

A Critical Analysis of China's Role in Global Energy Governance as a Strategy for Energy Security and Seeking Hegemony

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Abstract

In the turn of the twenty-first, China has grown to become the largest energy consumer in the world, the largest energy producer globally and has risen to prominence as one of the leaders in the development of alternative and renewable energy sources. This has granted China the status as a leader in global energy governance. But while China has actively participated in international energy markets as a massive competition, this has also been juxtaposed with an odd reluctance to ambitiously participate in global energy regimes. However, under President Xi Jinping this has changed, and China has become more and more dominant in the global energy sector; not just in the market but now in its governance. From its inclusion in international energy institutions to its role in energy development in the Belt and Road Initiative, BRICS and New Development Bank; we can now see how China has expanded its dominance in the energy sector. By using qualitative methods, this paper critically analyses China's strive to become a global hegemony via dominance in the energy development sector, both as a tool for its energy security as well as to hold geopolitical control over developing nations that rely on China for their energy needs.

Keywords:

energy governance, China, energy security, Belt and Road Initiative

1. Introduction

Since the advent of early human civilisations and the shift of human behaviour from hunter-gatherers to permanent agricultural societies one fundamental challenge remains intact; how can a group of individuals meet the growing needs of their expanding population quickly and fully. For centuries this has developed a culture of innovation and dynamic changes in human history. Entering the age of modern civilisation, these great changes in human history are divided into several distinct markings in the timeline to codify them; we call these specific eras industrial revolutions. The industrial revolution was the single most important development in human history in the last three centuries (Stearns, 2013). Thus far, there have been four distinct industrial revolutions; the first revolution is that of the eighteenth century in which early machinery was invented with the steam engine being one of the most significant, the second was signalled with the discovery of electricity, the third was characterised as the beginning of the era of information technology and finally the fourth is the era of massive industrial automation (Annisa, 2021; Cholily et al., 2019; Harahap, 2019).

The events of the first and second industrial revolutions introduced us to a new concept that would grow to become one of the most vital aspects of human livelihood in modern society energy. Up until then, our understanding of energy in the realm of physics had been confined and limited to mean the output

of any physical item or system either potentially, kinetically, thermally or in many of its other forms. But the industrial revolution has brought into reality a form of energy that transformed human lives like never seen before; and without realising it we had entered the dawn of the age of electricity (Ruíz, 2020). Less than one and a half centuries later, we have yet to reach the ceiling of this era and even then, we can already see how much electricity has changed our modern lives (Bryce, 2020). Industrial activities after the first and second revolutions have transformed the economies of many industrious and industrialised nations. Although this did not always prove to be for the better, automation resulted in an economy so efficient in production that it required far fewer employees and therefore resulted in significant increases in unemployment. It has fundamentally changed how we as humans work by creating new ways and tools to aid in human lives, and more importantly, in accelerating the production of goods (Annisa, 2021).

During all this, we must remember that not all states have had the same experience since the advent of industrialisation. China experienced technological breakthroughs in the early stages of industrialisation with the development of water-driven textile machinery in the fourteenth century (Elvin, 1973). This was much earlier than the western world. Yet, while the industrial revolution came early to England, China was slowly falling behind. While textile-factory technology became widely known in most of Asia in the nineteenth century, China was slow to adopt the technology; even falling behind Japan by almost half a century (Goldstone, 1996). This weakened China's standing on the world stage and as the western world began to expand to the east via trade routes and explorations, China became open to the dominant forces of the west. This led China into one of its darkest periods in history, the Century of Humiliation (Sun, 2021). This period was marked by the exploitation, domination, and devastation of China by foreign powers, and from that trauma, China began its efforts for rapid development and industrialisation; desperate not to let such a thing happen ever again. This push for rapid growth comes at a large energy cost which has led China to expand its energy make-up to meet such growing demands (Ayu, 2019).

Now entering the fourth industrial revolution at the turn of the twenty-first century, the field of energy is becoming increasingly multidimensional and complex. From the growing energy demands, the issue of electrification in the global south and energy-related carbon emissions, to the issue of climate change and environmental issues relating to energy production; there is a multitude of complex issues that need to be addressed. In its efforts to do so, the international community has attempted to establish global regimes, institutions and other efforts on both regional and global scales to overcome these issues. This has led to global energy governance becoming fractured, with many different energy regimes and institutions simultaneously existing together and oftentimes even overlapping (Escribano, 2014). This has made global energy regimes increasingly inter-polar, which explains why hegemony is bounded by these energy regimes (Escribano, 2014).

In this age, China has caught up with the rest of the world through rapid industrialisation in the 1970s and reconstructed its economy. This has been met with an ever-increasing demand for even more energy, and China faces the challenge of meeting these demands while facing other energy-related issues such as climate change and environmental impacts. But where China has flourished in energy markets, participating actively and even dominating several sectors; China has also adopted a rather reluctant attitude when it comes to participating in global energy regimes. This is a rather odd stance to have, given China's position as the largest consumer and producer of energy would benefit from holding significant influence over the norm-setting of global energy regimes. This all changed under President Xi Jinping, who sought to expand China's leadership role and sphere of influence through many policy changes; from participating in several energy governance projects to implementing several programmes in energy development with the Belt and Road Initiative (BRI) and BRIC's New Development Bank (NDB).

Thus, this article attempts to critically analyse how China's global energy policy has evolved from past administrations to the era of President Xi Jinping, particularly by looking into several aspects. First, the paper will evaluate how China has used its dominance in the energy sector as an instrument to grant itself a powerful role in global energy regimes. Second, the article will analyse the implementation of

China's regimes in energy development; particularly in the case of the Belt and Road Initiative (BRI), as well as Brazil, Russia, India, China and South Africa (BRICS) multilateral forum and its initiative the New Development Bank (NDB). Finally, the article will use Szeman's critical theory for energy to analyse China's energy policy under Xi Jinping to elaborate on China's use of energy as a tool for securing China's energy and for seeking hegemony through its participation in energy regimes and other instruments in China's energy sector.

2. Literature Review

In conducting this research, past contributions from other researchers on the topic of energy governance and China's changing energy has helped complete this article. However, here the authors would like to highlight not only past research on the subject but also the development of theorising energy matters which is a fairly new and evolving area.

First, the authors would like to highlight the work of Dr Zhang Jian titled "China's Energy Security: Prospects, Challenges, and Opportunities" published in 2011 which addresses how China categorises energy security as an aspect of domestic economic development and not a part of their foreign policy. Dr Jian further highlights how China deviates from the Western model for economic industrialisation which emits higher amounts of carbon and instead adopts its energy security policy. Dr Jian notes how this leaves the issue of how China will develop low carbon energy through research and development of clean coal and renewables; making this article rather incomplete in analysing China's role in energy governance and issues of carbon-emitting fossil fuels that remain a thorn in China's energy matrix.

Second, the authors turned to "*Analisis Strategi Keamanan Energi China dalam Upaya Penurunan Emisi Karbon melalui Pendekatan Konstruktivisme*" or "An analysis of China's Energy Security strategy in its effort to reduce carbon emissions through a Constructivist Approach" by Hidayat Chusnul Chotimah in 2021. In this article, Chotimah outlines China's commitment to lowering its carbon emissions and ascending into a leadership role over the global climate change regime by internalising the norms within. According to Chotimah, China's ratification of the Kyoto Protocol, and inclusion of multiple stakeholders in addressing climate change showcases China's seriousness in addressing the matter. This dives into one example of China's evolving role in energy governance which has shifted from a hesitant follower into a leader, but without showcasing other instances within the fractured and fragmented area of energy governance this is not obvious in itself.

The third and final literature that the authors turned to was "The Role of China in Global Energy Governance" written by Gaye Christoffersen in 2016. The paper goes into the relationship between Beijing and international organisations and regimes on energy like the International Energy Agency (IEA) as well as individual countries. The paper explores Chinese participation in global energy governance via the IEA, Energy Charter as well as numerous energy research institutions and how this reform Chinese domestic energy governance. However, what is more interesting is how China can alternatively restructure the global energy governance system in a manner that would reduce pressure on China to reform its policies internally. This paper takes on a liberal institutionalist approach, which puts a lens on institutions and their effects on domestic and international policies in countries like China. It posits a useful analysis of the limited activeness of China in Western global energy governance—something that has long been noted. It also puts in perspective the limits constricted by China's domestic capacity for energy governance that makes the nation vulnerable to the world oil market and puts holes in China's energy security. From this, the author is able to focus on China's activity on the world stage—in particular its activeness in deflecting any criticism towards China's energy consumption as well as its continued push to meet domestic energy demands by filling the gap through energy diplomacy.

These aforementioned articles give us a clear and in-depth understanding of the current situation faced by China as well as the actions they have taken regarding securing their energy needs through increased proactiveness in global energy governance. However, an area which this paper aims to unpack is the consequences that this shift in global energy governance has not just for China but every other country in the international community—particularly those becoming increasingly dependent on China's

increased proactiveness in international development. This article aims to give a more critical lens of these efforts made by China to seek participation in the global governance system and looks at its contribution in a way that extends beyond the real benefits of energy security—but instead attempts to find a bigger picture of this concentrated effort to create an alternative global energy order using the framework of the Belt and Road Initiative and the BRICS group. This means that it isn't crucial to simply understand this issue as a matter of energy security but to also place a historical and geopolitical context on the subject matter to better understand the consequences of this continued development. It is important to raise the question not only of how China's involvement in energy governance affects the supply and demand of energy needs and the fulfilment of energy security but a broader context of China's ambitions on the world stage as implied by the activities conducted in the context of international energy development. This paper aims to address China's use of its energy wealth as an instrument for Chinese hegemony through the case of energy projects within the Belt and Road Initiative, and how they have consequences beyond its participatory countries.

Just as an example of this, we can see how China's increased investment in Asia and African countries (including in energy development) have swayed benefactors to be in their favour in certain policies and decision-making on the world stage. Take for example the issue of the "One China Policy" which pre-1970s saw most of the developed and developing world recognizing the Republic of China (Taiwan) as the *one China*, with ROC being the official representing the country in the United Nations. When UN Resolution 2758 (XXVI) recognised the People's Republic of China as "the only legitimate representative of China to the United Nations" and threatened to remove Taiwan, 35 countries voted against the motion and sided with the United States. This included several African countries. However, in less than sixty years that alliance has changed with currently only the country of Eswatini recognising Taiwan as a sovereign state (Ministry of Foreign Affairs Taiwan, 2017). The same can be said in multiple vote results in the United Nations General Assembly, such as Resolution 62/167 in 2007 on the situation of human rights in the Democratic People's Republic of Korea—where 22 countries backed China's vote and 59 abstained. This showed a change in how states voted on issues, with many departing from their close ties to the West and instead was more Eastern looking, specifically towards China. This pattern demonstrates the use of Chinese Foreign Aid as means to shift voting alignment in the UN General Assembly among recipient countries.

In this paper the authors wish to expand on this, further analysing patterns of Chinese foreign and domestic energy policy shifts and the effects that they have both domestically in China as well as abroad. With current trends showcasing that Chinese aid has yet to slow down despite the known potentially devastating consequences for its recipients as seen in countries like Sri Lanka, we need to consider the full picture of China's expansion of energy governance in a better manner in order to be able to better understand the consequences that we might face in the future.

3. Methods

3.1 Qualitative Methods

This article uses qualitative research methods. Qualitative research methods are a collection of research methods that aim to understand a phenomenon from all experiences that are thoroughly researched in the form of words and language, in the specific context it is experienced, and by utilising various scientific methods (Moleong, 2007). Qualitative methods make observations of people in their environment by interacting directly with them and interpreting their opinions about the world around them (Nasution, 2003). Qualitative research methods produce descriptive data in the form of sentences or speech and observed individual behaviour. Articles using qualitative methods aim to gain a general understanding of social reality from the perspective of the participants (Bogdan & Biklen, 1992). It intends to describe and analyse various phenomena, events, social activities, attitudes, beliefs, views and ideas, both individually and in groups (Sukmadinata, 2005). Through this method, the authors can find detailed and free information about various answers. This qualitative research method seeks to get people to share their thoughts on the topic without providing much guidance or instruction (Perreault & McCarthy, 2006). This qualitative research can produce a finding which cannot be found by other

means of quantification or measurement and can be used to examine social life, behaviour, history and so on (Strauss & Corbin, 1998).

Based on the understanding of the qualitative method according to the experts above, in this article, the authors try to describe the phenomenon of China's sudden shift in attitude towards global energy governance and uncover how this may be used as an instrument for the advancement of China's energy security interests and its efforts to seek hegemony. To do this, the authors make great use of past research, policy papers, as well as other forms of literature and document-based research via the internet.

4. Theoretical Framework

4.1 Towards a Critical Theory for Energy

There are many contesting perspectives for the analysis of energy security and global energy governance in the field of International Relations. At this age, energy is no longer merely a human need; rather it has transcended into something that has affected how human beings organise their social, cultural and political lives while also being essential to economies (Mitchell, 2014; Szeman, 2019; Szeman & Petrocultures, 2016). Recently, there has been a unique perspective on energy brought into life one that has its roots in one of the first paradigms and schools of thought to be born in the shadow of the industrial revolution; critical theory and the Frankfurt School. Here, the authors will mainly refer to the two most exemplary texts for critical theory in energy. First, there is "Towards a Critical Theory of Energy" written by Imre Szeman. Second, the authors will analyse China's global energy development programme using the perspectives of Szeman and Jeff Diamanti in their work "Nine Principles for a Critical Theory of Energy".

In the contemporary world order of the twentieth and twenty-first century, there has been an evolution of sorts in the field of International Relations/International Studies. The end of the Cold War saw the international community transform into one of a multipolar and multicultural civilizations (Huntington, 1996). The event of globalisation and the evolution of the capitalist system that we have seen continue to expand has been met with fierce criticism, especially from the developing world that justifiably feels exploited or put at a disadvantage. So, it is unsurprising that nations of the global south have put efforts into developing alternatives to this western dependency for economic prosperity. In no sector is this more prevalent than that of energy development.

In his work titled "Towards a Critical Theory for Energy", Szeman elaborates how the study of energy humanities has developed over the past decades to fulfil several questions that have been left unanswered when it comes to the culture of energy in the contemporary world. By this, Szeman is referring to how energy has evolved into an issue widely discussed in society beyond that of a simple necessity for electrification in daily life into something that has embedded itself in our socio-political lives; an enigma that needs to be analysed. Take for example issues such as fossil fuel consumption becoming an ethical and moral dilemma as expressed in Allan Stokel's "Bataille's Peak". Thus, Szeman feels that there must be new tools developed so that we can better analyse the issue of energy through the alternative lens of critical theory.

This was further developed in "Nine Principles for a Critical Theory of Energy" co-authored by Szeman and Diamanti. In this article, Szeman and Diamanti go on to develop what are the founding principles necessary to develop a critical lens for energy matters. The following principles, in summary, are:

1. The global capitalist system and modernity: explain the importance of theorizing energy in the contemporary world for two major reasons. First, energy has shaped social lives and resulted in historical imbalances in power. Second, energy influences other matters such as infrastructure and is increasingly determinant on the state of civilizations and societies as energy further pushes the practices of global capitalism.

2. **Energy Hegemony:** in which the domination of energy sources like fossil fuels make those who control these resources hold a chokehold over the entire energy sector—and therefore it is within their interest to ensure that it continues being that way. As Gramsci elaborated how “states can only be referred to as hegemons so long as they are able to prove that they hold the capacity to expand their power above other states” the same can be said as a characteristic of dominating energy sources like oil and gas over others, pulling the undivided attention of the world dependent on it.
3. **Petro-subjectivity:** the state in which modernity has made our dependency on energy and specific energy resources higher than that of our historical dependency on other resources, including the sun and animals which were the traditionally dominant energy sources.
4. **The evolution of oil beyond that of a commodity and the development of social relations built on energy:** political entities, social structures and whole aspects of societies built around the concept of energy have evolved to make dominant energy sources like oil not only a driving force in energy but a driving force in society. As noted by Marx (1859) there are bases and superstructures; as of now, energy has become a base which serves as a force that shapes superstructures. Ideologies, laws, politics, education and other superstructures are now being affected, influenced and shaped by energy with these superstructures serving to further solidify the importance and centrality of energy in our lives.
5. **Real estates and energy rights:** highlights how energy is entangled with the concept of property. This means that conceptualising energy revolution means we must beforehand conceptualise the basic principle of a revolution in the critical lens: the transfer of property back to the people. Understanding that the domination of fossil fuels in these energy real estates is exactly why the transition to renewable energy is so slow as this concept of energy that disentangles itself from the frame property is difficult to attain; thus, sustaining the fossil fuel dominance.
6. **From property to imagined (oil) communities:** where property encapsulates the legal frame of energy and is then expanded by a political frame of energy. This is the state. The development of energy communities and the development of relationships and cooperation surrounding energy is now something we see worldwide; from the Organisation of Arab Petroleum Exporting Countries to its very contender OPEC.
7. **There is no democracy in energy:** historically and even now the subjectivity of mankind to energy has never been controlled under the principles and oversights of democratic processes. Rather, we see that the characteristics of energy regimes are that of an oligopoly in which a small number of actors co-exist and control the sector in its entirety. OPEC under this lens is nothing more than a cartel in which capitalists (in the definition of those who control the means of production) work together to maximise profits and lower conflict to not disrupt their cash flow; be it through price setting or any other form of what is domestically seen as an illegal business cartel but globally (with there being a lack of oversight from a global entity) viewed as completely natural and legal.
8. **Extractivism buries as much as it digs up:** this is an internal problem to the capitalist system. It generates environmental challenges and the limits of resources mean that it is very much digging its own grave as it lends itself to its own destruction and unravelling. There is also the less obvious matter of these activities creating socio-political conflicts, as stated by Marx on the long-term consequences of capitalism for labour in his immiseration thesis.
9. **Infrastructural Politics:** this covers ideas of decarbonisation, recapitalisation and decolonisation. This refers to how there is a need for a radical transformation and transition to energy governance. Szeman and Diamanti within the previous points have hinted at how they will always relate to one big aspect—energy infrastructure. Infrastructure is the catalyst of what makes this all possible, and thus infrastructure will also serve as its very solution. Thus, developing a critical lens for infrastructure development is needed. We must remember how historically infrastructure has pushed the development, growth, destruction and even trapping culture, geography and the relations between man and the planet. So, we must analyse critically how infrastructure development affects carbon emissions, expands the global capitalist system and can even be the instrument of neo-colonialist practises.

4.2 China's Global Energy Development as a Neo-Colonialist Practice and Instrument for Hegemony

The intensity and sheer volume of the financial and political-economic dimension when it comes to the relationship between China and that of the Global South, especially Asian and African countries have sparked a great debate on whether or not the relationship that has developed over the past decades has any implications of a new era of imperialism and colonialism (Lumumba-Kasongo, 2011). The conceptualization of neo-colonialism is necessary when it comes to analysing China's behaviour in Asia and Africa during recent times to determine whether or not they amount to colonialist practices (Junbo & Frasher, 2014). To understand this, we must first consider how countries' economic relations are conducted, in this case, goods of an equal sovereign states relations must be (1) determined by international markets, (2) agreed upon by both parties by choice without unilateral coercion and (3) not be distorted with the intention of limiting the scope to what advantages one party (Junbo & Frasher, 2014).

Furthermore, in discussing China's engagement in Asia and Africa in the context of neo-colonialism, we must also address the first flaw in the past assumption; the equal standings of the two states. There is no question that there will always be a potentially unequal position between two countries in their relationship, and no more is this exemplified by the existence of regional and even global hegemony. With the advent of globalisation, hegemony has become a concept increasingly familiar and heavily occupies the field of International Relations (Robinson, 2005). Here Robinson (2005) notes that there are several different variations offered to describe this concept, each tied to different traditions in International Relations Theory. For this, we will turn to the conceptualization of hegemony from that of the Realist and Marxist/Gramscian tradition, which describes hegemony as international domination in the politics and economics of a region or the world stage or consensual domination of ideology in which a ruling group can maintain or establish their rule through their leadership granting them abilities to invent, change and set norms, rules, traditions, beliefs, laws and cultures over those subjected to their domination.

Globalisation has become a new stage in the history of world capitalism, integrating national and regional economies into a global production and financial system (Robinson, 2005). Here neo-Gramscian perspectives have focused on the reciprocal relationship between production and power; this pertains to how these social relations of production can serve as a force to create bases of power within and across states and therefore shape world order (Robinson, 2005). This, of course, has created the rise of historical blocs, hegemonies that are composed of an amalgamation of certain groups from several states (Gramsci, 1971). At the turn of the twenty-first century, with the recovery of Asian countries from the financial crisis endured at the end of the twentieth century, we can now see a new hegemonic bloc to contend with the American and European (Soviet) historical contestation of hegemony. The Asian economic success here poses a competitive geopolitical threat to US interests (Arrighi & Silver, 1999) and no nation has been viewed as more of a threat than that China. Increasingly we are seeing a perceived shift towards Asia when it comes to the global development agenda, and in no instance is this clearer than that of the energy sector.

Following China's evolving relationship with the global south, particularly in what were the new and emerging states that had just received their nationhood at the end of the Second World War and in the post-colonial era. This makes it imperative to analyse China's behaviour in these countries to determine whether or not it can be labelled as a new form of colonialism, as in a contemporary sense we can't truly see any country as a colonial power that systematically causes a nation's late development for its own interest; especially seeing how this is described within the context of China's development agenda of the Belt and Road Initiative (BRI). Therefore, in this analysis, we recognise colonialism as an imperial project and colonial behaviour as a separate concept whose distinctive features are the only marker of whether any state's behaviour can verifiably be described as such (Junbo & Frasher, 2014).

By this logic, we can see that there is such a thin veil between hegemony and imperialism. Given that both hegemony and imperialism attempt to advance a state's self-interest through expanding its sphere

of influence both in its surrounding area and globally, then it can also be inferred that the practices of colonialism behaviour-wise can also be implemented as an instrument of a state's hegemony, while not being categorically a practice of colonialism. Within this article, the authors will go so far as to argue that in its practice, China has used its position as a regional hegemony to further its own goals and interests under what can only be described as colonialist practices blanketed under a façade of genuine assistance. This will be done by analysing China's shifting national policy for energy security, analysing its evolving role in global energy governance, and the implications this has for the states becoming increasingly dependent on China for the development of new energy infrastructures. Furthermore, the article will analyse how this, in turn, has affected the domestic policies of nations that are dependent on China, particularly pertaining to those areas which China may see as national interests.

5. Results and Discussions

5.1 China's Shifting National Energy Security Policy

China's policy for its energy transition is a long-term structural change in energy, which covers a complex array of energy and energy-related policy issues, including a fundamental change or substitution in energy consumption (Zhaouyuan & Ishrawan, 2020). China's energy security has undergone several evolutions in energy management. The shift in energy security policies is closely related to the increase in energy consumption due to economic development, and China's population represents one-fifth of all population. The pace of economic development and expanding industrialization put China in a difficult position to ensure the demand for domestic energy resources which has continued to skyrocket over the years (Figure 1).

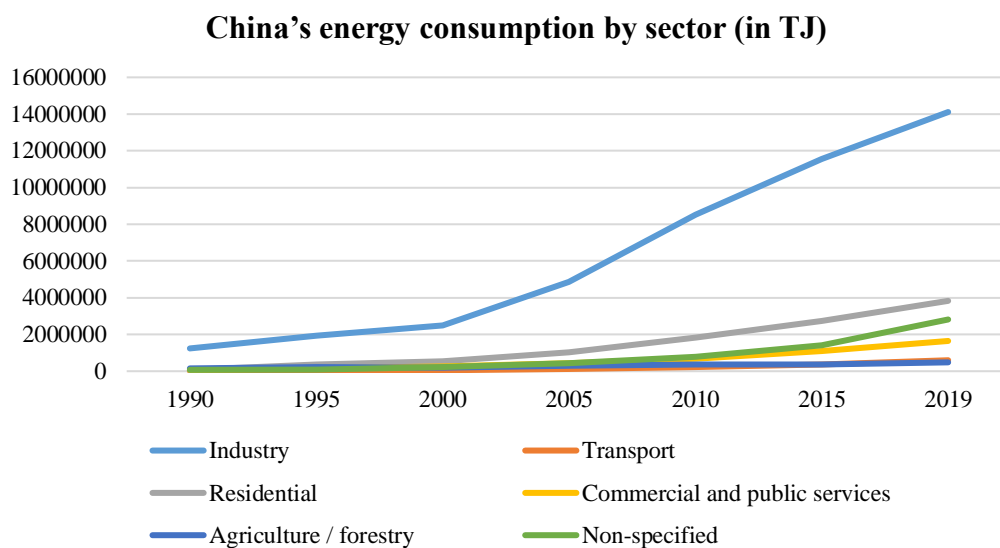


Figure 1. China's energy consumption by sector (International Energy Agency [IEA], 2021).

Historically, China has been self-sufficient in its energy supply. Even since the 1950s and 1960s, China has reached the self-sufficient energy stage (Liao, 2006; Zha, 2010). In the mid-1960s, China had become Asia's largest oil-producing country (Herberg, 2004). Abundant energy reserves make China a significant exporter and supplier of crude oil to other countries which face energy shortages like Japan. But in the early years of the 1990s China's exports of energy fell as the nation began to set priorities for domestic energy needs. This drastic decline in energy production and rising imports signalled the end of China's energy self-sufficient era. China could not meet its domestic energy demand, so it started to import oil in 1993 and continued to increase rapidly in the following years, from around 1% in 1993 to 48% in 2004 (Figure 2) (Kong, 2008). A report from the IEA (in Pollack 2007, p. 232) also showed similar data, namely that China's oil demand is projected to increase by 50% in 2030 (IEA, 2007).

Entering this second decade of the twenty-first century China, India and several other developing countries are facing what can categorically be said as a massive energy crisis.

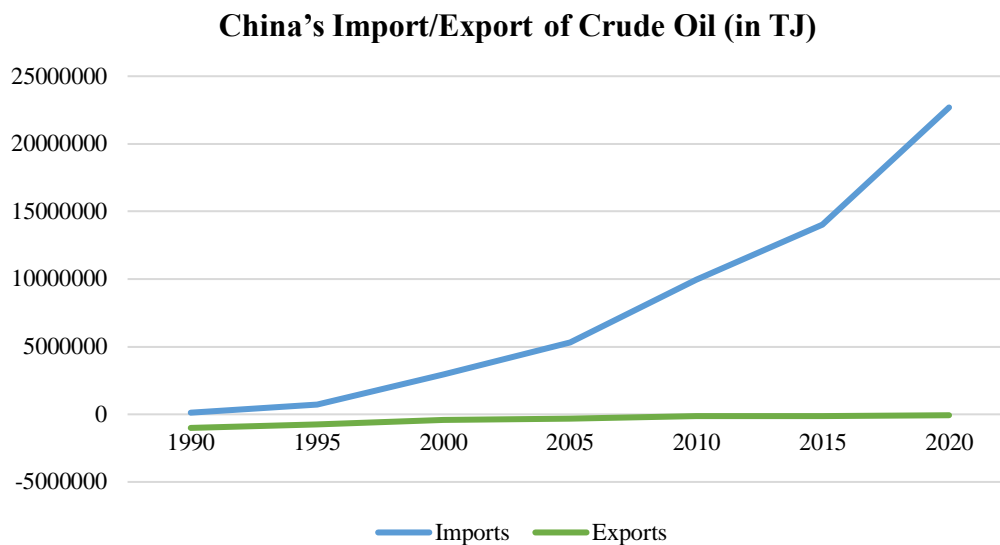


Figure 2. China's Import/Export of Crude Oil (IEA, 2021).

The energy crisis currently faced in China is not the first of its kind as similar tones were echoed in the past century. In the 1970s, the world faced an energy crisis as members of the Organisation of Arab Petroleum Exporting Countries (OAPEC) enforced an oil embargo to the West during the Yom Kippur War (Rustow, 1974). However, what is different this time is that this energy crisis is being driven by a fall in global supplies of fossil fuels during a time when the world is trying to lessen its dependence on them. But the current energy crisis shows clearly how much the global economy is still dependent on fossil energy. China's current crisis has the potential to trigger a global energy crisis that can threaten the wheels of the global economy, which had just started picking up speed from its sluggishness seen in the past two years by the COVID-19 pandemic.

The increasing number of import requests, global reserves and stability in oil prices are challenges faced by consumers and importers of traditional energy in China. With the uncertainty of future energy reserves, exploration and investment activities continue to be carried out (Xu, 2007). Consequently, all production capacity must be used to meet the increasing demand. This means that there is hardly any spare supply available to compensate for possible supply disruptions in times of crisis or conflict by temporarily increasing production. Besides the global supply chain situation, China is also facing a potentially catastrophic climate and environmental crisis due to the destructive nature of exploiting non-renewable energy resources which is a heavily extractive activity; something that harms the environment. This is another factor that makes this crisis different and rather alarming as while is being driven by the falling global supply of fossil fuels in the midst of growing energy demands it is also a massive challenge for China to generate electricity rapidly without further expanding their fossil fuel energy consumption during a time where dependency towards fossil fuels is already high and sentiments towards a phasing-out of fossil fuel use can be loudly heard from across the globe.

Concern for these environmental issues has dramatically increased since the 1980s due to scientific findings detailing the catastrophic consequences of a warmer planet (IPCC, 2021). This is a dilemma for China as the threat of climate change clashes with China's need to meet the increasingly massive energy demands. The Chinese government faced tremendous ecological pressures both at home and abroad, and its influence in the United Nations' Framework Convention on Climate Change's Conference of Parties (COP), especially during COP26 had been met with vast scrutiny. China's influence in the global climate change governance is both an opportunity as well as a concerning development; in the absence of the US on the world stage during President Trump's America First

policy, China has consolidated power in international forums under President Xi Jinping; one of the most glaring differences from the previous administrations. This is especially worrisome for COP as China's self-interest in meeting its energy demands is potentially very carbon intensive, and thus it is in the interest of China to prevent COP from implementing a phasing-out of fossil fuel energy.

This has catastrophic consequences for the climate and environment. There is a contradiction between energy development and environmental security. Considering the increasingly severe environmental damage, China must find a balanced way to integrate environmental security properly within its energy security policy. This makes it extremely imperative for China to implement some salient policies that both bridge the gap in energy security and enhance China's energy securitization without negatively impacting the environment; something that can be addressed by developing renewable sources of energy (Zhang et al., 2017).

5.2 China's Evolving Role in Energy Governance

In past administrations, China's position as the world's largest energy producer and consumer has been oddly contrasted by its seemingly reluctant attitude toward global energy governance. This has been further juxtaposed by its role as one of the leaders in the development of renewable energy. While China has actively participated in global energy markets, the same cannot be said when it comes to global governance in energy. In general, developing countries like China have begun to hold more critical roles in global governance especially in the energy sector as they experience a growing Gross Domestic Product (GDP) and demands for expanding electrification have become priority issues in many of these countries. This has planted a hope that these nations would begin to participate in global energy governance and international efforts to meet these demands more actively. For China, this momentum has presented itself as an opportunity for China to present itself as a leader during such times. With the change of regimes in China entering the Xi Jinping era we have seen China shift much of its economic policies, including in the energy sector, to become more outward-looking. This is a drastic change from previous leaderships that have more commonly viewed energy as a purely domestic issue.

In the early 2000s, China was rather reluctant to participate in the international community's efforts in energy cooperation. This was especially highlighted by Deng Xiaoping's low-profile policy in his Deng Xiaoping theory (Daekwon, 2017; Yan, 2014). But in 2013, Xi Jinping's rise to the Chinese presidency changed all of this, with his alternate approach of Xi Jinping Thought that calls for a more outward-looking China. Through his new policy programmes such as the One Belt One Road (now BRI), the formation of the BRICS group and their institutions such as the New Development Bank (NDB), China has solidified its intentions to be more outward-looking in its energy and economic development policy; something that has further legitimise China's role as a leader in global governance. China's ascension into international forums and institutions in energy exemplifies this. In November 2015 China officially became an affiliate of the IEA, and in 2017 the IEA and China's National Energy Administration established the IEA-China Cooperation Office in Beijing (IEA, 2021). Under President Xi Jinping China has also noted its desire to become a member of the International Renewable Energy Agency (IRENA) (IRENA, 2013). As of today, China has successfully become a full member of IRENA, the International Partnership for Energy Efficiency Cooperation (IPEEC), International Energy Forum (IEF) and the World Energy Council (WEG) and has become associate members, dialogue partners or hold some form of cooperation with other energy institutions such as IEA. This, of course, is without mentioning China's position in the United Nations and its related bodies with concerns to energy issues such as the United Nations Framework Convention on Climate Change (UNFCCC) which holds several bodies and committees that address the issue of energy be it fossil fuel or renewable energy.

With this, China has been able to expand its own interests in the energy sector on the world stage. The adoption of several partnership programmes with China and several China-led initiatives have set an agenda in which the world continues to look abroad when it comes to energy development.

5.3 China's Energy Dominance as an Instrument for Global Hegemony

5.3.1 China's Pursuit for Energy Hegemony

For the past decades, China's economy has grown to match that of the United States and is currently right behind it when it comes to dominating the world economy. At the turn of the twenty-first century, especially under President Xi Jinping, China has extended its sphere of influence through the establishment of vast networks of cooperation with countries from all around the world; including within the energy sector. China's dominance in the energy market as the largest producer, consumer as well as a leader in renewable energy transitions gives it a comparative advantage to many other developing states who are in great need of energy development as electrification becomes a necessity for human lives. China generates 7,9% of global economic output and 8% of the world's foreign trade volume as well as third in foreign investments with 28% of foreign exchange reserves; these are just some of the factors that can explain China's staggering 6% annual economic growth (Anggraini et al., 2019). During that time, China has become both the largest consumer and producer of energy, dominating both the markets as well as global energy governance. So how does China use that to its advantage?

To understand China's use of its energy dominance as an instrument for global hegemony we must first revisit the concept of hegemony and analyse how features of China's energy diplomacy; particularly energy infrastructure development can be seen in this context. In the Neomarxist and Gramscian conceptualisation of hegemony, we understand that a feature of the world order is the distinction of two classes of nations: norm-makers and norm-acceptors. The determinant of what class a nation falls into heavily depends on its political and socio-economic conditions; and in the twenty-first-century hegemony can be fractured and fragmented into different pockets, oftentimes occupying multiple spaces. This can be regional hegemony or even sectoral hegemony of certain political issues. This is exemplified by China's position as a regional hegemon in Asia through the BRI, and its hegemonic status for the energy sector as well. With the understanding of how holding a hegemonic position may benefit itself, China has strived to expand its scope of influence in global energy regimes including the IEA, which it had only joined under President Xi. Under President Xi, China's role in global energy matters has become quite significant and has therefore been able to push forward its initiatives in developing energy policies that affect the international community (Grantham Institute for Climate Change ICL, 2014).

5.3.2 Subjugation in Energy Development beyond the Petro-Subjects Era

As fossil fuels remain the most dominant energy source, it is still correct to outline those nations that are reliant on China for their energy needs as petro-subjects. Petro-subjectivity is the phenomenon that we see today on how energy has become interwoven so deeply into our lives that we are subject to those who provide our energy needs; becoming obedient towards the status quo without being able to consciously exercise autonomy; either individually or through collective will (Diamanti & Szeman, 2020). While currently this seems to be the case for fossil fuel-dependent nations, we cannot also forget China's expansion into renewable energy and its leadership in the sector; something that may evolve our petro-subjectivity into newer forms of subjugations if left unmatched or without a powerful enough contender in energy markets and global energy governance.

However, this has been met with contrasting opinions, some of which actually favour China as an alternative to the more traditional institutions that hold power to grant aid and tamper with domestic policies. Take the International Monetary Fund, for example. The Asian Infrastructure Investment Bank (AIIB) and the New Development Bank (NDB or also known as the BRICS Bank) offer a new global financing aid architecture for development that competes with the IMF and World Bank (WB) (Dosani, 2014). What's different with the NDB and AIIB compared to their Western counterparts is the lack of a firm grasp from the banks. Whereas the IMF can be perceived as suffocating with its structural adjustment policies and several requirements that can potentially change the laws and politics of a country, the NDB and AIIB stress no such thing; something that has made the NDB and AIIB much

more attractive, especially in backsliding democracies. These institutions are only further driven to success with China's global development project known as the Belt and Road Initiative (BRI). BRI has allowed nations to develop new infrastructure in the energy sector, but it has all come at a cost to these nations—a cost that further advances China's energy dominance and influence on the world stage. This is because China simply cannot lose in any scenario within its BRI programme, whether or not the states receiving aid can repay; with some even noting that China arguably benefits from nations going into default as China's debt forgiveness has been less than two percent of all debt owed with many developing Asia and African nation falling into massive Chinese debt which may strain their ability to make any other investments without China's aid in the future (Yue & Wang, 2020).

This emergence of two distinct and opposing camps; those who are in support of this Global South alternative to aid and development, and those who are apprehensive and sceptical of China's motivation in these large-scale investment projects show the evolution of subjectivity in the energy sector we are seeing on a global scale. Even as the world transitions into renewable energy, China's dominance in the development of renewable energy has cemented its role as a model for economic development and transition into green industry and renewable energy. The social normative and shaping of perspectives and attitudes towards this show that China has successfully captured the attention of the international community, and as more and more nations look towards China, more and more will seek to experience their own miraculous growth with China's aid, subjecting their continued growth being dependant on China's own. As for China, its motivation on the matter is clear and can be summarised into three main points: economic growth, national security and global influence (Osborne et al., 2021).

5.3.3 China's New Financial Regime and Controlling Global Energy Infrastructure Development

It is difficult to fully comprehend just how massive China's BRI project is. The project spans over the continents of Asia, Europe and Africa and covers infrastructure development on a scale never seen before (Hao et al., 2020). With a combined 68 countries participating in the first BRI summit in 2017 and with an investment commitment of USD 1 trillion, Hao et al. (2020) has regarded the project as the most extensively coordinated investment plan for interconnectivity and infrastructural development in human history. As of now this has been further cemented, with 140 countries signing Memorandums of Understanding to participate in the BRI project (Osborne et al., 2021). When looking at the map of the BRI project one can see how the scope of the project has such a substantial geopolitical and geoeconomics effect on the global energy sector; despite not having been included in its initial arrangement. As the project begins to take shape, we are beginning to see energy projects begin to take centre stage. Already several energy projects are in the works, with plans for major investment in developing renewable energy and expanding oil and gas pipelines across the continent of Eurasia in talks among BRI participants.

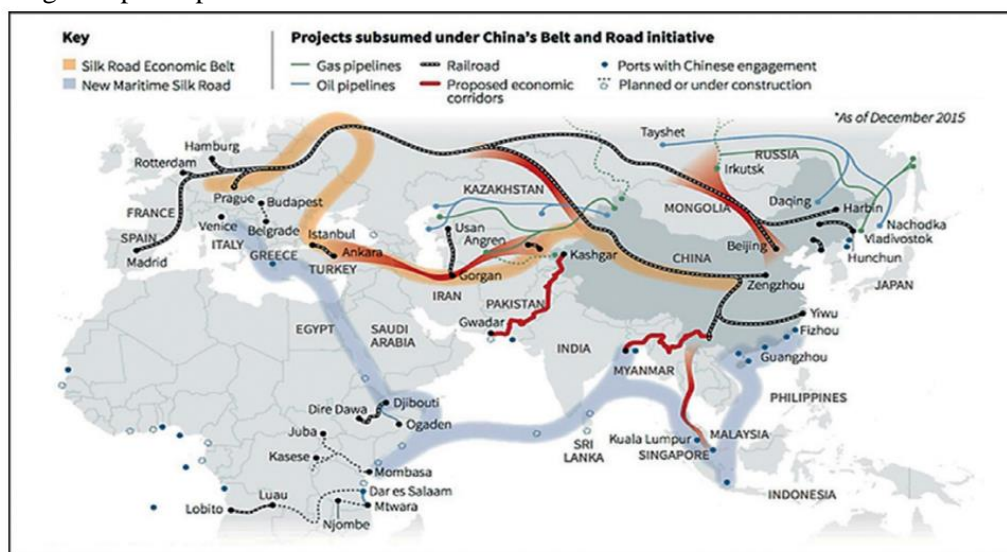


Figure 3. Map of China's Belt and Road Initiative (Hao et al., 2020).

To support this, China has used its expansive financial assets to assist with the funding of these projects. The establishment of the Silk Road Fund and the Asian Infrastructure Investment Bank (AIIB) announced by the Chinese government in 2014 was critical for the financing of the BRI project, and most of the projects in the Belt and Road are financed through other Chinese state-owned banks with the Bank of China and the Industrial and Commercial Bank of China holding some of the largest stakes with almost 90 percent of these Chinese funded projects involving Chinese Contractors (Centre for Strategic & International Studies, 2018; Osborne et al., 2021). These banks have been instrumental in the success of the BRI and account for a majority of the mega development project's financing. Most of this financing is settled through bilateral agreements directly between the lending banks and the recipient governments, which means that the terms of agreement for these arrangements can be kept private and not necessarily disclosed publicly (Osborne et al., 2021).

Another global south initiative that China has been a major contributor towards is the institutionalisation of BRICS and the establishment of the New Development Bank (NDB), something that has also been instrumental in China's search for hegemony and its ambitious approach to an alternative for global financial governance. NDB and AIIB as well as their role in financing BRI indicate not only China's intention to promote a new model for multilateral development finance that contests the long-standing Bretton Woods System, but it shows China's ambition to become the centre of the world (Wang, 2019). Both the NDB and the AIIB are the latest among multilateral development banks (MDBs) to enter into a financial ecosystem already filled with other, much older MDBs. But what is arguably different about this iteration from the IMF and World Bank is not so much its structure, finance capacity or scope, but rather its timing. At the turn of the twenty-first century, distrust towards western financial institutions reached an all-time high, with criticism and protests towards IMF's practices rippled throughout both the global south as well as the developed world. NDB and AIIB have entered a time in which global challenges call for large-scale financing of major projects, but the reluctance of the global south to continue deepening their dependency on the West remains as a stumbling block. Thus, this global south initiative was presented as a new alternative, and the developing world was quick to jump on it. NDB was launched as a counter to all institutions viewed as instruments of western imperialism, not just the Bretton Woods institutions like IMF and WB, but even the Organization for Economic Cooperation and Development (OECD) was under scrutiny by BRICS members (Abdenur & Folly, 2015).

In its infancy, NDB still struggles with the creation of a normative agenda (Abdenur & Folly, 2015). However, given China's significant pull in NDB, it would not be surprising if this follows the path of previous BRI financial institutions like the AIIM; where there are no coherent principles or norms as strict as those implemented by the western world. There is no structural adjustment policy, there is no interference of domestic policies, there is no liberalisation of markets and there are no democratisation and human rights standards implemented as a caveat to receiving loans. There are, however, certain unspoken rules which all have to do with China's national interests. For example, there is the One China Policy agenda in which nations that enter into diplomatic relations and economic partnerships with China must recognise Taiwan as a part of the People's Republic of China and not its own sovereign state. This exemplifies how China uses its global financial institution to further its own agenda, and as more states participate in the BRI, more are being subjected to China's national interests. This can be inferred as another demonstration of how China is attempting to set an agenda for a new world order, with BRICS serving as one of the testing grounds for its aspirations. BRICS holds several dimensions in the energy sector: first is the demand for energy and energy efficiency, second is BRICS National Oil Companies, third are rules for dialogue between producing and consuming BRICS countries and finally there is the global BRICS energy market policy both in market sustaining and market blocking (Christoffersen, 2016). China and other BRICS states take advantage of the NDB and their state-owned oil companies to cooperate with one another, with China holding the reins as the largest producer, consumer as well as holder of many of the investment banks for energy development. This aggressive move on China's part shows an understanding that a reshaping of global financial systems will go a long way in cementing its hegemony.

6. Conclusions

President Xi Jinping's perspective on China's role on the world stage greatly differs from his predecessors, and under Xi's leadership, China has seen a great political and socio-economic transformation. In no sector has this been clearer than the contrasting energy policies of the two administrations. Xi has put an end to China's long historic reluctance to participate in a larger capacity in global energy governance and sets a new precedent in the contemporary world order, offering an alternative for future investments in infrastructure and energy. This brings China forward as a potential hegemon in energy as it tackles both fronts, dominating energy markets and new and renewable energy development while also holding more and more power as a norm-setter/norm-maker in global energy regimes. Here we can see China's motivation clearly as they prioritise three main objectives: growing their economy, meeting their national security interests and expanding their sphere of influence. In the energy sector, China has taken advantage of its growing economy to look outward for opportunity. The Belt and Road Initiative has been China's very own laboratory in testing this out. The project has become China's greatest foreign policy instrument and has evolved from merely an investment opportunity for economic development. China has realised the desire of the global south to seek an alternative of financing development away from the IMF is an opportunity not to shift monetary gain towards China but as an opportunity to improve China's relationship with the world and insert its own self-interests abroad. This is exemplified with the adoption of the One China Policy by states cooperating in the BRI project, and China's realisation of how this may solidify its hegemony globally is clear as the Chinese government continues to test the boundaries of how BRI may benefit it; even when nations fail to pay their debts and go into default, showing how China can benefit from the project even when it is a fiscal risk.

Other than its own project, China has also become more active in the international community under President Xi, becoming full-time members or associate members with several international institutions dedicated to energy matters. The fragmented and fractured nature of global energy regimes does not pose as an issue for China as its dominance within the energy sector has become so holistic that it has the capacity to actively participate in a multidimensional approach; meaning that China has the capability to dedicate resources into all the institutions it participates in without being spread too thin or becoming any less effective. Yet this shift in national energy security policy isn't without its drawbacks, as China puts itself in a position where the nation's dealings are becoming more and more transparent, and therefore prone to criticism. Not only that, in doing so China inadvertently reveals its own insecurities; from the challenge it faces to meet growing energy demands to the issue of climate change and environmental degradation. While all in all it appears that China views this as worth it, confident in its position and significant role being able to protect it from any sort of political play from other contending superpowers; China is nonetheless vulnerable and struggling to face these aforementioned challenges and it is yet to be seen whether or not, in the end, China's struggle for power and hegemony in global energy governance will bring it any rewards. What can already be seen is the conflicting consequences these financial aid China has made towards the global south and developing nations in Asia and Africa which while have brought on new development projects have also made them vulnerable to China's debt-trap-diplomacy style of pursuing self-interests.

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