

China's Desire for Soft Power

How is China using environmentalism to gain influence in the developing world?



Kieran Downing

Master Thesis in International Relations – Culture & Politics

S2072386

Word Count: 14639

k.r.downing@umail.leidenuniv.nl

Table of Contents

1 - Introduction.....	3
2 - Literature Review.....	4
2.1 - Development and economic history of China.....	4
2.2 - Development of Green Technology in China.....	5
2.3 - International Development & Investment.....	7
2.4 - Emerging Importance of Soft Power for China.....	9
3 - Methodology.....	12
4 - China's involvement in Kenya and the development of energy and influence.....	13
4.1 - Chinese involvement in the electrification of Kenya.....	14
4.2 - Green Energy Development in Kenya.....	17
4.3 - Geothermal Energy in Kenya.....	18
4.4 - Traditional Energy Developments in Kenya.....	20
4.5 - China's influence in Kenya.....	22
5 - China - Pakistan involvement in green energy and soft power development.....	25
5.1 - China-Pakistan Relationship.....	25
5.2 - Energy Issues in Pakistan.....	26
5.3 - Green Solutions to Pakistan's Energy Problems.....	27
5.4 - Other Chinese sources of investment for Pakistan.....	29
5.5 - Chinese soft power and influence in Pakistan.....	32
6 - Findings.....	35
6.1 - Why Kenya and Pakistan?.....	37
7 - Conclusion	39
8 - References.....	40
9 - Bibliography.....	51

Introduction

China, as a nation, is world-renowned for the difficulties it has faced with its climate and pollution. Newspapers worldwide have commented and ran articles on the destruction of the environment in China for years. Pictures of smog and dust clouds in cities like Beijing, to reports over desertification are widespread in media. The destruction of the natural environment of China is the price the Chinese people paid for the development of their nation. The Chinese government has realized for many years the destruction that has been caused and the health problems its citizens face due to the toxic air they have breathed for two decades. In the last number of years, environmentalism has grown more popular in China. Seeing children wearing masks to school to protect from the fumes of factories has brought new perspective to the people of China and how they interact with the world and environment around them. Environmentalism in China is a relatively new phenomenon, yet it is now being wielded by the Communist Party to develop a new form of influence in the world. The focus of this thesis will be how China, in becoming an immensely wealthy world superpower, is using their new-found wealth to procure influence around the world through infrastructure and energy projects. The goal of this is to become a counterweight to the hegemonic United States while also using this new status to develop a multipolar world. China is committed to the environment; however, it also harbors an ambition to develop its influence around the world through soft power and developing a more positive image of China through environmentalism. The world is facing a real crisis with looming climate change, with many difficult decisions on the horizon. Green energy is fast becoming a powerful commodity that will only continue to grow in importance as the effects of climate change become more apparent. The Chinese government hopes to use the continued need for green energy as a launchpad to a larger sphere of influence in the future.

Through researching reports on climate change, energy consumption, China's Foreign Direct Investment, infrastructure projects and more, I will analyze through data and content analysis how China uses money and finance to garner influence in the Global South as a purveyor of development and renewable energy.

Literature Review

In this chapter, I will review literature regarding China's development in the last 3 decades while also looking into the development of green energy in general and then more specifically in China. I will also examine the emergence of soft power as a tool for nations to use and how China is utilizing soft power in its current state. Through the combination of these topics, I will showcase how China is using renewable energy to develop Chinese soft power around the world.

2.1 - Development and economic history of China

China has developed in 30 years at breakneck speed. They have achieved immense economic development over a timescale never seen before (Morrison, 2018). Within that time of massive economic development, the destruction of the environment in China was also accelerating at speeds never seen before (Qiu, 2011). Having taken the lead in GDP growth and FDI (Morrison, 2018), China has also become the world's number one consumer of coal, oil, and steel and the largest producer of CO2 emissions worldwide (China Power Project, 2018). The economic development that has brought such riches to China has also brought many health issues for its citizens and environmental issues for its land (He, 2014). It became quite clear many years ago that moving toward a more sustainable society would be necessary for China to continue thriving as it has for 20 years.

China is the world's largest polluter, having taken the mantle from the United States in 2007 (Buckley, 2017). It was even unearthed in 2015 that China was consuming up to 17% more coal per annum than had been reported (Buckley, 2015). This resulted in Beijing and Shanghai experiencing catastrophic levels of pollution which resulted in schools and business being closed, and residents being warned not to leave their homes if it was not necessary (Phillips, 2014). In December 2015, Beijing issued red alerts for severe pollution, which was the first since the emergency alert system was established (Wong, 2015). It was also found that in 2015 at least eighty percent of China's cities were breathing air that contained pollution above the recommended healthy amount (Dong, L. 2015).

2.2 - Development of Green Technology in China

The Chinese government came to the realization in the 2000's that investment in renewable energy would be paramount to safeguard the future of the country. Since that time, they have been rapidly funneling money into the development of new and alternative technology and fuels (Ren21, 2017) and invested an estimated 36 percent of the total global investment in renewable energy in 2016 (ibid.).

According to the Global Status Report (2017), China announced this year that it would invest 'CNY 2.5 trillion (USD 360 billion) in renewables by 2020' (GSI, 2017), due largely to the massive air pollution problems in major Chinese cities due to coal power plants. China also announced in January 2017 that it would cancel 100 coal plants (Forsythe, 2017) and that 29 coal plants that were in the planning stage were also being shelved to make way for renewable energy (Stanway, 2017). Due to the uptick in interest in green energy, more people are finding themselves employed in green energy than ever before in China. 3.9 million people were directly employed by green energy companies in China in 2017 and the rate of growth in employment is growing by roughly nineteen percent per annum (GSR Report, 2017, p.43).

It is thought that China could account for 28% of the world's energy demand by 2035 (Woetzel and Kejun, 2017). China currently accounts for 23% of the world's energy demands (BP, 2017). As a form of contrast, the United States currently accounts for 18% of the energy demand (AGI, 2018) and could drop to 12% of the world's total energy demand by 2035 (Woetzel and Kejun, 2017). It must be noted that China has attempted to make significant progress in reducing the intensity of its energy usage. The Chinese economy has grown exponentially since the 1980's. It has seen an 18-fold increase in the size of the economy, yet the consumption of energy in that same period is fivefold (Woetzel and Kejun, 2017). In layman's terms, this equals to a reduction in energy of 70% per GDP unit (ibid.).

One major component to reducing energy intensity in China is domestic investment into renewable energy. China intends to be at the forefront of green energy (Ren21, 2017) through continuous investment in renewable energy. Currently investing over USD\$100 billion per year

in renewable energy since 2014, China has already become the world's largest investor in renewable energy (Buckley and Nicholas, 2017). On top of the domestic investments totaling over \$100 billion, China is also investing over \$32 billion per year in overseas renewable energy (Buckley, Nicholas and Brown, 2018) China invests more money in renewable energy abroad than any other country worldwide (ibid.). This has led to Chinese companies increasingly finding themselves at the helm of global renewable energy development (Davidson, 2018). China's State Grid Corporation, a state entity, is planning an energy grid spanning the globe that will consist of wind turbines and solar panels (Baculinao, 2016). China is already seeing the fruits of the labour of being an early mass adopter of renewable energy. Chinese made solar panels are estimated to be roughly 20% cheaper than solar panels made in the United States (Fialka, 2016), due to the massive economies of scale involved along with a supply chain that is more developed than its US counterpart (Fialka, 2016). Chinese wind turbine manufacturers are also slowly closing the technology gaps they previously grappled with (Zhao and Ren, 2015). Wind turbines currently in use in China are domestically made 90% of the time. In 2002, this figure was just 25% (Woetzel and Kejun, 2017).

China is now being touted as the world leader for renewable energy (Buckley and Nicholas, 2017). Other countries are looking to China for ways and means to increase their development and use of renewable energy (Bradsher, 2017). This is one of the first times in modern history that other countries have started actively looking to China for innovative developments (ibid.). Highly developed nations such as Japan and Singapore are sending teams to study renewable energy in China (ibid.). It was not long ago that people considered China the factory of the world, with unending smog and a terrible quality of life. This vision of China, although mostly outdated nowadays, does persist in the western world.

All in all, it does not appear that there will be any slowdown in the demand for green energy and cutting-edge technology in China. The demand for green technology and energy in the domestic Chinese market will function as a vehicle to propel China to be the world leader in renewables. It is already being said that China has become the world leader in green energy. Many developing nations that hope to be carbon neutral by 2050 are seeing this huge change in China and using it as a road map in reducing energy intensity while developing green energy infrastructure.

China is still incredibly dependent on coal power, even with the enormous push toward green energy in recent years. It will be highly costly to fully transfer the Chinese energy sector from coal and other fossil fuels to newer, greener energy resources. Countries will also be keeping an eye out of this development. It could be said that China is being seen as the testing ground for the change to both developed and carbon neutral country.

As of 2018, solar panels and wind farm development is now more popular than fossil fuel development China, but the electrical grid in the country has yet to keep up with the rapid changes. This has left many solar panels and wind farms unusable for the time being. This, however, is just a temporary issue whilst the Chinese government implements the necessary infrastructure to the nationwide grid. A concerted effort to develop renewable energy and step away from fossil fuels as quickly as possible could result in a potential cost saving of a trillion dollars by 2035 (McKinsey, 2017). Ultimately, it will depend on how quickly this new technology is adopted by the Chinese government and then the Chinese people. If they adapt quickly, we may see changes at an unprecedented scale. If change is slow, it will continue the slow march to climate destruction (McKinsey, 2017).

2.3 - International Development & Investment

China understands that in order to continue the development of their own economy, foreign trade and investment is a necessary tool (PWC, 2018). Multinational and foreign trading by Chinese business is increasingly popular, especially in the Global South (Woetzel and Kejun, 2017). The Global South has become an important area of this foreign trade in recent years. South-South cooperation has exploded in recent years, mainly due to the development of the BRICS economies and the increased shared participation and economic cooperation of these nations. South-South trade, especially amongst nations such as China and India, have helped to herald the rise of the Global South. This rise of the Global South brings forward an idea that a multi-polar world is developing at a faster rate than ever before. Multipolarity, with powers such as China, India, Russia and the US leaves much room for development, growth, and opportunities for countries as opposed to a unipolar world where the United States was the economic king.

South-south cooperation is necessary for China as it is where the bulk of its soft power is developing. This is due to western and developed nations remaining weary of China and its

authoritarian government and rule. The weariness is not unfounded, as China does have a tendency to act of its own accord and play to its own rules. Therefore, China is intentionally honing in on nations in the developing world in order to gain a foothold before western nations can (Dollar, 2016). Western nations such as France and the United States tend to prefer investing in a nation if are willing to adhere to specific guidelines (ibid.) whereas China appears to be willing to offer capital and loans to a more diverse selection of countries (ibid.). Due to their more lenient loan system, China is now the biggest trade partner and biggest foreign investor of some African and Latin American countries, leaving the U.S. and EU countries behind in the distance (Dollar, 2016) (Anderlini, 2015).

During this decade, the main destination for investment into renewable energy has been Asia, and more specifically East Asia. Investment in renewable energy in Asia grew from USD\$64 billion in 2013 to USD\$114 billion in 2016 (Ren21, 2017. P.122). Although there was a reduction in energy investment between 2015 and 2016 (Ren21, 2017. P.123), it is still the world's dominant area for renewable energy technology and development. China is, of course, the main player in this scenario with \$78.3 billion in investment in renewable energy during 2016 (ibid.). China outstripped all other nations, with the United States, in second place, investing USD\$46.9 billion (ibid.). Japan invested USD\$14.4 billion while India invested a total of USD\$9.7 billion in 2016 (ibid.). The solar and wind power sectors of renewable energy are rather consistently the most popular form of investment across the globe. In 2013, 82% of total renewable energy investment was ploughed into wind and solar technology, and by 2016, that percentage had risen to 94%. (Ren21, 2017). Both solar (Mostly Solar PV or Photo Voltaic) and wind power each account for 47% of the total renewable energy investment in 2016 (ibid.). The pattern emerging here is that people and corporations appear to understand solar energy and wind energy. They are accepted as viable, easy to understand methods of providing, promoting and developing energy. Wind and solar energy are easier financial investments, and due to the fact that over 90% of the world's total green energy investment in 2016 was made by private companies and corporations, it is important for them to be financially viable. On a positive note, investment in renewable energy accounted for 63.5% of total investment in energy worldwide in 2016 (ibid.) Renewable energy was more popular than coal or any other fossil fuel investment with USD 249.8 billion invested in green energy compared to USD 113.8 billion for fossil fuel development and USD\$ 30 billion for nuclear power development (ibid.)

2.4 - Emerging Importance of Soft Power for China

Soft power is a concept first developed by Joseph Nye in 1990. According to Nye, soft power is ‘the ability to get what you want through attraction rather than coercion or payments. It arises from the attractiveness of a country’s culture, political ideals, and policies. When our policies are seen as legitimate in the eyes of other, our soft power is enhanced’ (Nye, 2004, P.5).

What is interesting to note is that China, and the Chinese government became aware in the 1990’s that a form of soft power would be necessary for China to compete on the world stage. Their issue was that, as a communist nation, they were very much in the minority. Thus, began the slow opening of the Chinese economy in order to slowly and carefully open up and begin to assimilate in certain regards with the rest of the world. Chinese people and their lived experiences were very different to other parts of the world, but they understood that a need to be more inclusionary to become more successful was the key (Nye, 2012).

However, it was not smooth sailing from there. China comes with its own unique set of characteristics that can make it more difficult to harness the pull of soft power. Soft power should generally be understood to be an organic or inherent thing within the culture of a particular country (Nye, 1990). Soft power can be borne out of the creativity of the people and then utilized by said country’s government to in order to promote it worldwide (ibid.). But soft power should always strive to be an organic creation or a preexisting state of culture (ibid.). This is where it begins to get more difficult for Chinese soft power to develop. As the Communist party has total control of the country, most everything needs to be sanctioned by the government. The Chinese Communist Party and its leaders do not naturally tend toward boundless creative expression and freedom. China, in reality, does not truly allow for the natural development of soft power in their society. The line between party and power is very much blurred with public diplomacy and soft power as all forms of culture must be approved by the Chinese central government (Osno, 2014). Joseph Nye states that there can be obstacles noting that ‘particularly in China, where the communist Party fears allowing too much intellectual freedom and resists outside influences’ (Nye, 2004. P. 89).

As a result of the heavy censorship placed on all forms of Chinese culture, there has been a dearth in the development of Chinese soft power through media. Chinese music, social media, and television shows have failed to take off in other parts of the world, and continue to struggle against K-Pop, Korean television programs and Japanese anime and manga (Zhou, 2015).

Although their development of soft power through cultural means is far from ideal, China has had some success in developing soft power through their economic success. China as an economic model is a form of their soft power (Barker, 2017). Having brought 500 million people out of abject poverty in 30 years, China has developed an immensely positive economic reputation worldwide, especially within the developing world and Global South (ibid.). Governments and counties with more authoritarian regimes have looked to China as an economic model but pollution and socio-economic issues which have developed as a result of economic development have hampered this soft power in recent years (ibid.).

The authoritarian model in which China functions is a more contentious point. There are other authoritarian nations that have taken a liking to the Chinese approach, yet more often than not, countries are not as authoritarian as China (Barker, 2017). This causes a break in the soft power dynamic and relatability of the Chinese success story. It is not feasible for many countries to develop the wealth and quick development such as China, as they do not wield the same level of power over their citizens and residents. This rise of authoritarian power has been described as ‘sharp power’ as opposed to ‘soft power’ which Nye (2018) had described as harnessing ‘the allure of culture and values to augment a country’s strength, sharp power helps authoritarian regimes compel behavior at home and manipulate opinion abroad’ (Nye, 2018).

This sharp power brings into focus the lack of transparency of the Chinese government (Bandow, 2017) which is also a stumbling block for analyzing the development of soft power in the Global South. According to David Shambaugh (2015) ‘nobody knows for sure how much China spends on these activities, but analysts estimate that the annual budget for “external propaganda” runs in the neighborhood of \$10 billion annually. By contrast, the U.S. Department of State spent \$666 million on public diplomacy in fiscal year 2014’ (Shambaugh, 2015). Although China is thought to spend roughly \$10 billion a year in specifically on soft power, as Shambaugh noted, it can be very difficult to ascertain where and how it is being spent but some information does make its way into the public sphere.

The money being spent on China's soft-power ventures is being fortified with serious investment capital: \$50 billion for the Asian Infrastructure Investment Bank (Weiss, 2017), \$41 billion for the New Development Bank (Rajendran, 2014), and \$40 billion for the Silk Road Economic Belt (Tweed, 2018) amongst innumerable other investments. Beijing has also pledged to invest \$1.25 trillion worldwide by 2025 (Shambaugh, 2015).

Much of this investment is being directed toward green energy. Having spent decades utilizing fossil fuels to develop China economically; renewable energy is now becoming a popular option for investment. China, although the world's largest polluter, now finds itself, rather paradoxically, as the world leader in green energy.

The dire need for cleaner energy sources to ensure the continued survival of the Chinese people and economy, along with Chinese investment in foreign energy and infrastructure projects along with the Chinese government's desire to expand their influence around the world all combine together to create this thesis that I will outline below.

Methodology

In order to conduct this analysis, and create a strong and concrete argument, I will use a variety of methods to garner the information needed. As this thesis covers a range of topics – soft power and influence, green technology, development and investment in green technology, infrastructure investment, the Belt and Road Initiative and the countries of China, Kenya, and Pakistan – it is pertinent to use various methods and means to make this a succinct methodological process. I will be looking content analysis by way of analyzing green energy reports, and investment reports in energy and infrastructure in all three countries. I will also be looking into how soft power is being utilized by China and the methods in which they are harnessing and developing their soft power and cultural influence. This will again, be through the lens of content analysis and also comparison of various media texts, such as newspaper articles and journals that are written from the point of view of Chinese and Chinese backed media companies, or Kenyan/Pakistani or non-Chinese backed media companies. In doing so, I will choose various articles written by the Chinese funded and non-Chinese funded newspapers and websites to showcase how the funding of green energy in Kenya and Pakistan is being utilized as a method to develop influence. There are, of course, limitations to the usage of newspaper articles and journals. They do not convey every sentiment that is felt by the local people toward China and Chinese investments. The authors of the articles will also have their own biases, of course. Given the time frame, it would have been more conclusive to visit Kenya, Pakistan and China to ascertain the feelings and beliefs of the local people, and how these people do view the Chinese in their country. This, however, was not feasible. Therefore, I have decided to engage with local and reputable foreign media as a method of taking the temperature of the local populace.

Other limitations include the fact that the Chinese government tends to be rather secretive with figures on foreign direct investment. There is a clandestine nature to the Chinese communist party that can hinder the development and understanding of how much money they spend abroad.

China's involvement in Kenya and the development of energy and influence.

China has become a key player in the development of other Global South states in recent years due to the large wealth that it has amassed (Sun, 2014). This is occurring through Chinese backed banking institutions offering large loans to developing countries relatively easily, with little strings attached (ibid.). These loans may be generally easy to receive, but they tend to have high interest rates and complex repayment schemes, which many countries cannot afford to pay back in time (Parker and Chefitz, 2018).

The Asian Infrastructure Investment Bank is one such bank. The AIIB was first discussed by Xi Jinping in 2013 and officially opened its doors in January 2016. In only two years since it opened, it has amassed an estimated capital of roughly \$100 billion, equivalent to 66% of the capital of the Asian Development Bank and about half that of the World Bank (Curran, 2018) even though both of these institutions that have been in existence for many decades. The AIIB has amassed a great deal of influence in a startlingly short amount of time and with all of their current projects based in developing economies, it has been said that it serves as a very generous form of soft power designed by Beijing through financing key infrastructure and energy projects (Zhu, 2015). The AIIB approved Kenya as a member of the AIIB in May 2018 (SCMP, 2018). This is expected to fuel further investment and loans by China into Kenya in the near future.

China already controls much of Kenya's debt. As of May 2018, China controls 66% of Kenya's total current bilateral debt, amounting to nearly USD\$4.8 billion, out of a total of USD\$7.2 billion (Stavis-Gridneff, 2018). In contrast, The World Bank and United Nations have loaned Kenya a combined USD\$5.3 billion since their formation until now (Omondi, 2018). The contrast here is stark. In 8 years, China has loaned Kenya nearly the same amount as the World Bank and United Nations in 70 years.

Until 2010, China had loaned Kenya a total of \$140 million. That number is now astronomically higher and with it comes other issues such as the balance of power and control.

China controlling such a large percentage of Kenya's bilateral debt is something that worries Kenyans. It could potentially evolve into a more authoritarian and controlling relationship in the future if Kenya finds difficulties repaying the Chinese loans. With Kenya's admission into the AIIB in May 2018, that figure is only set to rise higher and higher. With Kenyan debt to China rising, and the money from these loans going to projects that Kenyans are beginning to not want, the approval ratings of China have taken a hit in recent years (Pew, 2017).

As such, in this chapter I will set out how China, and Chinese companies have flourished in the Kenyan energy sector. This is due to the funding of green (and not-so-green) energy development through the Chinese government. I will also touch on why Kenya is being targeted by China for energy development due to the large increase in population and energy demand in the coming decades and that they were already relatively positive toward China. Data showing increasing need for energy coupled with a growing interest in green technology showed Chinese investors and companies that Kenya was a place where they could invest and make money. I will also analyze the fossil fuel side of the situation plus the now saturation of money in the region and the growing backlash toward Chinese money in Kenya.

4.1 - Chinese involvement in the electrification of Kenya

At this present time, Kenya runs on three different energy sources that are vastly different from each other. Biomass accounts for 69% of energy generation, followed by petroleum at 22% and finally electricity at a paltry 9% (Global Legal Insights, 2018). Looking further into the generation of electricity in Kenya now, electricity is currently generated in a variety of methods. Geothermal generation makes up 47%, hydropower has 39%, thermal generation is at 13% and wind power constitutes 0.4% (GSI, 2018). Although the sources of electricity generation are rather varied, the total output still only amounts to 9% of energy generation as a whole.

Total Energy Generation in Kenya

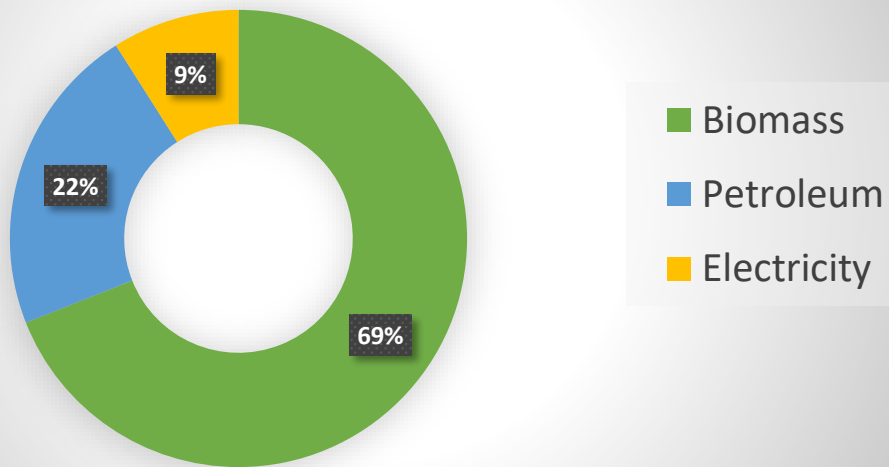


Figure 1 - (GSI, 2018)

Electricity Generation Breakdown in Kenya

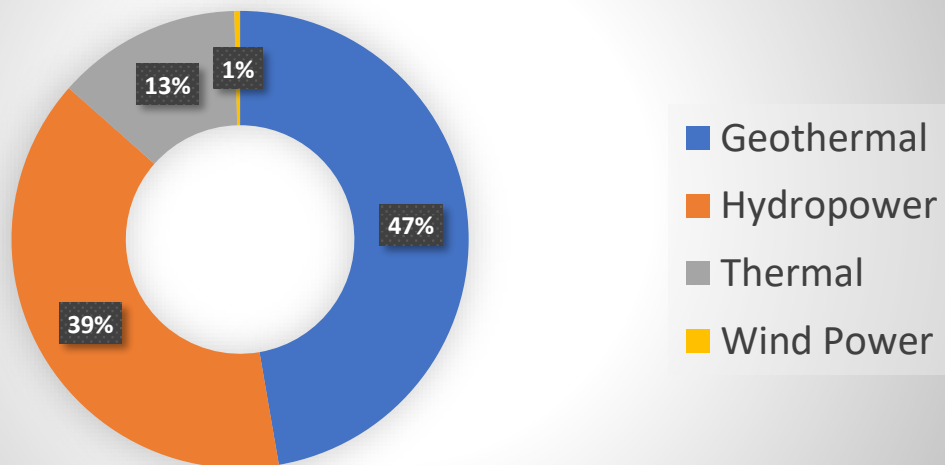


Figure 2 - (GSI, 2018)

This, however, is predicted to change in the near future. By the year 2030, the demand for electricity across the entire region of Eastern Africa is projected to triple (GSI, 2018). With this enormous gain in demand, investment in renewable technology will be an essential component for creating electricity in the region. It is the only way forward if the governments in the region plan to meet the demand with actual supply. Adding to the strain is that power generation is still quite unpredictable in Kenya. This is mostly due to hydropower, as it relies on unpredictable weather patterns, thus is less consistent in its energy output. Power outages can affect roughly a third of the population at any one time (GSI, 2018). This then affects the productivity and economic viability of the nation, as they cannot depend on consistent electricity. As a comparison, Mexico, China, and South Africa only experience power outages roughly 1% of the time (ibid.). In order for Kenya to thrive, it must develop a solid and consistent electricity energy generation.

As a sign of the growing influence of Chinese investment in Kenya, the China Electric Power Equipment and Technology Company Limited (CET) signed a \$240 million contract in January 2018 with the Kenya Electricity Transmission Company Limited (KETRACO) to provide the electrification of the Standard Gauge Railway that runs through Kenya (Aradi, 2018). Ninety percent of the funding for the SGR railway is being provided by the Exim Bank of China, a Chinese state-owned bank. The remaining 10% of the project is being funded by the Kenyan government (Kithinji, 2016). The Chinese government is in effect fully funding a \$13 billion railway project in Kenya. This railway is not being constructed as a purely altruistic project. China has been investing heavily in Kenya so that Kenya can form an integral part of the Belt and Road Initiative. In order for Kenya to become a viable part of the Belt and Road Initiative being development by China, Kenya will need an upgraded transportation network. This train runs between the two largest cities in Kenya, Nairobi and Mombasa. There are 14 substations being built between both cities and the hope is that the electrification of the railway line will lead to a more consistent train line with less breakdowns and more modern train stations and carriages (Kithinji, 2016). It is hoped that these improvements will be achieved while also switching to a cleaner power source in electricity. It is also hoped that these significant improvements will bring economic stimulus to the regions, towns and areas near the railway. Similarly, it is hoped that easy transport links combined with a reliable service will help support the development of a new economic corridor between Nairobi and Mombasa (Kithinji, 2016).

4.2 - Green Energy Development in Kenya

Kenya is ranked second to South Africa in clean energy investment in the African continent and sixth globally. USD\$3.6 billion was invested into green energy in Kenya between 2009 and 2014 (Ernst & Young, 2015). But even with the massive investments and projects, it is clear that electricity production will need to grow at a faster rate as demand grows. Kenya recently spent \$12 million to develop and launch the Climate Innovation Centre (Craig, 2012). The new facility is expected to facilitate the creation of 5000 green energy jobs created through Small and Medium Enterprises that will be incubated at this innovation centre (ibid.).

Chinese companies have taken notice of the high level of investment into green energy in Kenya and have been using it to their advantage in recent years. Two Chinese conglomerates, the NARI Group and Power China Guizhou Engineering Company were awarded a USD\$200 million contract to connect the new Lake Turkana Wind Power Farm to the Kenyan national grid. The largest wind farm on the continent of Africa, the Lake Turkana wind farm has a full capacity of 310 megawatts (Cormack and Kurewa, 2018). The Lake Turkana Wind Farm is also the single largest private investment in the history of Kenya (ibid.). Covering roughly 40,000 acres and home to 365 wind turbines with a capacity of 850 kilowatts each (Mutiga and Smith, 2015), the Lake Turkana Wind Farm will have the capacity to electrify 1 million homes at full capacity (Bll and Kimuge, 2018).

Solar power is also experiencing a boom in Kenya, alongside many other renewable energy sources. There are also plans for the Kenyan government to electrify more rural areas of the country. 25 smaller, so-called 'mini solar power plants' are planned in the North Eastern and Rift Valle to further the electrification of Kenya in the near future (Fortuna, 2018). Many of the towns pegged for electrification are currently located in off-grid areas and will reap many benefits from the arrival of solar power (Fortuna, 2018). It is also hoped that through the continued and progressive expansion of solar power in the country, the cost of the electricity generation will continue to fall, thus making it more affordable and available to more Kenyans. The aforementioned mini solar plants will join four existing mini solar plants which is hoped will help speed up the process of electrification.

Due to this clear demand and eagerness by the Kenyan government to expand into solar technology and solar generated electricity, Chinese solar power companies are now eagerly

looking to expand into Kenya. However, these Chinese companies are tending to target the end user, or the general Kenyan consumer (Mu, 2017). Numerous Chinese firms have set up in Kenya offering solar lighting, LED lighting and solar powered cooking equipment targeted to a more rural consumer, the type that will benefit from the construction of the mini solar power plants across Kenya (ibid.). On the consumer level these firms appear to be more connected to the local population. They tend to have local Kenyan vendors and distributors as opposed to the large-scale conglomerates building the wind farms, ports and railways which tend more toward Chinese workers.

4.3 - Geothermal Energy in Kenya

In February 2018 the Kenyan government announced that it wants to add 1,745 megawatts of geothermal generation to the national grid by 2025 (Obulutsa, 2018). It currently stands at ninth in the world for geothermal energy production (Yee, 2018). The Kenyan government has also created a new energy policy that has instructed KenGen, the Kenyan state-owned energy system, to eliminate fossil fuel-powered generation along with the country's independent power producers. Kenya Vision 2030, as it is called, is Kenya's new forward-thinking plan that outlines how Kenya is planning to have the majority electricity sourced from renewable energy by the year 2030. This is crucial for the development of the country as the demand for electricity is expected to rise between 7-9% annually over the next decade (Proctor, 2018).

It has been estimated that Kenya's population is projected to almost double in size over the coming years. The Kenyan population is forecasted to jump from 49 million in 2017 to 85 million people by 2050 (Fengler, 2010). With a massive increase in population, energy needs will also increase in turn. As of 2018, only forty percent of Kenyan's have access to a reliable electricity service (Yee, 2018). Fifteen hundred miles of transmission lines are currently under construction, with another 3,600 miles of lines in the works (Yee, 2018). Geothermal projects as a renewable energy source tend to a time consuming and arduous project, given that it can take a lot of time to explore for geothermal viability, collect necessary data, and develop the site for energy generation. Securing finance sufficient for the project can also add to the timeline.

Up until now, Chinese firms have dominated the exploration of geothermal energy in Kenya. Kenya has become a global leader in geothermal exploration as the government has invested heavily in green energy to reduce in reliance of diesel powered plants (Ren21, 2016). In the last five years, Chinese companies have won the most geothermal drilling contracts in Kenya, locking out much of the competition, including domestic firms (Mwaro Mangi, 2017).

When geothermal energy became more and more popular in Kenya, it was initially European firms receiving the contracts to develop geothermal energy. However, since 2005 Chinese companies have steadily overtaken the European firms. Great Wall Company, a Chinese corporation, has been the market leader for geothermal drilling in Kenya. They initially made their entrance in to the country when they won a contract to drill six wells in the Olkaria field (Kisero, 2010). This relatively small contract was followed by a contract to drill a further fifteen wells which were completed by 2008. Another ten wells followed afterward (ibid.). Currently, Great Wall has a contract to drill 26 new geothermal wells in Kenya (ibid.). This current contract is propped up through a loan to the Kenyan government from the Exim Bank of China to the value of USD\$95.4 million (Sanghi and Johnson, 2016). Exim Bank of China is a state-run bank. The Chinese government is actively pursuing the development of geothermal green technology through the facilitation of loans and money for exploration of geothermal activity.

Although geothermal drilling was initially welcomed by the Kenyan people, as it is a cleaner, safer and more sustainable form of energy, there are growing concerns amongst the people regarding the monopolistic nature of the Chinese companies with access to the geothermal wells (Pilling, 2018). This stems from the issue that the Kenyan government is footing the bill for this geothermal drilling, yet the loans have come from China and are being paid to Chinese companies. Through this process, the Kenyan government and people are shouldering the entirety of the risk in finding geothermal activity that is usable as energy. China has effectively minimized its risk by providing both the capital and labour, ensuring the money is returned domestically even if they fail to provide workable geothermal energy.

China, in this situation, has developed the best of both worlds for itself. China can extol the virtues of green energy through providing capital to developing nations for renewable energy, while safeguarding the return of the loan through the use of Chinese companies as labour and using Chinese banks such as the state-owned Exim Bank (Sanghi and Johnson, 2016).

It clear that Kenya wants to develop its energy potential, both green and traditional. It is necessary for Kenya to develop their electricity and energy network as the population of the

country will double by 2050 and along with that will come intense new demand. China, and the Chinese government have tapped into this expanding demand by offering these generous loans to the Kenyan government, but Chinese companies are doing the drilling, providing the manpower, and likely will reap the most benefits from this exploration and development of green technology. The Chinese companies, such as Great Wall Company are being directly state funded by the Chinese government, yet Kenya is shouldering the debt of this exploration. This type of information has slowly been leaking out to people in Kenya, and it has started to affect the way in which Kenyans view China.

4.4 - Traditional Energy Developments in Kenya

Although Chinese money and investments are unquestionably contributing to cleaner energy developments in Kenya, there is a darker side to the energy investments in Kenya. This is the investments being pumped into coal.

Amu Coal—a consortium of Kenyan and Chinese energy and investment firms—is set to start building a coal plant on the only part of the Kenyan coast that is untouched by industrial development.. The plant, which is to be built about 21 kilometers north of Lamu town, near the Kenyan coast, is to be known as the Lamu Power Plant (Nyabola, 2017).

The consortium behind the construction of the coal power plant is the Amu Power Consortium. The consortium comprises of Centum Investment and Gulf Energy which are both Kenyan (Bloomberg.com, 2018), China Huadian Corporation Power Operation Company and Sichuan Number 3 Power Construction Company which are both Chinese and state-owned and Sichuan Electric Power Design and Consulting Company which Chinese and privately owned. The Industrial and Commercial Bank of China, and officially the largest bank in the world, has put up \$1.2 billion of the \$2 billion total dollars of funding for the construction of the power plant. The Chinese central government owns 71% of the ICBC Bank, which deftly illustrates the connections of the Chinese government to the continued development of fossil fuel power plants as they own a majority of the bank that is putting up 60% of the funding of this coal power plant as well as owning 2 of the 5 companies that comprise the consortium that is building the plant itself. This truly does show how the Chinese government is still willing to fund coal power and fossil fuel energy development as long as it is not in China.

Kenya's president, Uhuru Kenyatta, led a delegation of investors to sign a USD\$2 billion deal in China, which guaranteed the funding for the Lamu coal power plant. In contrast to the Chinese funding for the Lamu plant in Kenya, China has recently cancelled 103 coal power plants (Forsythe, 2017) that were scheduled to be built domestically. Instead of constructing coal power plants domestically, they have shifted their attention to new renewable energy sources such as wind, nuclear and solar power. Their aim is to push coal to the side, as it is seen as one of the dirtiest and most expensive forms of energy production. Although China does have a domestic issue with air quality, they do not appear to be terribly bothered with the air quality of other countries. This does illustrate the differences between domestic policy and international policy for the Chinese. It appears that China is still very happy to finance the construction of harmful energy sources. All they ask in return is that it is built in faraway lands where Chinese people won't be affected negatively. It should be mentioned that the power plant commenced construction in 2013, with a view to having 5000MW of power up and running by December 2015. However, as of August 2018, only site clearance has been done on the construction site (Sengupta, 2018).

This coal power plant is being funded with Chinese money, however, you will find little reference to it in Chinese media. It is sometimes referred to as a 'port' in Chinese media. Xinhua News referred to the Lamu Coal Plant as the cleanest coal power plant ever built (Mu, 2018). Domestically, Kenyan media has grown tired of the delays to the projects and the obvious environmental issues surrounding the coal power plant (Kubania, 2018). Opposition to the power plant is growing, with a recent article of the Lamu plant in The Daily Nation, lambasting China for exporting its dirty power abroad. Kamau wrote that although Li Keqiang (The current Chinese Prime Minister) has vowed to 'make China blue again by cutting down on the use of coal to power its energy firm, China Power Global is involved in the project in Lamu where it will build the \$2 billion coal plant on 974-acres near the Indian Ocean' (Kamau, 2018). This correlates to the notion that as green energy takes hold in China; Chinese coal firms are being pushed abroad to continue making money. Beijing, although pushing domestically for more renewable energy, is still approving the financing and loans to Chinese coal companies so they can develop harmful power plants abroad (Kamau, 2018).

4.5 - China's influence in Kenya

China has, historically, had a higher approval rating in Kenya than most other nations, not only in Africa, but in the world (Pew, 2017). Approval of China by Kenyans hit a peak of 86% in 2010 (Pew, 2017). China has enjoyed a positive image in the African nation for years. The reasons Kenyans found China to be hospitable and helpful were many. China has helped to finance many infrastructure projects, opened Confucius Institutes in Kenya which facilitate the learning of Mandarin Chinese, and developing various media such as China Central Television, which in 2012 launched a broadcasting center in Nairobi alongside English-language Chinese newspapers that are circulated on a regular basis (Okang'a, 2017).

However, even though there have been many positive developments between Kenya and China, there is growing discontent in Kenya regarding China. An issue that is beginning to come to light now regards the large expatriate component of the workforce on Chinese backed projects. On the Standard Gauge Railway, there is currently 841 Chinese workers compared to 2,679 Kenyans. Although the SGR has been functional since 2017, Chinese workers will continue to be present on the SGR until 2027 at the earliest (Lang'at, 2018). Kenyan media is also picking up on the treatment of Kenyan workers on the SGR. *The Standard*, the oldest and most popular of Kenya's newspapers, conducted an investigation into the treatment of Kenyan and Chinese staff on the railway. They found that Kenyan and Chinese staff will not eat at the same tables, nor will they travel in the same vans (Wafula, 2018). Furthermore, if a Chinese worker is sitting in a van alone, the Kenyan will wait for another van to arrive instead of sharing (ibid.). Additionally, it was discovered that Chinese staff were permitted the use of their phones and also to smoke cigarettes yet if their Kenyan counterparts were to smoke or use their mobile phone, they would be fired (ibid.). The investigation moreover stated that that 'Kenyan drivers have taken charge of the 472-kilometre ride just once, during the project launch with President Uhuru Kenyatta as a passenger', when two female drivers made the trip' (ibid.). Once the VIP passengers had exited, the Chinese conductor resumed control and no Kenyan has been in charge of driving the train since (ibid.). Since all controls on board are in Chinese, the trained drivers have found themselves doing tasks such as cleaning and rubbish collection. The investigation also found that the Chinese staff were earning up to 5 times as much as their Kenyan counterparts (ibid.). Xinhua Africa, China's official newspaper in Africa reported that the Chinese envoy to 'Kenya rejected allegations that the operators of the Standard Gauge Railway (SGR) discriminated against local employees' (Mu, 2018). Xinhua also reported that

‘the Chinese ambassador to Kenya, told journalists in Nairobi that the only challenge that exists is a cultural and communication barrier between Chinese and local employees. The Chinese envoy called for objective reporting by the media to ensure that facts are known by the public’ (Mu, 2018). This reporting illustrates the differences in the narrative between domestic and Chinese media in the reporting of news regarding Chinese backed energy and infrastructure projects.

Even so, China is still developing a good image in Africa. They are developing soft power and influence in Kenya and throughout the continent, and a large part of that is the infrastructure projects they are funding. An Afrobarometer survey conducted in 2014 and 2015 surveyed Africans from across the African continent to find their views regarding China and the United States. Infrastructure and development, along with business investments appear to be the most important contributions by China and the Chinese people to the African continent according to the report (Afrobarometer, 2016). The report found that 75% of Kenyans think that China has some or a lot of influence over the Kenyan economy (ibid. 13). Only 4% of Kenyans thought that China had no influence on the Kenyan economy (ibid.). In a similar vein, 76% of Kenyans thought that China’s economic and political influence over their country was either somewhat positive or very positive (ibid. 15). Only 8% of Kenyans thought that China’s influence in the economy and politics of Kenya was negative in some capacity (ibid.). 67% of Kenyans thought that China’s economic development assistance was helpful to the Kenyan economy while 14% found it negative (ibid. 17). When asked what factor contributed to the most positive view of China, 69% of Kenyans opted for ‘Investment in infrastructure and business’ (ibid. 21). In second place was ‘Cost of Products’ with only 13% (ibid. 21). Only Zambia (74%) and Gabon (73%) ranked ‘investment in infrastructure and business’ higher than Kenya in the survey (ibid. 21). This goes to show how successful China has been at developing key infrastructure in Kenya, and the positive impact it is having on its image. Regarding negative views of China, 45% of Kenyans chose ‘quality of Chinese products’ as the most negative image of China. This was followed by 10% who chose ‘taking jobs and businesses from locals’ (ibid. 23).

Although the Afrobarometer painted a largely positive image, the survey was conducted in 2014 and 2015. A more recent poll conducted in 2017 by The Pew Research Center, shows a shift in the narrative. Pew found that in 2016, 54% of Kenyans had a positive image of China, and in 2017, 54% had a positive view of China, a drop of 2 points. This is in stark contrast to 86% approval in 2010 and even 70% in 2015 (Pew, 2017).

In recent years, 2017 and 2018, it has become more and more apparent that China is controlling

more of Kenya than ever before. Between China having control of nearly 70% of Kenya's total debt and the sheer amount of infrastructure projects that are solely in the hands of Chinese companies, Kenyan support of China appears to be waning. Chinese investment into Kenya appears to be a victim of its own success in some ways. China sees Kenya as a gateway to Africa, with untold resources and a government more than willing to work with China. They are investing in green (and not-so-green) technology for their own benefit and they are also still contributing to climate change in a harmful way. Although the Chinese are making huge strides domestically to move toward green energy, it does not nullify the coal power plant development in Kenya. If it is not in China itself, it does not mean that it is not harming the planet in some way or another. The Pew polls show that Kenyans think the most important thing Chinese people bring is money and investment into the country. Unfortunately, it appears that China has overused this openness to control an incredibly large amount of capital and work in Kenya through potentially overenthusiastic development. The Kenyan people are now growing tired of China being in control of its debt, railways, energy infrastructure, ports and more. There is only so much control one country can have over another.

China – Pakistan involvement in green energy and soft power development

5.1 - China-Pakistan Relationship

Relations between China and Pakistan are very cordial and friendly. Since establishing relations in 1956, they have formed a close bond with each other. China is Pakistan's second biggest trader (Kamal and Malik, 2017) and invests an enormous amount of money into Pakistani infrastructure (Page and Shah, 2018). Pakistan relies primarily on China for its arms and weapons (Kabir, 2018). In 2016, Pakistan spent USD\$ 5 billion purchasing 8 Chinese submarines to be delivered by 2028 (Gady, 2016). 52.8% of Chinese arms sold to other Asian nations between 2008 and 2017 were sold to Pakistan (China Power Project, 2018). Bangladesh followed in second place with 18.3% of sales (China Power Project, 2018).

Pakistani people also hold the most positive views toward Chinese people in the world (Pew, 2017). China and Pakistan have long and closely woven ties that stretch across all facets of their economy and society (Sattar, 2015). Having said that, China is far more influential in Pakistan, than Pakistani influence in China with Pew finding that only 30% of Chinese people have a favourable view of Pakistan versus 8% of Pakistanis having a favourable view of China (Pew, 2014).

China is currently building a massive port in the town of Gwadar, which will give China direct access to the Indian Ocean and Arabian Gulf (Tai, 2017). They are also developing a network of roads and infrastructure projects that will link Gwadar through Pakistan to the western Chinese province of Xinjiang (Hourelid, 2015). Under Chinese investment, Gwadar has morphed into a strategically important port for both countries. 20% of the world's oil flows through this region (Tai, 2017) and the port is located on one of the world's busiest shipping routes (ibid.). The Gwadar port is a part of the Belt & Road Initiative, a trillion-dollar investment program organized by China to create a modern-day silk road (ibid.).

Throughout this chapter, I will detail how much potential China sees in Pakistan, and the methods China is using to develop Pakistan through the China-Pakistan Economic Corridor. I will discuss various green energy projects along with other infrastructure and fossil fuel projects that are intrinsic parts of China's development goals for Pakistan. Finally, I will speak

about the influx of Chinese soft power and influence within Pakistan and the growing backlash against China, its investment and its people in Pakistan.

5.2 - Energy Issues in Pakistan

Pakistan is currently in the throes of an energy crisis that had led to an economic crisis. Coupled with a fast-growing population of 185 million people and many issues begin to arise (Awan and Khan, 2014). It is currently an underdeveloped and very populous country that requires a continuous source of energy to keep its development on pace and provide Pakistani people with a continuously improving standard of living. Only 67 percent of the population currently has access to electricity (Rana, 2014). As of now, Pakistan has been unable to fulfill its domestic energy requirements and is undergoing an acute energy crisis (ibid.). As it stands, Pakistan's needs to increase its total power output by roughly 25 percent in order to have a solid, dependable electricity grid (ibid.). The regular power outages have cost Pakistan's economy immensely. Power outages can routinely last more than 12 hours at a time, with all areas of the country, from rural to urban, affected (Siddique and Wazir, 2016). This has resulted in many businesses and enterprises being hampered in their operations and development, leaving a significant deficit in the country's economy.

This energy is not entirely unprecedented. In recent years Pakistan has seen massive increases in energy demand due to the expansion of transport sector, the manufacturing sector, and an increase in cars, trains, aviation and shipping across the nation. The ultimate cause of this debacle goes back years and can be attributed to decades of negligence, mismanagement and poor planning (Sajid and Javaid, 2018). Pakistan, as a developing country, requires vast amounts of energy to fulfill its household and industrial needs, while also keeping the country's development on track (Awan and Khan, 2014). However, Pakistan is struggling to meet a sustained supply of energy which has resulted in this crisis that they now face. Energy output in Pakistan focuses rather heavily on thermal generation, with hydrocarbons making up 87% of the total primary energy supply (Sajid and Javaid, 2018). Thermal, hydel, and nuclear power provide 62.5%, 33.6%, and 3.9% whilst oil makes up 35.1% (ibid.). Natural gas and coal make up 27.3% and 0.1%, respectively (ibid.). Hydro and nuclear are the renewable forms of energy generation with a share of 13% between the two in 2014 (Shakeel, Takala and Shakeel, 2016). 2014 was also a milestone year for Pakistan as the country experienced its' first contribution from wind energy in the mix at 0.2% of energy generation (ibid.). The above figures illustrate

that renewable energies have been slow on the uptake in Pakistan, even though the need for new energy, or, at the very least, a more diverse portfolio of energy sources is required by Pakistan to continue growing both economically and developmentally.

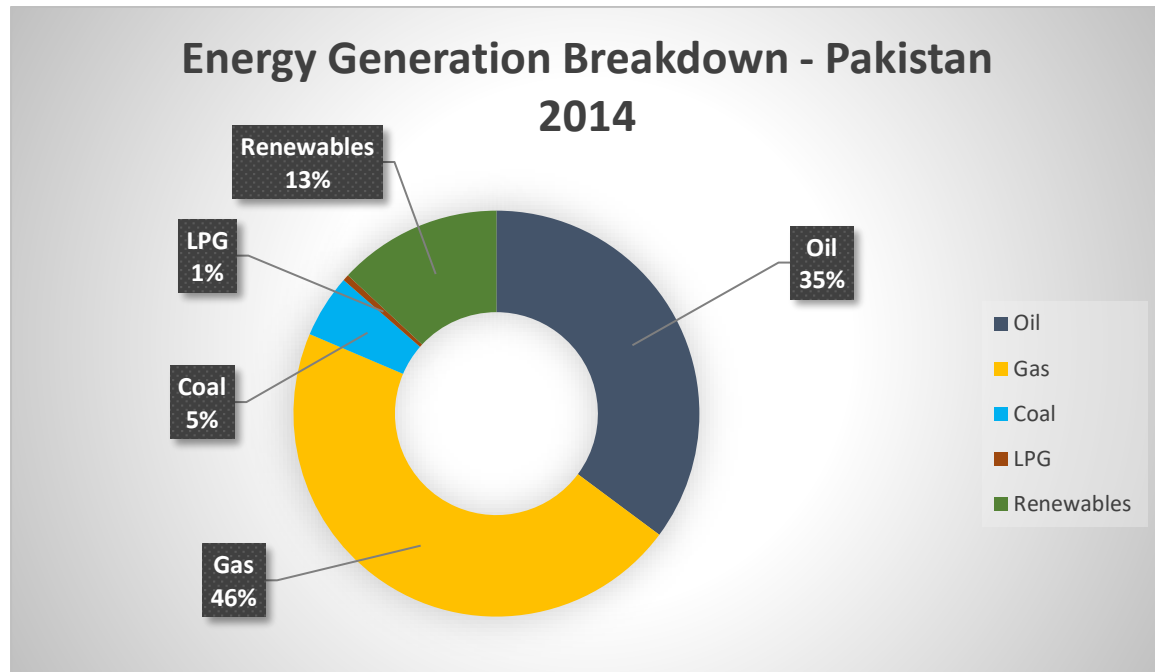


Figure 3 - (Shakeel, Takala and Shakeel, 2016)

5.3 - Green Solutions to Pakistan's Energy Problems

The energy crisis that Pakistan is facing has caused fossil fuel spending to increase in recent years (Wylie, 2018). Pakistan, however, has a vast repository of potential renewable energy (Shakeel, Takala and Shakeel, 2016) (Rauf et al., 2015) could make for a much more sustainable, and greener, solution. There are a number of renewable energy projects including the Dawood wind farm project, which is expected to provide fifty megawatts of energy generation. The wind farm is being built by HydroChina, a Chinese corporation, and financed by the Chinese ICBC Bank (Mancheva, 2016) but green energy is still far from the most popular energy form, nor is it likely to be in the near future. As of 2015 Pakistan derives around 35% of its energy generation from hydroelectricity (Rauf et al., 2015), however other promising renewable energy sources, such as solar and wind power, still have a small footprint on the energy landscape in Pakistan (Rauf et al., 2015). Pakistan's government and politicians are looking to alleviate the energy issues in whichever way possible, using any energy sources available to them. Once energy becomes more stable in Pakistan, they will turn their attention

to increasing the amount of green and renewable energy being used to power Pakistan.

That is not to say they are ignoring investment in green energy. Pakistan is focusing quite seriously on developing renewable energy, especially solar energy (Rauf et al., 2015). Pakistan's location makes it an ideal place for the development of solar power (ibid.). Sunshine averages roughly eight hours per day or 2300–2700 hours per year (ibid.). The Balochistan region of Pakistan has some of the most promising solar power potential in the entire world with an average of eight hours of sunshine per day (Ahmed et al., 2016). The total solar energy potential of Pakistan is approximately 2900 gigawatts (Shakeel, Takala and Shakeel, 2016). To put that into perspective, 2900 gigawatts of renewable energy could power 870,000,000 homes. Pakistan has the solar energy potential to generate electricity for over a billion people. With a current population of 185 million people, that would not only resolve all issues regarding energy domestically, but Pakistan would likely have the ability to sell the excess energy to neighboring countries for a tidy profit. Of course, that is the absolute ultimate, best case scenario potential for solar power in Pakistan. However, even if they were to harness half, or even a third of the absolute potential, it would likely remove all energy issues that Pakistan is currently having.

It may still be very early days for the development of solar power in Pakistan, but there have been positive developments and progress is being made. The Quaid-e-Azam solar park, located in the central province of Punjab, came online in 2015, and will eventually produce up to 1000 megawatts of electricity (Stokler et al, 2016). Pakistan announced in March 2018 that once the traditional power plants currently under construction have been completed, hydropower projects would become the priority (Kiani, 2018). In 2016, Zonergy, a Chinese company completed construction of the Quaid-e-Azam Solar Park, the world's largest solar power plant (Bhutta, 2015). It is 6,500 acres large and has a capacity of 1000 megawatts (ibid.). Another Chinese company, Xinjiang SunOasis completed the early stages of the solar park (ibid.). Here again, we see massively large scale renewable energy projects that are being financed by Chinese loans and constructed by Chinese firms. This again ensures that the capital remains domestically Chinese where possible. The Dawood wind power project, also financed with CPEC money, is being developed by HydroChina (Awan, 2018). The Suki Kinari Hydropower Project in Pakistan's Kaghan Valley is also being constructed with financing from China's Exim Bank (ibid.). China's Silk Road Fund is putting up the capital to construct the USD\$1.6 billion Karot Dam which is also being constructed as part of the CPEC (Xia, 2015). Finally,

the \$2.4 billion Kohala Hydropower Project is under construction by the Three Gorges Corporation, another Chinese firm (Zheng, 2018). All of these projects will no doubt bring renewable energy to the forefront in Pakistan. That is undoubtedly something that will help Pakistan to develop, and hopefully thrive with a more secure electricity base. What is concerning is that these are all multi-billion-dollar projects, all financed through Chinese banks, and constructed by Chinese conglomerates and companies. The workforce for the construction of these large-scale energy developments also tend to be Chinese, thus reducing the actual local input to a bare minimum. If China has control over the entire process of an infrastructure project from inception to completion, can it really be said that it is Pakistani? It must be stated again that the construction of these renewable energy infrastructure projects does not come free. They are being financed through loans that the Pakistani government and people will have to pay. Even though the workers are Chinese, the materials are Chinese, and the developers are Chinese. It begs the question; what happens if Pakistan cannot pay back the loans?

5.4 - Other Chinese sources of investment for Pakistan

China has begun to target countries with no current coal burning power plants for coal-power expansion in the near future through the Belt and Road Initiative (Tabuchi, 2017). Countries such as Pakistan and Egypt currently burn little to no coal for their energy, and these new coal powered plants could set a dangerous and backward tone for energy policy in developing nations (ibid.). Under the stewardship of Chinese capital and companies, Pakistan's coal capacity is set to grow to 16,000 megawatts from 190 (Shaikh and Tunio, 2017). As of now, Pakistan accounts for less than 1% of the world's total carbon emissions. Pakistan is ranked 135th in the world for carbon emissions. If the country's coal capacity does indeed grow from 190 megawatts to the projected 16000, Pakistan will see itself become a more heavily entrenched emitter of carbon emissions (ibid.).

Much of the Chinese investments into Pakistan are connected to the China-Pakistan Economic Corridor. The China-Pakistan Economic Corridor, also known as the CPEC, is a collection of infrastructure projects in Pakistan (Dadwal and Purushothaman, 2017). They are mostly under construction at the moment and financed through large loans from Chinese banks (ibid.), in a similar vein to the infrastructure development also happening in Kenya. The CPEC was originally valued at USD\$46 billion, but with an increase in projects, the entire scheme is now said to be worth over USD\$62 billion (Zheng, 2018). The CPEC intends to quickly modernize

Pakistan through strengthening and developing the economy and infrastructure of the nation. There are a myriad of transportation networks, special economic zones and energy projects being built to harness the most potential from Pakistan (Dadwal and Purushothaman, 2017).

The issue behind this is that the project in its entirety, although helping Pakistan, has been meticulously designed to benefit China as much as possible (Wintour, 2018). An enormous network of railways and motorways are being built in Pakistan to facilitate the development of the country (Lim, 2017). These motorways and railways will link northern Pakistan, which borders China, to the newly built ports in Gwadar and Karachi. The Chinese are also building motorways and railways to the western border of China that will be seamlessly connected to those in Pakistan (Lim, 2017). China is set to benefit from direct access to the Indian Ocean like never before. Previously, Chinese ships had to cross the Strait of Malacca between Malaysia, Indonesia and Singapore in order to transport their goods to Europe and Africa. Now they will have direct roads and trains leading to seaports far closer to Africa, Europe and the Middle East.

Over USD\$11 billion is being bankrolled for these transportation developments across Pakistan (Zahra-Malik, 2014). Financing for these developments is coming from Chinese banks such as ICBC (ibid.) and will be used to connect China and Pakistan more easily. Some of the projects include a motorway between Karachi and Lahore that will be over 1000 kilometers in length and vast upgrades and renovations for existing highways and railways, including the main Karachi-Peshawar rail line, the most important rail route in Pakistan. The goal is to eventually connect the Pakistani railway to the railways of Xinjiang in Western China, thus creating a seamless transportation network from China to the ports in southern Pakistan (Sahai, 2018). This transportation network of roads, motorways and railways that will intertwine China and Pakistan like never before are the product of the China Pakistan Economic Corridor, yet the impetus of the development is that China has the direct access to the Indian Ocean that it so desires. Pakistan is the location of the economic corridor, but China appears to be deciding what is being built, where it is being built and why it is being built. The motorways and railways will, no doubt, help accelerate the development of the country of Pakistan but at the end of the day these new roads all lead back to China.

On top of the \$11 billion being spent on transport, a further USD\$33 billion is to be spent on energy infrastructure throughout Pakistan (Zahra-Malik, 2014). This injection of capital is being ploughed mostly into fossil fuels, such as oil but there are some greener projects in the mix. Solar and wind power projects are being invested in, including the Quaid-Al-Azad solar park. Natural gas is also seeing an investment as stated above. Overall there is a large mix of energy sources being used in the CPEC, and although they are constructing the one of the world's largest solar power farms, the majority of the finance will be utilized by fossil fuels, which will continue to pollute the earth. This correlates with the same issues Kenya is having in that China is investing in green technology in both countries, but as a secondary investment to the fossil fuel investment. It appears to not be the primary priority for China in both Kenya and Pakistan to help develop a greener energy network that would likely be usable far further into the future, rather than the fossil fuels which are quickly running out. Although there is public knowledge and understanding that fossil fuels are running out and causing climate change and environmental issues, they continue to invest. Pakistan appears to have accepted these investments as they want to have a modern country with a stable energy environment that can compete on the global stage. Many countries in the developing world are currently seeing development like never before. Ethiopia, Cambodia, Vietnam and Laos are just some of the nations that are currently developing but within 50 years may well become full industrialized (The Economist, 2018). It is important for nations like Pakistan to think ahead and remain competitive. It appears that Pakistan's government has decided that trading a percentage of their sovereignty to China for the funds to develop their nation is a price worth paying. That is not to say that I disagree with Pakistan's government. Investment is important for any country. Although the investment in fossil fuels is rather backward thinking, the CPEC is expected to help bring massive amount of employment to Pakistan. It is estimated that the CPEC will be instrumental in the creation of upward of the 2 million jobs for Pakistan between 2015 and 2030 (Jabri, 2018), while if all projects in the CPEC come to fruition, the total value of these projects would be equivalent to all Foreign Direct Investment since 1970 (Deloitte, 2018).

This foreign direct investment is not only being spent on energy projects and motorways. The China Overseas Port Holding Company, which is building the Gwadar port in Pakistan is expected to spend USD\$4.5 billion in the area (Mooney and Shaw-Smith, 2016). They are constructing a floating liquefied natural gas facility as well as roads, power, hotels and other infrastructure, both in the port and in Gwadar city. China has also granted Pakistan USD\$230

million to construct a new international airport in Gwadar. This \$230 million is being seen as a gift to the Pakistan and they will not be obliged to repay (Jorgic, 2017). The Chinese state-owned Exim Bank of China, has also financed the building of a coal power plant in the city of Gwadar (Jorgic, 2017). While these gold star developments trundle on with the help of Chinese finance, the actual town of Gwadar still has a lack of basic facilities. Power outages are a common occurrence and there is still a lack of access to clean water. Balochistan, the province in which Gwadar is located, remains the poorest in the country (ibid.).

5.5 - Chinese soft power and influence in Pakistan

The China-Pakistan Economic Corridor has emerged as a vital tool for the development of Chinese soft power in Pakistan and abroad. China has invested an enormous amount of capital into Pakistan. This investment has opened up many new possibilities for Pakistanis. Economic cooperation between both countries is set to skyrocket (Hussain, 2016), and once all projects have finished, will likely continue to flourish over time. Pakistan has never seen so much investment before, especially from one singular nation (Hussain, 2016). China has realized that trade can play an important role in the development of soft power. By building roads, railways and ports with direct access between Pakistan and China, they are not only making goods easier to export around the world, they are making Chinese goods easier, and likely cheaper, to buy in Pakistan and vice versa. Beijing sees economic development as a form of peacemaking (Bowen, 2017). Since the 1990's the Chinese economy has grown at speeds never seen before, making its citizens wealthier every year. In the process, less and less Chinese people are challenging the system of government there. This is not all that surprising. The majority of people around the world have similar desires. Most people want to have a decent job, enough money for a place to live and put food on the table, and some money at the end of the month to spend on frivolities or to save it. China has, for the most part, succeeded in doing that for over a billion people. The economic development of China has been a runaway success. It has brought wealth to the country, but it has also brought peace and compliance from the Chinese people (Hawkins, 2017). Beijing can see for itself that economic development can bring a level of peace to a country that in turn also aids and encourages economic development. Other countries, companies and conglomerates tend to prefer investing in economically developed, peaceful countries. China is attempting to make this happen for Pakistan though the vast investment in the CPEC.

Pakistan has had a favorable view of China for many years. The Pew Group has polled Pakistanis for years regarding their image and view of China. They have consistently found high approval ratings in Pakistan for China. In the last poll conducted by Pew in 2015, 82% of Pakistanis had a positive image of China (Pew, 2017). This is compared to 78% with a positive view in 2014, 81% in 2013 and 85% in 2012. Both 2012 and 2010 recorded the highest favorability percentage at 85% (ibid.). In fact, approval has not dropped below 75% since 2007 (ibid.). The lowest approval was in 2006 at 69% (ibid.). This goes to show that, at least for the last decade, China has enjoyed very high approval ratings in Pakistan.

Although approval ratings in Pakistan for China remain high, China is also practicing the same safe bets in Pakistan as they are in Kenya. The Gwadar Port, one of the most important and high-profile projects in the CPEC will almost entirely benefit China (Jorgic, 2017). According to the agreement between Pakistan and China, 91 per cent of the revenues from the Gwadar port over the next 40 years are to go to the port's operator, Chinese Overseas Port Holding Company, with the remaining 9 per cent to go to the federal government (Aamir, 2018). Again, here we see enormous Chinese investment and development in other countries, yet China is still the country that stands to benefit almost entirely from the construction and operation of this port. Obviously, if a country offers loans and grants in order to help the development of infrastructure in another country, there will normally be caveats in place whereby the country funding the project receives access or some profits from the operation. This is to be expected. 91% of profits may be construed as rather excessive however.

The influx of cash and development from China into Pakistan, although welcomed, is becoming more contentious. Ordinary Pakistanis are worried that China is effectively buying the use of the country and the ability to mould the country however it sees fit. It is apparent that Pakistan, in accepting the CPEC deal, was aware that potentially some of its 'sovereignty' would be compromised in the pursuit of development. However, there is growing backlash across Pakistan. A prominent Chinese business man was recently murdered in his car while eating lunch. His murder was seen across Pakistan as reprimand for the growing unease amongst Pakistanis that their government has ceded too much power to the Chinese government (Wintour, 2018). Pakistanis officials and ministers have argued that were China to not have invested in Pakistan, there would not have been another country lined up to take China's place. This is a dilemma faced by many nations when Chinese investment comes knocking. Finance from China is generally free of the various moral and social obligations

attached to finance, aid and loans from western nations (Sun, 2014). China controls 46% of Pakistan's trade deficit (Wintour, 2018) and people are worried that a similar situation will arise in Pakistan as it did in Sri Lanka. Sri Lanka has had a port built in Hambantota by China, however as the revenue for the port has been low, Sri Lanka has been unable to pay the loans. In December 2017 Sri Lanka handed control of the port to two Chinese state bodies in a lease for 99 years (Schultz, 2017).

The Chinese state is resolute in its desire to develop countries in its own liking. The vast wealth that China has amassed in the last 3 decades has afforded it power and riches like never before. They have clearly decided to put this money to good use. The development of Pakistan in a way that primarily benefits China is no coincidence. The country borders both China and India, with India having a fairly contentious relationship with both Pakistan and China. The fact that China is investing so heavily in Pakistan shows that it has an active, and now vested, interest in the region and its development. It is important to also note that China is quite happy to invest in the continued development of fossil fuel projects in Pakistan and with the new railways and motorways, it will be easier than ever before to deliver energy from fossil fuels into China without having to actually deal with the ramifications that come from fossil fuel development. The juxtaposition between China investing in fossil fuel developments in a neighboring country while shutting down domestic coal plants and scrapping plans for any future plans is astounding. China, in this instance and likely many more, gets to remain the world's largest investor in green technology and can reap the benefits of the positive media that goes with it. They have become the world leader in green energy, yet their cities will continue to be run on Chinese funded fossil fuels, albeit from abroad.

Findings

From my research into the effect China is having on Pakistan and Kenya, it is obvious that they are threading a clear path toward power. They have amassed enormous amount of wealth in recent decades and are now using this wealth to attempt to buy influence in countries around the world (Stevenson & Li, 2018) Although it has been successful thus far, cracks appear to be starting to show. Kenya's approval ratings dropping in the last two years (Pew, 2017), especially considering the ramp up in Chinese investment there in those same two years shows that there is potentially a level of fatigue coming into play. The Chinese are undoubtedly doing good work in developing infrastructure, green energy and building roadways and railways in these developing countries. There may, however, need to be a reasonable limit to the amount of development China can and should have control over in another country.

China is pumping money into countries along the Belt and Road and beyond (Perlez and Huang, 2017). They have an endless supply of capital but that does not give them an endless supply of goodwill. The investment by Chinese money into infrastructure and green energy projects around the world have the ability to drum up good publicity for China and the Chinese government but it is masking the fact that many of these projects abroad are financed by Chinese banks, designed by Chinese companies, built by Chinese conglomerates who use Chinese workers (Abi-Habib, 2018). The lack of local workers, capital and companies is showing through more and more (ibid.). The lack of positives for the local community in many of these projects is becoming more apparent to the people of both Pakistan and Kenya. Pakistan is already hurtling toward a debt crisis just three years into the beginning to the CPEC development, due to the large-scale loans that Pakistan has taken on from China. They are already facing difficulties in paying back the loans (Page & Shah, 2018). The sheer scale of the loans may force Pakistan to request a bailout form the IMF (ibid.).

This economic free-for-all is part of a major public relations campaign that China has had in the works for over a decade (Abi-Habib, 2018). This vision to improve the perception of China worldwide began in 2007 under President Hu Jintao but has certainly intensified since Xi Jinping took power in 2012 (Shambaugh, 2015).

This has culminated in the development of the so-called 'Chinese Dream' (Kuhn, 2013). Beijing appears to attach much importance to the ideological theory behind the 'Chinese dream'

insofar as using it as a tool to carve out a common goal for Chinese people to achieve. It is used internationally too, mostly to cater to the many millions of Chinese living abroad, but it does have some foreign followers hoping to develop a career in the world's next superpower. The Chinese dream forms only a small part of China's schemes to enhance its soft power in media, education, sport and the arts. Although it is unclear and unreported how much money is spent by the Chinese government on soft power, it has been estimated at USD\$10 billion per year (Shambaugh, 2015). This is in contrast to the United States Department of State which spent USD\$666 million on public diplomacy in 2014 (ibid.). The numbers here are exponentially different. China is throwing money into all available rings to develop a more positive image worldwide. It must be noted that the United States, in 2014 at least, had immense soft power in almost all corners of the globe, however in recent years it has fallen (Nye, 2018). It is not necessary for the US to spend the equivalent amount of money that China currently feels like it needs to spend. The United States has been a cultural backbone of the world since the 1950's. Although we are moving from a unipolar world to a more multipolar world, the US is still a prominent purveyor of soft power (Burrows and George, 2016). China may eventually reach the lofty heights of US soft power, but it will need to continue spending money to reach the top due to the political regime, lack of transparency, internet censorship and cultural differences it currently faces.

China is focusing on developing soft power and influence in the Global South for this reason. The West still has many issues with the perception of China. China's soft power in the western world is still rather limited. There is still an albeit outdated viewpoint of China being a relatively poor (Stuart, 2015), developing nation which hampers its potential soft power. There is also the issue, as stated above, of the absence of a democracy (Fenby, 2015). Finally, China, at least until recently did not enjoy the cache of being a country to aspire to be like. It did not have cultural brand or soft power capital that illustrated China in a positive, and aspirational image. In 2018, this has begun to change, with Shenzhen becoming a tech capital, Chinese celebrities such as Alibaba's Jack Ma and the film star Fan Bingbing becoming more well known in the western and developing world. We are seeing a more 'natural' progression of Chinese soft power. The Beijing Olympics in 2008, the Shanghai Expo in 2010 and the upcoming Winter Olympics in 2022 illustrate how China could develop the growing interest in Chinese culture. There is also continuously growing demand for Mandarin Chinese language learning and people worldwide have come to the realization that China will be an important actor on the world stage. On top of this, Chinese state media is a growing presence in

developing nations, especially in Africa (Jiang et al., 2016).

Xinhua, one of China's premier television channels, is in a massive global expansion phase at the moment as another method of expanding Chinese influence across the globe (ibid.). Xinhua is looking to become a global player in the media world. China's main state TV channel, China Central Television or CCTV is also in the process of going global. CCTV launched an English language channel in 2000. CCTV currently broadcasts in 6 different languages around the world. CCTV established its African headquarters in Nairobi with a view to make inroads into the African media and television landscape (York, 2013).

These state-owned news organizations with bases worldwide can be used by the Chinese government to provide stories and news articles with a more positive slant regarding China. It should be noted that the same could be said for RT Today for Russia, FOX News for the US, or potentially even the BBC for Britain. This approach is not unique to China nor the Chinese government. It could be said, however, that the global expansion of media outlets by dominant countries is a method of reshaping the narrative to the viewpoint that is most beneficial for said country. All major world nations from Russia to the UK to China to France make use of this messaging to push their own agenda. Xinhua, having hundreds of bureaus in every corner of the world, is well placed to convey the Chinese governments' message to the world, and to convey the sense of soft power and diplomacy that are looking to develop.

6.1 - Why Kenya and Pakistan?

Kenya and Pakistan were chosen to highlight the growing unease and unhappiness with their terms and conditions of Chinese finance for a number of reasons. Kenya has a more recent relationship with China, whereas Pakistan has a long-standing relationship with Beijing. Both countries are at different stages of development regarding the Chinese backed infrastructure projects. However, although both countries differ, there is growing unease amongst the people of Kenya and Pakistan (Pew, 2017) about the role that China will play in their countries going forward. The image of China in both Kenya and Pakistan has been positive for years, yet with this unfettered investment by China in both countries, China's positive image is starting to erode. It appears that people in Pakistan and Kenya are realizing that China is not as altruistic as they appear with many of the developments being built for strategic purposes only, with the main beneficiary being China (Jorgic, 2017). The fact that other countries that have found

difficulty in paying back loans such as Sri Lanka (Abi-Habib, 2018) and Djibouti (Cheng, 2018) is also an issue. China has built its first non-domestic army base in Djibouti (ibid.), and Sri Lanka has ceded control of the Hambantota port for 99 years to China as the terms of the loan are too difficult for Sri Lanka to meet (ibid.). More information and news regarding unattainable loan repayments to China are making headlines and this does appear to be worrying governments connected to China around the world.

China utilizing money and knowledge of energy to develop influence and soft power is not limited to Kenya and Pakistan. China is engaging in this power revolution all over the world. Coal projects in Egypt, financed by Chinese capital and constructed by Shanghai Electric Company, are expected to bring the country's coal energy capacity to 17,000 megawatts (Tabuchi, 2017). Egypt's current capacity is near zero. The China Energy Engineering Corporation is constructing 2,200 megawatts worth of coal-fired power capacity in Vietnam and Malawi (ibid.). Of the world's 20 biggest coal plant developers, 11 are Chinese (ibid.). Countries such as China should not be using their considerable wealth to bring new countries in the coal power fold as it will only cause more damage in the future.

Both Kenya and Pakistan also feature on the Belt and Road Initiative. Nairobi is on the maritime silk road being developed by China. Gwadar in Pakistan is part of the China- Pakistan Economic Corridor which will be linked to the Silk Road Economic Belt. The Belt and Road Initiative is the future of China's global development which is designed to link China in a more seamless manner to Europe, the Middle East, Africa, Oceania and further afield.

Although Chinese investment in green energy and infrastructure in these countries is positive, the lack of local workers employed, and genuine local investment is beginning to grate on the people of the area (Abi-Habib, 2018). Coupled with the fact that it is coming to the surface that many Chinese projects are being used by China to just get a foothold in the area for trade (such as the Sri Lankan port) people are beginning to become wearier of Chinese investment and money. It appears that fatigue is indeed settling in amongst countries located along the Belt and Road, with Myanmar attempting to renegotiate a USD\$10 billion port, Malaysia cancelling a \$20 billion rail project and Nepal cancelling two hydroelectric dams (Page & Shah, 2018). This is indicative of governments realizing that Chinese finance may not be as clear cut as it appears to be.

Conclusion

In conclusion, China may be moving ahead with the developments of coal power plants in Kenya, Pakistan and elsewhere, but it is at odds with developments happening domestically in China. Renewable energy has taken hold in China (Davidson, 2018), a country that is famous worldwide for its harmful levels of pollution. Planned coal power plants have been shelved and renewable energy is now becoming more widespread within China (ibid.). China does remain the world's largest carbon emitter but this quick shift to renewables may see the end of China as the world's worst emitter in the near future (ibid.). However, even with this dramatic shift to renewable energy, China's government and state-controlled banks and companies continue to develop coal plants abroad (Slezak, 2017).

In spite of the growing backlash against China and its investment capital, it appears that Beijing will continue to affect change through financing. China is committed to green energy to a certain degree and they do appear to want to become more culturally and socially powerful within the world. We do not know how this will play out in years to come, and how their desire for more cultural influence will be decided. What is clear, is that countries have begun to realize that Chinese finance may have too many strings attached to be worthwhile.

Reference List

- Aamir, A. (2018). China's Belt and Road plans dismay Pakistan's poorest province | Financial Times. [online] Ft.com. Available at: <https://www.ft.com/content/c4b78fe0-5399-11e8-84f4-43d65af59d43> [Accessed 23 Sep. 2018].
- Abi-Habib, M. (2018). How China Got Sri Lanka to Cough Up a Port. [online] Nytimes.com. Available at: <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html> [Accessed 28 Sep. 2018].
- AGI (2018). How much of the world's energy does the United States use?. [online] AGI. Available at: <https://www.americangeosciences.org/critical-issues/faq/how-much-worlds-energy-does-united-states-use> [Accessed 21 Sep. 2018].
- Ahmed, S., Mahmood, A., Hasan, A., Sidhu, G. and Butt, M. (2016). A comparative review of China, India and Pakistan renewable energy sectors and sharing opportunities. *Renewable and Sustainable Energy Reviews*, 57, pp.216-225.
- Anderlini, J. (2015). China to become one of world's biggest overseas investors by 2020 | Financial Times. [online] Ft.com. Available at: <https://www.ft.com/content/5136953a-1b3d-11e5-8201-cbdb03d71480> [Accessed 4 Jul. 2018].
- Aradi, G. (2018). Ketraco signs Sh24b deal to power electric SGR trains. [online] The Standard. Available at: <https://www.standardmedia.co.ke/business/article/2001268689/sh24-billion-deal-to-electrify-sgr-signed> [Accessed 6 Apr. 2018].
- Awan, Z. (2018). Taking stock of power projects under CPEC - USA. [online] Usa.chinadaily.com.cn. Available at: <http://usa.chinadaily.com.cn/a/201809/05/WS5b8f47a4a310add14f389c53.html> [Accessed 5 Oct. 2018].
- Awan, A. and Khan, Z. (2014). Recent progress in renewable energy – Remedy of energy crisis in Pakistan. *Renewable and Sustainable Energy Reviews*, 33, pp.236-253.
- Baculinao, E. (2016). China Unveils \$50 Trillion Global Electricity Proposal. [online] NBC News. Available at: <https://www.nbcnews.com/business/energy/china-unveils-proposal-50-trillion-global-electricity-network-n548376> [Accessed 28 Jun. 2018].
- Bandow, D. (2017). China's Desperate Need for Political Transparency. [online] Cato Institute. Available at: <https://www.cato.org/publications/commentary/chinas-desperate-need-political-transparency> [Accessed 23 Jul. 2018].
- Barker, T. (2017). The Real Source of China's Soft Power. [online] The Diplomat. Available at: <https://thediplomat.com/2017/11/the-real-source-of-chinas-soft-power/> [Accessed 24 Jun. 2018].

Bhutta, Z. (2015). Bahawalpur to have world's largest solar power plant | The Express Tribune. [online] The Express Tribune. Available at: <https://tribune.com.pk/story/874303/bahawalpur-to-have-worlds-largest-solar-power-plant/> [Accessed 14 Aug. 2018].

Bll, B. and Kimuge, S. (2018). Lake Turkana wind power project set to come on line by September. [online] Daily Nation. Available at: <https://www.nation.co.ke/business/Lake-Turkana-wind-power-project-set-to-come-/996-4593956-x16b1fz/index.html> [Accessed 14 Sep. 2018].

Bloomberg.com. (2018). Company Overview of Centum Investment Company Limited. [online] Available at: <https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=9286886> [Accessed 21 Sep. 2018].

Bowen, J. (2017). China, Global Peacemaker?. [online] ChinaFile. Available at: <http://www.chinafile.com/reporting-opinion/viewpoint/china-global-peacemaker> [Accessed 14 Jul. 2018].

BP (2017). China: Country and Regional Insights. [online] bp.com. Available at: <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/country-and-regional-insights/china.html> [Accessed 3 Jun. 2018].

Bradsher, K. (2017). China Looks to Capitalize on Clean Energy as U.S. Retreats. [online] Nytimes.com. Available at: <https://www.nytimes.com/2017/06/05/business/energy-environment/china-clean-energy-coal-pollution.html> [Accessed 19 Jun. 2018].

Buckley, C. (2017). China's Role in Climate Change, and Possibly in Fighting It. [online] Nytimes.com. Available at: <https://www.nytimes.com/2017/06/02/world/asia/chinas-role-in-climate-change-and-possibly-in-fighting-it.html> [Accessed 3 Jun. 2018].

Buckley, C. (2015). China Burns Much More Coal Than Reported, Complicating Climate Talks. [online] Nytimes.com. Available at: <https://www.nytimes.com/2015/11/04/world/asia/china-burns-much-more-coal-than-reported-complicating-climate-talks.html> [Accessed 1 Aug. 2018].

Buckley, T. and Nicholas, S. (2017). China's Global Renewable Energy Expansion. [online] Ieefa.org. Available at: http://ieefa.org/wp-content/uploads/2017/01/Chinas-Global-Renewable-Energy-Expansion_January-2017.pdf [Accessed 24 Jul. 2018].

Buckley, T., Nicholas, S. and Brown, M. (2018). China 2017 Review World's Second-Biggest Economy Continues to Drive Global Trends in Energy Investment. [online] IEEFA. Available at: <http://ieefa.org/wp-content/uploads/2018/01/China-Review-2017.pdf> [Accessed 29 Sep. 2018].

Burrows, M. and George, R. (2016). Is America Ready for a Multipolar World?. [online] The National Interest. Available at: <https://nationalinterest.org/feature/america-ready-multipolar-world-14964> [Accessed 15 Aug. 2018].

Cheng, A. (2018). Will Djibouti Become Latest Country to Fall Into China's Debt Trap?. [online] Foreign Policy. Available at: <https://foreignpolicy.com/2018/07/31/will-djibouti-become-latest-country-to-fall-into-chinas-debt-trap/> [Accessed 9 Sep. 2018].

China Power Project (2018). How is China managing its greenhouse gas emissions? | ChinaPower Project. [online] China Power Project. Available at: <https://chinapower.csis.org/china-greenhouse-gas-emissions/> [Accessed 2 Oct. 2018].

China Power Project (2018). How dominant is China in the global arms trade?. [online] Center for Strategic and International Studies. Available at: <https://chinapower.csis.org/china-global-arms-trade/> [Accessed 10 Aug. 2018].

Cormack, Z. and Kurewa, A. (2018). The changing value of land in Northern Kenya: the case of Lake Turkana Wind Power. *Critical African Studies*, 10(1), pp.89-107.

Craig, J. (2012). Kenya Climate Innovation Center Helps Address Climate Change. [online] VOA. Available at: <https://www.voanews.com/a/kenyas-climate-innovation-center-helps-address-climate-change/1528784.html> [Accessed 22 Sep. 2018].

Curran, E. (2018). The AIIB China's World Bank. [online] Bloomberg.com. Available at: <https://www.bloomberg.com/quicktake/chinas-world-bank> [Accessed 19 Sep. 2018].

Dadwal, S. and Purushothaman, C. (2017). CPEC in Pakistan's Quest for Energy Security. *Strategic Analysis*, 41(5), pp.515-524.

Davidson, H. (2018). China on track to lead in renewables as US retreats. [online] the Guardian. Available at: <https://www.theguardian.com/environment/2018/jan/10/china-on-track-to-lead-in-renewables-as-us-retreats-report-says> [Accessed 7 Jun. 2018].

Deloitte (2018). How will CPEC boost Pakistan economy?. [online] Deloitte, pp.1-5. Available at: <https://www2.deloitte.com/content/dam/Deloitte/pk/Documents/risk/pak-china-eco-corridor-deloittepk-noexp.pdf> [Accessed 13 Oct. 2018].

Dollar, D. (2016). China as a Global Investor. [online] Foreign Policy at Brookings. Available at: https://www.brookings.edu/wp-content/uploads/2016/07/China-as-a-Global-Investor_Asia-Working-Paper-4-2.pdf [Accessed 5 Oct. 2018].

Ernst & Young (2015). Power transactions and trends Q3 2015. [online] Ernst & Young. Available at: [https://www.ey.com/Publication/vwLUAssets/EY_-_Power_transactions_and_trends_-_Q3_2015/\\$FILE/EY-power-transactions-and-trends-Q3-2015.pdf](https://www.ey.com/Publication/vwLUAssets/EY_-_Power_transactions_and_trends_-_Q3_2015/$FILE/EY-power-transactions-and-trends-Q3-2015.pdf) [Accessed 10 Jun. 2018].

Fenby, J. (2015). Is lack of democracy a problem for China?. [online] BBC News. Available at: <https://www.bbc.com/news/world-asia-china-30780040> [Accessed 25 Sep. 2018].

Fialka, J. (2016). Why China Is Dominating the Solar Industry. [online] Scientific American. Available at: <https://www.scientificamerican.com/article/why-china-is-dominating-the-solar-industry/> [Accessed 9 Jun. 2018].

Forsythe, M. (2017). China Cancels 103 Coal Plants, Mindful of Smog and Wasted Capacity. [online] Nytimes.com. Available at: <https://www.nytimes.com/2017/01/18/world/asia/china-coal-power-plants-pollution.html> [Accessed 29 Jun. 2018].

- Fortuna, C. (2018). Renewable Energy In Kenya: Meeting The Needs Of An Expanding Population. [online]. Clean Technica. Available at: <https://cleantechnica.com/2018/04/16/renewable-energy-in-kenya-meeting-the-needs-of-an-expanding-population/> [Accessed 30 July 2018].
- Gady, FS. (2016). China to Supply Pakistan With 8 New Stealth Attack Submarines by 2028. [online] The Diplomat. Available at: <https://thediplomat.com/2016/08/china-to-supply-pakistan-with-8-new-stealth-attack-submarines-by-2028/> [Accessed 2 Jul. 2018].
- He, G. (2014). The human cost of China's untold soil pollution problem. [online] The Guardian. Available at: <https://www.theguardian.com/environment/2014/jun/30/the-human-cost-of-chinas-untold-soil-pollution-problem> [Accessed 10 Jun. 2018].
- Hourel, K. (2015). China and Pakistan launch economic corridor plan worth \$46 billion. [online] Reuters. Available at: <https://www.reuters.com/article/us-pakistan-china/china-and-pakistan-launch-economic-corridor-plan-worth-46-billion-idUSKBN0NA12T20150420> [Accessed 16 Jul. 2018].
- Hussain, E. (2016). China–Pakistan Economic Corridor: Will It Sustain Itself?. *Fudan Journal of the Humanities and Social Sciences*, 10(2), pp.145-159.
- Jabri, P. (2018). CPEC to boost economic activities, generate two million new jobs till 2030. [online] Business Recorder. Available at: <https://www.brecorder.com/2018/08/20/434815/cpec-to-boost-economic-activities-generate-two-million-new-jobs-till-2030/> [Accessed 7 Sep. 2018].
- Jiang, F., Li, S., Rønning, H. and Tjønneland, E. (2016). The voice of China in Africa: media, communication technologies and image-building. *Chinese Journal of Communication*, [online] 9(1), pp.1-7. Available at: <https://www.tandfonline.com/doi/full/10.1080/17544750.2016.1141615> [Accessed 16 Sep. 2018].
- Jorgic, D. (2017). Hoping to extend maritime reach, China lavishes aid on Pakistan town. [online] Reuters. Available at: <https://www.reuters.com/article/us-china-silkroad-pakistan-insight/hoping-to-extend-maritime-reach-china-lavishes-aid-on-pakistan-town-idUSKBN1EB00J> [Accessed 25 Aug. 2018].
- Kabir, U. (2018). Pakistan listed 9th largest arms importer in the world by SIPRI | The Express Tribune. [online] The Express Tribune. Available at: <https://tribune.com.pk/story/1657844/3-pakistan-listed-9th-largest-arms-importer-world-sipri/> [Accessed 5 Sep. 2018].
- Kamal, J. and Malik, M. (2017). Dynamics of Pakistan's Trade Balance with China. [online] State Bank of Pakistan. Available at: <http://www.sbp.org.pk/publications/staff-notes/Pak-China-trade-balance.pdf> [Accessed 6 Aug. 2018].
- Kiani, K. (2018). Energy investments under CPEC shifted to hydropower sector. [online] DAWN.COM. Available at: <https://www.dawn.com/news/1392836> [Accessed 24 Sep. 2018].
- Kisero, J. (2010). Kenya on the cusp of a geothermal energy boom. [online] The East African. Available at: <http://www.theeastafrican.co.ke/news/Kenya-on-the-cusp-of-a-geothermal-energy-boom/-/2558/1057116/-/view/printVersion/-/2qaf94/-/index.html> [Accessed 23 Jun.

2018].

Kithinji, E. (2016). The Importance of Standard Gauge Railway (SGR) Project To The East African Region. [online]. International Journal of Current Business and Social Sciences, 1 (5), 15-32. Available at:

<http://www.ijcbss.org/attachments/article/89/The%20Importance%20of%20SGR%20Project%20to%20the%20East%20African%20Region.pdf> [Accessed 19 September 2018].

Kuhn, R. (2013). Xi Jinping's Chinese Dream. [online] Nytimes.com. Available at: <https://www.nytimes.com/2013/06/05/opinion/global/xi-jinpings-chinese-dream.html> [Accessed 11 May 2018].

Kubania, J. (2018). In Lamu, a coal power plant faces opposition. [online] Daily Nation. Available at: <https://www.nation.co.ke/news/In-Lamu--a-coal-power-plant-faces-opposition/1056-4378174-dajthdz/index.html> [Accessed 25 Sep. 2018].

Lang'at, P. (2018). Chinese to work at Kenya's Standard Gauge Railway till 2027. [online] The Daily Nation. Available at: <https://www.nation.co.ke/news/Chinese-to-work-at-SGR-till-2027/1056-4668756-xrjdlw/index.html> [Accessed 11 Aug. 2018].

Lekorwe, M., Chingwete, A., Okuru, M. and Samson, R. (2018). China's growing presence in Africa wins largely positive popular reviews. [online] Afrobarometer.org. Available at: http://afrobarometer.org/sites/default/files/publications/Dispatches/ab_r6_dispatchno122_perceptions_of_china_in_africa1.pdf [Accessed 16 Jul. 2018].

Mahmood, A., Javaid, N., Zafar, A., Riaz, R., Ahmed, S., Razzaq, S. (2013). Pakistan's overall energy potential assessment, comparison of LNG, TAPI and IPI gas projects. Renewable and Sustainable Energy Reviews. 31. 10.1016/j.rser.2013.11.047. [Accessed 30 Aug. 2018].

Mancheva, M. (2016). PowerChina installs last turbine at 49.5-MW Pakistani wind farm. [online] Renewablesnow.com. Available at: <https://renewablesnow.com/news/powerchina-installs-last-turbine-at-495-mw-pakistani-wind-farm-522832/> [Accessed 30 Aug. 2018].

McKinsey (2017). McKinsey Global Institute releases report: Beyond the supercycle: how technology is reshaping resources. [online] Mckinseyenergyinsights.com. Available at: <https://www.mckinseyenergyinsights.com/resources/pr/mckinsey-global-institute-releases-new-report/> [Accessed 4 May 2018].

Mooney, T. and Shaw-Smith, P. (2016). Volumes elusive at Gwadar but mammoth project work continues IHS Fairplay. [online] Fairplay.ihs.com. Available at: <https://fairplay.ihs.com/ports/article/4279271/volumes-elusive-at-gwadar-but-mammoth-project-work-continues> [Accessed 9 Sep. 2018].

Morrison, W. (2018). China's Economic Rise: History, Trends, Challenges, and Implications for the United States. [online] Fas.org. Available at: <https://fas.org/sgp/crs/row/RL33534.pdf> [Accessed 21 Aug. 2018].

Mukkam-Owuor, R. and Kageni, E. (2018). Energy 2018 | Kenya | Laws and Regulations - Global Legal Insights. [online] GLI - Global Legal Insights Energy 2018 | Kenya | Laws and Regulations. Available at: <https://www.globallegalinsights.com/practice-areas/energy-laws-and-regulations/kenya> [Accessed 8 Aug. 2018].

- Mu, X (ed). (2018). China rejects allegations of discrimination at Kenya's SGR. [online]. Xinhua Africa. Available at: http://www.xinhuanet.com/english/2018-07/28/c_137352793.html [Accessed 12 August 2018].
- Mu, X (ed). (2018). Kenya plans to build cleanest coal fired power plant in Africa: officials - Xinhua | English.news.cn. [online] Xinhuanet.com. Available at: http://www.xinhuanet.com/english/2018-05/17/c_137184491.html [Accessed 5 Jun. 2018].
- Mutiga, M. and Smith, D. (2015). Africa's largest windfarm set to connect remote Kenya to the grid. [online] the Guardian. Available at: <https://www.theguardian.com/environment/2015/oct/09/africas-largest-windfarm-set-to-connect-remote-kenya-to-the-grid> [Accessed 4 Sep. 2018].
- Mwaro Mangi, P. (2017). GEOTHERMAL EXPLORATION IN KENYA – STATUS REPORT AND UPDATES. United Nations University. [online] Available at: <https://orkustofnun.is/gogn/unu-gtp-sc/UNU-GTP-SC-25-0701.pdf> [Accessed 23 Sep. 2018].
- Nye, J. (1990). Soft Power. *Foreign Policy*, [online] (80), p.153. Available at: https://www-jstor-org.ezproxy.leidenuniv.nl:2443/stable/1148580?sid=primo&origin=crossref&seq=1#metadata_a_info_tab_contents [Accessed 16 Apr. 2018].
- Nye, J. (2012). China and soft power. *South African Journal of International Affairs*, [online] 19(2), pp.151-155. Available at: <https://www-tandfonline-com.ezproxy.leidenuniv.nl:2443/doi/pdf/10.1080/10220461.2012.706889?needAccess=true> [Accessed 5 May 2018].
- Nye, J. (2018). China's Soft and Sharp Power | by Joseph S. Nye. [online] Project Syndicate. Available at: <https://www.project-syndicate.org/commentary/china-soft-and-sharp-power-by-joseph-s--nye-2018-01> [Accessed 6 Aug. 2018].
- Nye, J. (2018). Donald Trump and the Decline of US Soft Power. [online] Project Syndicate. Available at: <https://www.project-syndicate.org/commentary/trump-american-soft-power-decline-by-joseph-s--nye-2018-02> [Accessed 30 Sep. 2018].
- Obulutsa, G. (2018). Kenya's KenGen says to add extra 1,745 MW to grid by 2025. [online] Reuters. Available at: <https://af.reuters.com/article/investingNews/idAFKCN1G315V-OZABS> [Accessed 22 May 2018].
- Omondi, D. (2018). China now controls 66 per cent of Kenya's bilateral debt. [online] The Standard. Available at: <https://www.standardmedia.co.ke/business/article/2001279079/kenya-s-debt-to-china-balloons-to-sh478-6b> [Accessed 21 Aug. 2018].
- Osno, E. (2014). China's Censored World. [online] Nytimes.com. Available at: <https://www.nytimes.com/2014/05/03/opinion/sunday/chinas-censored-world.html> [Accessed 1 Jun. 2018].
- Page, J. and Shah, S. (2018). China's Global Building Spree Runs Into Trouble in Pakistan. [online] WSJ. Available at: <https://www.wsj.com/articles/chinas-global-building-spree-runs-into-trouble-in-pakistan-1532280460> [Accessed 9 Sep. 2018].

Parker, S. and Chefitz, G. (2018). China's Debtbook Diplomacy: How China is Turning Bad Loans into Strategic Investments. [online] The Diplomat. Available at: <https://thediplomat.com/2018/06/chinas-debtbook-diplomacy-how-china-is-turning-bad-loans-into-strategic-investments/> [Accessed 30 Jun. 2018].

Perlez, J. and Huang, Y. (2017). Behind China's \$1 Trillion Plan to Shake Up the Economic Order. [online] Nytimes.com. Available at: <https://www.nytimes.com/2017/05/13/business/china-railway-one-belt-one-road-1-trillion-plan.html> [Accessed 10 Sep. 2018].

Pew (2014). How Asians View Each Other. [online] Pew Research Center's Global Attitudes Project. Available at: <http://www.pewglobal.org/2014/07/14/chapter-4-how-asians-view-each-other/> [Accessed 6 Aug. 2018].

Pew, 2017. Global Indicators Database | Do you have a favorable or unfavorable view of China? Pew Research Center's Global Attitudes Project - Do you have a favorable or unfavorable view of China? Available at: <http://www.pewglobal.org/database/indicator/24/> [Accessed May 17, 2018].

Phillips, T. (2014). Shanghai considers arming residents with anti-pollution masks. [online] Telegraph.co.uk. Available at: <https://www.telegraph.co.uk/news/worldnews/asia/china/10586296/Shanghai-considers-arming-residents-with-anti-pollution-masks.html?fb> [Accessed 8 Feb. 2018].

Pilling, D. (2018). Kenya's energy and transport plans come at a cost | Financial Times. [online] Ft.com. Available at: <https://www.ft.com/content/13c32d3a-658b-11e8-bdd1-cc0534df682c> [Accessed 12 Sep. 2018].

Proctor, D. (2018). Geothermal Generation Growing by Leaps and Bounds in Kenya. [online]. Power Magazine. Available at: <https://www.powermag.com/geothermal-generation-growing-by-leaps-and-bounds-in-kenya> [Accessed 30 July 2018].

PWC (2018). New Era in China ushering in new business opportunities. [online] PWC. Available at: <https://www.pwccn.com/en/research-and-insights/new-era-in-china/new-era-in-china-usher-ing-in-new-business-opportunities-en.pdf> [Accessed 12 Oct. 2018].

Qiu, J. (2011). China faces up to 'terrible' state of its ecosystems. Nature, [online] 471(7336), pp.19-19. Available at: <http://www.nature.com.ezproxy.leidenuniv.nl:2048/news/2011/110301/full/471019a.html> [Accessed 14 Sep. 2018].

Raheem, A., Abbasi, S.A., Memon, A., Samo, S.R., Taufiq-Yap, Y.H., Danquah, M.K., and Harun, R., 2016. Renewable energy deployment to combat energy crisis in Pakistan. Energy, Sustainability and Society, 6 (1).

Rajab, R. (2017). Is the Lamu coal power plant a poisoned chalice to the economy?. [online] The Star, Kenya. Available at: https://www.the-star.co.ke/news/2017/06/05/is-the-lamu-coal-power-plant-a-poisoned-chalice-to-the-economy_c1571770 [Accessed 18 Aug. 2018].

Rajendran, U. (2014). BRICS Bank: The New Kid on the Block. [online] The Diplomat. Available at: <https://thediplomat.com/2014/07/brics-bank-the-new-kid-on-the-block/> [Accessed 10 Jun. 2018].

- Rana, S. (2014). Two-thirds get electricity: Less than half of Pakistanis have access to sanitation, says WB. [online] The Express Tribune. Available at: <https://tribune.com.pk/story/690737/two-thirds-get-electricity-less-than-half-of-pakistanis-have-access-to-sanitation-says-wb/> [Accessed 27 Jul. 2018].
- Rauf, O., Wang, S., Yuan, P. and Tan, J. (2015). An overview of energy status and development in Pakistan. *Renewable and Sustainable Energy Reviews*, 48, pp.892-931.
- Ren21. (2016). Renewables 2016. Global Status Report. [online]. Renewable Energy Policy Network. Available from: http://www.ren21.net/wp-content/uploads/2016/10/REN21_GSR2016_FullReport_en_11.pdf [Accessed 13 November 2017].
- Ren21. (2017). Renewables 2017. Global Status Report. [online]. Renewable Energy Policy Network. Available from: <http://www.ren21.net/status-of-renewables/global-status-report/> [Accessed 14 November 2017].
- Sahai, D. (2018). China's terror dilemma in CPEC: A Xinjiang strategy?. [online] ORF. Available at: <https://www.orfonline.org/research/china-terror-dilemma-cpec-xinjiang-strategy/> [Accessed 20 Sep. 2018].
- Sajid, Z. and Javaid, A. (2018). A Stochastic Approach to Energy Policy and Management: A Case Study of the Pakistan Energy Crisis. *Energies*, 11(9), p.2424.
- Sanghi, A. and Johnson, D. (2016). Deal or No Deal Strictly Business for China in Kenya?. Policy Research Working Paper. [online] World Bank. Available at: <http://documents.worldbank.org/curated/en/801581468195561492/pdf/WPS7614.pdf> [Accessed 16 Sep. 2018].
- Sattar, H. (2015). China and Pakistan's All-Weather Friendship. [online] The Diplomat. Available at: <https://thediplomat.com/2015/03/china-and-pakistans-all-weather-friendship/> [Accessed 29 Jul. 2018].
- Schultz, K. (2017). Sri Lanka, Struggling With Debt, Hands a Major Port to China. [online] Nytimes.com. Available at: <https://www.nytimes.com/2017/12/12/world/asia/sri-lanka-china-port.html> [Accessed 29 Jun. 2018].
- Sengupta, S. (2018). Why Build Kenya's First Coal Plant? Hint: Think China. [online] Nytimes.com. Available at: <https://www.nytimes.com/2018/02/27/climate/coal-kenya-china-power.html> [Accessed 14 May 2018].
- Shaikh, S. and Tunio, S. (2017). Pakistan ramps up coal power with Chinese-backed plants. [online] Reuters. Available at: <https://www.reuters.com/article/us-pakistan-energy-coal/pakistan-ramps-up-coal-power-with-chinese-backed-plants-idUSKBN17Z019> [Accessed 21 Sep. 2018].
- Shakeel, S., Takala, J. and Shakeel, W. (2016). Renewable energy sources in power generation in Pakistan. *Renewable and Sustainable Energy Reviews*, 64, pp.421-434.
- Shambaugh, D. (2015) 'China's Soft-Power Push', *Foreign Affairs*, 94(4), pp. 99–107. Available at: <https://login.ezproxy.leidenuniv.nl:2443/login?URL=http://search.ebscohost.com.ezproxy.lei>

denuniv.nl:2048/login.aspx?direct=true&db=a2h&AN=103175014&site=ehost-live
(Accessed: 17 October 2018).

Siddique, S. and Wazir, R. (2016). A review of the wind power developments in Pakistan. *Renewable and Sustainable Energy Reviews*, 57, pp.351-361.

Slezak, M. (2017). Asia's coal-fired power boom 'bankrolled by foreign governments and banks'. [online] *The Guardian*. Available at: <https://www.theguardian.com/environment/2017/jul/20/asias-coal-fired-power-boom-bankrolled-by-foreign-governments-and-banks> [Accessed 10 Oct. 2018].

South China Morning Post. (2018). China-led AIIB approves Papua New Guinea, Kenya as members. [online] Available at: <https://www.scmp.com/news/china/diplomacy-defence/article/2144320/aiib-approves-papua-new-guinea-and-kenya-new-members> [Accessed 9 Jun. 2018].

Stanway, D. (2017). China suspends new coal-fired power plants in 29 provinces: report. [online] *Reuters*. Available at: <https://www.reuters.com/article/us-china-power-capacity/china-suspends-new-coal-fired-power-plants-in-29-provinces-report-idUSKBN1880P4> [Accessed 18 Apr. 2018].

Stevenson, A. and Li, C. (2018). China's Plan to Win Friends and Influence Includes Ski Slopes and Spas. [online] *Nytimes.com*. Available at: <https://www.nytimes.com/2018/08/01/business/china-belt-and-road.html> [Accessed 12 Oct. 2018].

Stavis-Gridneff, M. (2018). More of Africa Finds Itself in China's Debt. [online] *The Wall Street Journal*. Available at: <https://www.wsj.com/articles/more-of-africa-finds-itself-in-chinas-debt-1532549741> [Accessed 13 Sep. 2018].

Stökler, S., Schillings, C., Kraas, B. (2016) Solar resource assessment study for Pakistan. *Renewable and Sustainable Energy Reviews*. Volume 58. <https://doi.org/10.1016/j.rser.2015.12.298>.

Stuart, E. (2015). China has almost wiped out urban poverty. Now it must tackle inequality. [online] *The Guardian*. Available at: <https://www.theguardian.com/business/economics-blog/2015/aug/19/china-poverty-inequality-development-goals> [Accessed 28 Sep. 2018].

Sun, Y. (2014). China's Aid to Africa: Monster or Messiah?. [online] *Brookings*. Available at: <https://www.brookings.edu/opinions/chinas-aid-to-africa-monster-or-messiah/> [Accessed 24 Sep. 2018].

Tabuchi, H. (2017). As Beijing Joins Climate Fight, Chinese Companies Build Coal Plants. [online] *Nytimes.com*. Available at: <https://www.nytimes.com/2017/07/01/climate/china-energy-companies-coal-plants-climate-change.html> [Accessed 8 Sep. 2018].

Tai, M. (2017). Gwadar: A case of South–South cooperation. *Cambridge Journal of Eurasian Studies*, 1, pp.YQ3D9P.

The Economist (2018). The fastest-growing and shrinking economies in 2018. [online] *The Economist*. Available at: <https://www.economist.com/graphic-detail/2018/01/05/the-fastest-growing-and-shrinking-economies-in-2018> [Accessed 27 Sep. 2018].

- Tweed, D. (2018). China's New Silk road. [online] Bloomberg.com. Available at: <https://www.bloomberg.com/quicktake/china-s-silk-road> [Accessed 7 Sep. 2018].
- Wafula, P. (2018). Revealed: SGR workers treated badly by Chinese masters. [online]. The Standard. Available at: <https://www.standardmedia.co.ke/article/2001287179/revealed-sgr-workers-treated-badly-by-chinese-masters> [Accessed 9 August 2018].
- Weiss, M. (2017). Asian Infrastructure Investment Bank (AIIB). Congressional Research Service. [online] Available at: <https://fas.org/sgp/crs/row/R44754.pdf> [Accessed 5 Oct. 2018]
- Wintour, P. (2018). 'All-weather friendship': but is Pakistan relying too heavily on China?. [online] the Guardian. Available at: <https://www.theguardian.com/cities/2018/aug/03/all-weather-friendship-but-is-pakistan-relying-too-heavily-on-china> [Accessed 11 Sep. 2018].
- Woetzel, J. and Kejun, J. (2017). China's renewable energy revolution. [online] McKinsey & Company. Available at: <https://www.mckinsey.com/mgi/overview/in-the-news/china-renewable-energy-revolution> [Accessed 23 Aug. 2018].
- Wong, E. (2015). Beijing Issues Red Alert Over Air Pollution for the First Time. [online] Nytimes.com. Available at: <https://www.nytimes.com/2015/12/08/world/asia/beijing-pollution-red-alert.html> [Accessed 29 Jan. 2018].
- Wylie, R. (2018). A renewable solution to Pakistan's energy crisis?. [online] Eniday.com. Available at: https://www.eniday.com/en/sparks_en/a-renewable-solution-to-pakistans-crisis/ [Accessed 1 Oct. 2018].
- Yee, A. (2018). Geothermal Energy Grows in Kenya. [online] Nytimes.com. Available at: <https://www.nytimes.com/2018/02/23/business/geothermal-energy-grows-in-kenya.html> [Accessed 16 Jun. 2018].
- York, G. (2013). Why China is making a big play to control Africa's media. [online] The Globe and Mail. Available at: <https://www.theglobeandmail.com/news/world/media-agenda-china-buys-newsrooms-influence-in-africa/article14269323/> [Accessed 30 Aug. 2018].
- Zahra-Malik, M. (2014). China commits \$45.6 billion for economic corridor with Pakistan. [online] Reuters. Available at: <https://www.reuters.com/article/us-pakistan-china/china-commits-45-6-billion-for-economic-corridor-with-pakistan-idUSKCN0J51C120141121> [Accessed 28 Aug. 2018].
- Zhao, X. and Ren, L. (2015). Focus on the development of offshore wind power in China: Has the golden period come?. *Renewable Energy*, 81, pp.644-657.
- Zheng, Y. (2018). Chinese dams will help electricity-starved Pakistan. [online] South China Morning Post. Available at: <https://www.scmp.com/business/companies/article/2119898/china-three-gorges-pakistan-dams-will-benefit-electricity-starved> [Accessed 1 Sep. 2018].
- Zhou, Y. (2015). Pursuing soft power through cinema: censorship and double standards in mainland China. *Journal of Chinese Cinemas*, 9(3), pp.239-252.

Zhu, Z. (2015). China's AIIB and OBOR: Ambitions and Challenges. [online] The Diplomat. Available at: <https://thediplomat.com/2015/10/chinas-aiib-and-obor-ambitions-and-challenges/> [Accessed 13 Jul. 2018].

Bibliography

Albert, E. (2017). China's Big Bet on Soft Power. [online]. Council on Foreign Relations. Available at: <https://www.cfr.org/backgrounder/chinas-big-bet-soft-power> [Accessed 19 Nov. 2017].

Barker, T. (2017). The Real Source of China's Soft Power. [online]. The Diplomat. [Accessed 19 Nov. 2017]. Available at: <https://thediplomat.com/2017/11/the-real-source-of-chinas-soft-power> [Accessed 19 Nov. 2017].

Burgh, H, & Rong, Z. (2011). China's Environment and China's Environment Journalists. [online]. Bristol, UK: Intellect, eBook Collection EBSCOhost. Available from: <http://web.b.ebscohost.com/ehost/detail/detail?vid=0&sid=9d94dcf7-aaa6-404c-b0a8-b1a6e8f3cdc8%40sessionmgr104&bdata=JnNpdGU9ZWlhvc3QtbGl2ZQ%3d%3d#db=nlebk&AN=1135689> [Accessed 15 November 2017].

ChinaPower Project. (2017). Is China's soft power strategy working? [online]. China Power Project. Available at: <https://chinapower.csis.org/is-chinas-soft-power-strategy-working> [Accessed 19 Nov. 2017].

Cho, Y., & Jeong, J. (2008). China's Soft Power: Discussions, Resources, and Prospects. [online]. Asian Survey, 48(3), 453-472. Available at: doi:10.1525/as.2008.48.3.453 [Accessed 15 November 2017].

Ramo, J. (2007). Brand China. Beijing: Foreign Policy Centre.

Council on Foreign Relations. (2016). China's Environmental Crisis. [online]. CoFR. Available at: <https://www.cfr.org/backgrounder/chinas-environmental-crisis> [Accessed 20 December 2017].

Dong, L. (2015). 367 shades of grey: why China needs a coal cap. [online]. Greenpeace East Asia. Available at: <http://www.greenpeace.org/eastasia/news/blog/367-shades-of-grey-why-china-needs-a-coal-cap/blog/54429/> [Accessed 15 December 2017].

Financial Times. (2017). China's soft power comes with a very hard edge. [online]. Financial Times. Available at: <https://www.ft.com/content/ae476228-bfea-11e7-b8a3-38a6e068f464> [Accessed 19 Nov. 2017].

Gardels, N. (2017). Is China's Hard Power Undermining its Soft Power?. [online]. Huffington Post. Available at: https://www.huffingtonpost.com/nathan-gardels/china-power-confrontation_b_5496816.html [Accessed 19 Nov. 2017].

Geall, S (ed.) (2013). China and the Environment : The Green Revolution. [online]. Zed Books, London. Available from: <https://ebookcentral.proquest.com/lib/leidenuniv/detail.action?docID=1160735> [Accessed 20 November 2017].

Hong, Z. (2015). The Price of China's Economic Development : Power, Capital, and the Poverty of Rights. [online]. The University Press of Kentucky, Lexington, Kentucky. Available at: <http://web.b.ebscohost.com/ehost/detail/detail?vid=0&sid=2b280f8f-a387-45a3-93c4-4b7deb95849d%40pdc-v-sessionmgr01&bdata=JnNpdGU9ZWlhvc3QtbGl2ZQ%3d%3d#AN=975562&db=nlebk>

[Accessed 20 November 2017].

Kahn, M. (2016). For China, climate change is no hoax – it’s a business and political opportunity. [online]. The Conversation. Available at: <https://theconversation.com/for-china-climate-change-is-no-hoax-its-a-business-and-political-opportunity-69191> [Accessed 19 December 2017].

O’Donnell, L. (2004). A Thirst for Power: China in Tibet. [online]. The Ecologist. [online]. Available from: <http://www.theecologist.org/2004/jun/01/thirst-power-china-tibet>]. [Accessed 14 November 2017].

Oluwaseun, T. (2017). South Africa in BRICS: The Regional Power’s Soft Power and Soft Balancing. [online]. Politikon 44:3, pages 387-403. Available from: <http://www.tandfonline.com/doi/abs/10.1080/02589346.2017.1295620> [Accessed 15 November 2017].

Ming, L, Chen, Z, & Wang, Y. (2013). China’s Economic Development : Institutions, Growth and Imbalances. [online]. Edward Elgar Publishing. Cheltenham, Gloucestershire. Available from: <https://ebookcentral.proquest.com/lib/leidenuniv/detail.action?docID=1164205> [Accessed 20 November 2017].

Nye, J. (2004). Soft Power: The Means to Success in World Business. New York, N.Y Public Affairs.

Ren21. (2016). Renewables 2016. Global Status Report. [online]. Renewable Energy Policy Network. Available from: http://www.ren21.net/wp-content/uploads/2016/10/REN21_GSR2016_FullReport_en_11.pdf [Accessed 13 November 2017].

Ren21. (2017). Renewables 2017. Global Status Report. [online]. Renewable Energy Policy Network. Available from: <http://www.ren21.net/status-of-renewables/global-status-report/> [Accessed 14 November 2017].

Ren21. (2017). Renewables Global Futures Report 2017. [online]. Renewable Energy Policy Network. Available from: <http://www.ren21.net/renewables-global-futures-report-2017-now-available/> [Accessed 16 November 2017].

Shambaugh, D. (2015). China’s Soft Power Push. [online]. Foreign Affairs, Volume 94; Issue 4. Available at: https://global.factiva.com/ha/default.aspx#!?&_suid=151117621266502807841080204587 [Accessed 16 November 2017].

Shapiro, J. (2001). Mao’s War against Nature: Politics and the Environment in Revolutionary China. [online]. Cambridge: Cambridge University Press. Available at: <https://www.cambridge.org/core/books/maos-war-against-nature/B2B796F91692D9D6E99675511C3D5FF4> [Accessed 19 November 2017].

Thrall, L, & Rand, C. (2015). China's Expanding African Relations : Implications For U.S. National Security. [online]. Santa Monica, California: RAND Corporation, eBook Collection (EBSCOhost), EBSCOhost. Available at: [http://web.b.ebscohost.com/ehost/ebookviewer/ebook/bmxIYmtfXzEwMjA3NDhfX0FO0?sid=2161befd-9a8e-4a4f-a859-81d51f835750@sessionmgr102&vid=0&format=EB&rid=1](http://web.b.ebscohost.com/ehost/ebookviewer/ebook/bmxIYmtfXzEwMjA3NDhfX0FO0?sid=2161befd-9a8e-4a4f-a859-81d51f835750@sessionmgr102&vid=0&format=EB&rid=1S2072386)

[Accessed 17 November 2017].

Van Someren, TCR. & Van Someren-Wang, S. (2014). Green China : Sustainable Growth in East and West. [online]. Springer Berlin Heidelberg. Berlin, Heidelberg. Available from: <https://ebookcentral.proquest.com/lib/leidenuniv/detail.action?docID=1030787> [Accessed 20 November 2017].