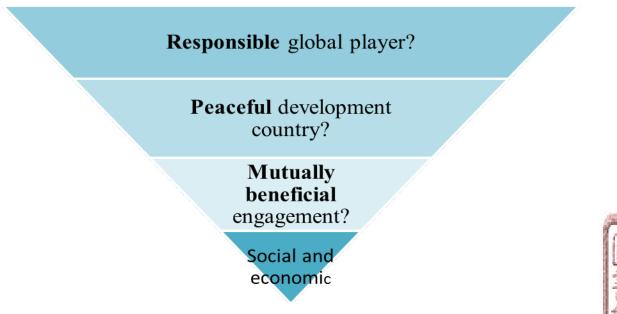




eia Note: Estimates of total production less consumption. Does not account for stockbuild. Source: U.S. Energy Information Administration, Short Term Energy Outlook, January 2014.

Source: EIA EIA (2014). Report: China Overview, U.S. Energy Information Administration.

Appendix 2: Conceptual pyramid, key words



Appendix 3: 1999-2009 oil export from Nigeria, Angola and Sudan

(2nd line: Nigeria, 3rd line: Angola)

表 2 1999-2009 年中国从尼日利亚、安哥拉、苏丹进口原油量	表 2	1999-2009	年中国从尼日利亚、	安哥拉、	苏丹进口原油量
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11 HT	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
尼日利亚	136 92	118 66	77. 25	48 79	12 20	148 90	131. 02	45 19	89, 51	35 04	139 32
安哥拉	287. 60	863 66	379, 89	570, 51	1 01 0 15	1 620 82	1746.28	2 345 20	2 499 66	2 989, 39	3 217, 25
苏丹	26 61	331 36	497.34	642 56	625 84	577.05	66.2 08	484 65	1 0 30 95	1 049 92	1 219, 14

资料来源:田春荣《2004年中国石油进出口状况分析》和《2009年中国石油进出口状况分析》

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Appendix 4: The impact of Chinese aid and development offered for the implementation of selected projects (abridged)

Selected projects and selected	Merowe			
indicators				
(a) The share of the Chinese in total	(%)			
Capital and finance	50%			
Employment	80%			
Training	80%			
Increase in knowledge transfer	90%			
Increase in technology transfer	90%			
Improve capacity building in the	90%			
project				
Increase availability of machines	100%			
Increase availability of equipment	100%			
Increase availability of raw	60%			
materials.				
(b) The positive impacts of the Chir	nese aid (%)			
Increase or growth in production	120%			
· ·				
Increase availability of the	120%			
services				
increase in employment				
opportunities				
increase in skill level	100%			
increase in knowledge	100%			
increase in technology transfer	100%			
Improve capacity building in the	100%			
project				
Increase availability of machines,	100%			
equipment and raw materials				
Training fields	600 labours			
	and 500			
	Engineers			

Source: Nour, Samia. Assessment of Effectiveness of Chinese Aid in Competence Building and Financing Developing in Sudan. Maastricht, 2014 Nour, S. S. O. M. (2014) Assessment of Effectiveness of Chinese Aid in Competence Building and Financing Development in Sudan. Maastricht, Maastricht Graduate School of Governance. MGSoS 37.



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