



Joint Master in Global Economic Governance and Public Affairs

Riding the Green Dragon: Assessing China's Climate Diplomacy with the EU

Supervised by Dr Christian Manahl

Rachel Seewai Lim 2024

ANTI-PLAGIARISM AND FRAUD STATEMENT

I certify that this thesis is my own work, based on my personal study and/or research and that I have acknowledged all material and sources as well as AI tools used in its preparation. I further certify that I have not copied or used any ideas or formulations from any book, article or thesis, in printed or electronic form, or from AI tools without specifically mentioning their origin, and that complete citations are indicated in quotation marks.

I also certify that this assignment/report has not previously been submitted for assessment in any other unit, except where specific permission has been granted from all unit coordinators involved, and that I have not copied in part or in full or otherwise plagiarized the work of other students and/or persons.

In accordance with the law, failure to comply with these regulations makes me liable to prosecution by the disciplinary commission and the courts of the Republic of France for university plagiarism.

Name: Rachel Seewai Lim

Date: June 16, 2024

Signature:

I hereby declare that I have composed the present thesis autonomously and without use of any other than the cited sources or means. I have indicated parts that were taken out of published or unpublished work correctly and in a verifiable manner through a quotation. I further assure that I have not presented this thesis to any other institute or university for evaluation and that it has not been published before.

<June 16th, 2024> <Lim Rachel Seewai>

Acknowledgements

Writing this thesis was an incredible journey, and I would like to express my deepest appreciation to all people who supported and understood me. My heartfelt thanks go to the experts, for generously allowing me to interview them despite their busy schedules. Without their insight, this thesis would be incomplete. I extend my gratitude to my family for supporting my decision to leave my full-time job in Japan to pursue a master's degree in Europe. Their encouragement and my cultural background of being half Japanese and half Chinese profoundly influenced this work. I am deeply grateful to my thesis supervisor, Dr. Christian Manahl, whose guidance and detailed advice were instrumental throughout my writing process. And thank you to the incredible staff at LUISS and CIFE, as well as the professors who opened my eyes to sustainable development and inspired me to write on EU-China cooperation on sustainability. They truly changed how I look at the world and broadened my understandings in ways I never anticipated.

I sincerely thank my classmates, with whom I had stimulating discussions and debates over many, many things. I've learned as much as I did in lectures from my classmates, and I'm so grateful for LUISS and CIFE's Global Economic Governance and Public Affairs Master's program for giving me this opportunity to meet these amazing people whom I call my friends. The journey and transition through Rome, Berlin and Nice was not easy, but it was infinitely comforting knowing that I was together with everyone. Special thanks to Anna, Benni, Tabatha, and Andrra whose advice and companionship were invaluable. I also appreciate my Japanese friends who helped me maintain my language skills and provided emotional support through shared activities and conversations in Japanese. Finally, I owe a special thanks to Leon, for his endless support and love. Meeting you through this program, was the one of the greatest outcomes of this experience.

Thank you all for your invaluable contributions to this thesis.

Abstract

Is there any hope for EU-China relations? The European Union (EU) and China are strong characters in the broader geopolitical competition, with their relationship seemingly deteriorating in recent years due to China's rise as an economic superpower, and concerns over trade and technology. Climate diplomacy is considered one of the few topics both parties are willing to cooperate on. This thesis focuses on China's potential to become a proactive partner with the EU through climate diplomacy, exploring future challenges and opportunities. Ultimately, the study illustrates the urgency for China to accelerate its sustainability efforts, shedding light on areas of improvement that will allow China to reach its goals.

The research introduces key theoretical frameworks, such as the Ecological Modernization Theory, Post-colonial Theory, and Hegemonic Stability Theory. By using a mixed-methods approach, the thesis consists of qualitative interviews with experts in EU-China relations and sustainable development, and qualitative analysis of policy documents, scholarly articles, and government reports. The research aims to contribute to sustainability by providing actionable strategies for bridging the gap between China's economic ambitions and environmental responsibilities, exemplifying EU-China cooperation as a model of global climate leadership.

Table of Contents

Ab	ostract
1.	Introduction5
Ba	ckground
De	fining the Research Question
2.	Literature Review
We	estern Imperialism and Impact on China
Ce	ntury of Humiliation
Th	e Chinese People's Political Consultative Conference and The National People's Congress
Eco	onomic growth of China
Im	plications of China's new growth patterns
Ch	ina and ecological civilization
Ch	ina's current challenges with environmental protection
EU	leading the global fight against climate change
Cu	rrent EU-China cooperation on Sustainable Development
Fin	nding the research gap
3.	Theoretical framework
Th	e path forward for developing countries
Не	gemonic Stability Theory
Eco	ological Modernization Theory (EMT)
Ch	ina as the 'other', Post-colonial Theory
4.	Research Methodology
5.	Analysis
5.1	Attention to detail is key
5.2	'Quick wins' for provinces in China
5.3	Chinese citizens' sustainability awareness and action
5.4	Areas of possible international cooperation
5.5	The EU and the world's spill-over effect in developing countries
5.6	China and innovation
5.7	China's international reputation
6. l	Recommendation49
6.1	Recommendations for EU-China cooperation
7. (Conclusion52
8 1	Ribliography 53

1. Introduction

Background

Our world is in danger. We cannot deny the urgency of the fight against climate change, and this global challenge requires a global solution. The issue of global warming and environmental damage has been a topic of concern among the scientific community as early as the 1950s (Pester, 2021). Studies showed that human activities and emissions are the primary driving force, being responsible for 100% of the global warming observed since 1950 (Hausfather, 2017). The largest oil and gas producer in the United States, ExxonMobil, conducted a private study in the 1970s that predicted global warming (Paddison, 2023). United Nations' "Our Common Future", also known as the Brundtland Report that coined the term "Sustainable Development", questioned the existing economic and population growth model in the 1980s for its failure to consider the deterioration of the planet, suggesting the need to include the collective well-being of humanity and our ecosystem (World Commission on Environment And Development, 1987). The years 2000 to 2009 were the warmest decade since 1880. Although changes in the sun's irradiance (energy), sea surface temperature in the tropics, and aerosol levels in the atmosphere also cause slight increases or decreases in the planet's temperature, the rise of carbon dioxide and greenhouse gases was the main contributor to the rising temperature of the atmosphere (Voiland, 2010).

Yet, despite blaring alarms that warned humanity repeatedly, no significant changes were made until now. Until recently, the earth has never been near 'the point of no return'. In 2009, a group of scientists led by Johan Rockström quantified 9 key areas that regulate the stability and resilience of the earth system, known as the 'planetary boundaries' where under these boundaries, humanity could continue to thrive for generations to come (Stockholm Resilience Centre). Now in 2024, 6 planetary boundaries have been crossed, meaning there are increased risks to people and the ecosystems we are part of (Stockholm Resilience Centre). A 2023 UN study highlights the significant financial investment needed to mitigate climate change – US\$5.4 trillion to US\$6.4 trillion annually – to achieve just six Sustainable Development Goals (SDGs) by 2030 (United Nations, 2023). Governments are more aware now that action is

needed as soon as possible. As the impact of climate change becomes more severe, the cost is also expected to rise (The World Economic Forum, 2023). In almost every corner of the world, human activities have started to take a toll on the environment, causing extreme weather events, sea-level rises, loss of biodiversity, desertification, and many other issues impacting vulnerable countries the most.

China, with its recent rapid growth that built its reputation as the 'World's Factory' has surpassed many countries to become the world's largest emitter, with 27% of global carbon dioxide emissions annually (The World Bank, 2022). On average, 8.0 tons of carbon dioxide (CO2) are emitted per person per year in China, excluding landuse change emissions (Our World In Data, 2023). Although this number lags behind some countries like Qatar with 36 tons per person, the United Arab Emirates with 22 tons per person, and developed countries such as the United States, Canada, Australia, South Korea, and Japan, Chinese emissions have a huge impact on the world due to the country's sheer population size (Lu & Dickert, 2023). With the world's green transition just beginning, it will be impossible to achieve its global climate goals without China's active participation. China's emissions are projected to peak in 2025, and whether, realistically, the nation will be able to fulfill its net zero targets in 2060 is questionable (Climate Action Tracker, 2023).

China is the second most populous country in the world and is among the 12 mega-biodiverse countries (Convention on Biological Diversity). With over 35,000 higher plant species and most species of birds in the world (Convention on Biological Diversity), China has much to protect. In 2022, the country had the highest share score in the Nature Index, with its largest contribution to research in the four natural sciences categories including physical sciences, chemistry, biological sciences, and earth and environmental sciences (Woolston, 2024). With the world's second-largest economy by nominal GDP and largest purchasing power parity, China has experienced explosive economic growth since its market reforms in 1978, after its 'open-door policy' to transition to a market-oriented economic system (Eye on Asia).

After decades of rapid industrialization, China has been subjected to severe consequences of climate change. China is the country with the second most natural disaster after the United States (Dyvik, 2024). The Chinese climate has warmed since the 1950s, with temperatures increasing more rapidly than in other parts of the world (Sun et al., 2021). China's densely packed cities and low-lying coastal population centers, the country now frequently experiences heavy natural disasters like coastal flooding, storm surges, coastal erosion, and saltwater intrusion, in areas where one-fifth of its population lives (The World Bank, 2022). Other environmental issues concerning China, including air pollution, water pollution, food and water shortages, plastic pollution, and biodiversity loss, have also heightened Chinese citizens' concerns. The European Investment Bank's climate survey focused on 2019-2020 revealed that 79% of Chinese citizens considered climate change a major threat to society, compared to 47% of EU citizens and only 39% of citizens in the United States (European Investment Bank). While the country pledged to become carbon neutral in 2060, China continues coal-powered industrial production and electricity demand, which puts the achievement of its commitment into doubt. With 1.2 million premature estimated deaths per year (Yin et al., 2020), air pollution and climate change are a growing concern for ordinary Chinese citizens.

Framed internationally as a 'coal addiction', 70% of China's emissions are made up of coal power (Howe & Cao, 2023), a situation further exacerbated by energy shortages at home and the European energy crisis last year following Russia's invasion of Ukraine (Howe & Cao, 2023). China's commitment to reducing reliance on coal power has been challenged by the country's uneasy challenges on energy security, with a need to sustain the still-growing economy and its massive population of 1.43 billion people (Worldometer, 2024). Meanwhile, with rising temperatures that bring the need to power air-conditioning, local governments have turned to coal power to ensure smooth levels of energy supplies, as droughts have lowered the energy output of hydropower plants (Fabbri, 2023). China's growth in the past 30 years is no doubt impressive, expedited by the country's policies aimed at developing the economy and growing its capital investment. Unfortunately, the environment has been sacrificed in the process.

China now must do a balancing act: doing its best to sustain the economic growth while keeping up with its own green demands and that of other global superpowers.

Unquestionably, China's presence is now felt in every corner of the world, confronting global leaders with the urgency to reevaluate their strategies against the rising superpower. China remains the EU's largest trading partner for goods imports, while the EU and China share complex and intricate economic and political relations (destatis, 2024). Their respective take on one another has shifted through the decades, and the EU describes China currently as a "partner for cooperation, an economic competitor and a systemic rival" (European Union, 2023). Parallel to this, sustainable development has emerged as a key area of mutual interest and cooperation. There have been a series of dialogue and strategic alignments between the two international actors, previously with the EU-China 2020 Strategic Agenda for Cooperation, notably shown through the European Investment Bank's presence in China for 25 years, lending over 3 billion Euros for projects in forestry, energy, transportation, and other sectors in more than 20 regions of the country (European Investment Bank, 2021). Despite varying opinions on EU-China relations from both sides, there is one thing that is universally understood; readouts of all recent heads of state-level meetings between the EU and China confirm everyone's agreement that the EU and China should maintain cooperation on climate change (Tsang & Schäpe, 2023).

However, with tensions running high, there is shrinking scope for climate cooperation (Webster, 2022). As China rises as one of the major economic powers in the world, EU-China relations have also evolved into a competitive field, with significant points of competition that add to difficulties in alignment between the two. The EU has also expressed frustration with China's low commitment towards climate change highlighting China's continuous dependency on coal-fired power plants, and Brussels is hoping to push China to take more ambitious steps towards their initial goals as well as to enforce stricter regulations (Amelang, 2023). Now with the European Union leading the world in the fight against climate change (Roper, 2020), and China's increased capability to tackle sustainability issues despite its negative carbon footprint, both party's trajectory toward sustainable development is of concern for our planet.

Nevertheless, climate change is one of, if not the largest issues that humanity is facing. The importance of international cooperation cannot be stated enough. Balancing China's economic interests with sustainability goals presents a complex challenge, but also a unique opportunity for growth. Since 2020, China's growth stagnated because of the real estate crisis, leading to massive layoffs and financial instability (Routley & Conte, 2024). China has emerged as a global leader in renewable energy, exporting new-energy vehicles (NEVs), solar cells, and lithium-ion battery products surpassing the 1 trillion yuan (128 billion Euro) in 2023 (Ahmed, 2024). By leveraging soft power through collaborative green initiatives with the EU, China could establish its position as a global leader in sustainability, as well as strengthen its bilateral relationship with the largest advocate for climate action, the European Union. There is no doubt that China can benefit from improving its international standing, including its relations with the EU. By considering its global image and utilizing green diplomacy, China can aim to foster a cooperative image and reduce tensions with other countries. Recognizing the key areas that China and Europe can mutually benefit from can facilitate future partnerships on global challenges that China requires Europe's support from, consequently strengthening their influence in international organizations and promoting a more inclusive and balanced global governance system.

China's relations with the EU cannot be viewed as a simple bilateral relationship because it is merely the surface layer of numerous bilateral relationships and national interests (Otero-Iglesias et al., 2015,7). With 27 member states, every country has varying degrees foreign policy and security approaches to China, making the findings the tip of the iceberg compared to the overall complexity. This study acknowledges that, given the complex political, economic, and social characteristics of the European Union, a more layered analysis of each country's commitment to sustainable development would provide additional insights to assess the overall scale of sustainable development efforts between the EU and China.

Defining the Research Question

This thesis will explore key areas of potential cooperation, considering its geopolitical implications as well as acknowledging its limitations. Several experts in the field from both the EU and China were interviewed to gain a deeper understanding of the topic. Considering the two are major competitors in global geopolitics and economics, it is crucial to analyze the EU and China's cooperation on sustainability issues. This research will provide China with specific recommendations to improve its relations with the EU through collaborative efforts on climate change while addressing the key areas of concern that China must maintain. Demystifying the complexities of EU-China cooperation on sustainable development by researching the different approaches and undertaking contextual analysis will provide a clearer understanding of this critical issue.

This Master's thesis will be guided by the following research questions: What are the main drivers and obstacles for China in aligning its climate policies with the EU's sustainability goals? In what ways can China become a more proactive partner with the EU in global climate diplomacy? In answering these questions, I hope to contribute to the climate change dialogue between China and the EU and to offer suggestions to China for its carbon-neutral journey.

2. Literature Review

Understanding the dynamics of EU-China cooperation in sustainable development requires a thorough review of existing literature, to dissect complex relations and key events that brought the two powers to this point. Godement notes that in the last four decades, China and Europe's relationship has completely taken a turn; previously with Europe's large presence and influence in China, now shifted to China's large presence and influence in Europe (Godement, 2020, 252). This section examines the history of EU-China relations, the status of their sustainable development cooperation, and the main theoretical themes related to this issue, to see where current knowledge is lacking and where research gaps exist.

Western Imperialism and Impact on China

The interaction started as early as the 16th century, way before the time of a united European community. Compared with Europe's economy, China's economy was at that time more open to the world and market-oriented (Abrami et al., 2014). There was competition among European powers to obtain silk, porcelain, and tea from China (Columbia University Asia for Educators, 2024). As a payment for these goods, large amounts of silver extracted from Mexico and Peru were exported to China, where it served as the Chinese money supply and mitigated the inherent lack of precious metals (Columbia University Asia for Educators, 2024). Eventually, Europeans, who wanted to keep the silver for payment to mercenaries in their ongoing wars, began to look to opium as an alternative payment to China (National Army Museum, 2024), yet the Chinese would only accept silver as payment. To address this issue, the British merchants including the East India Company imported Indian opium illegally into China, with a demand for silver in exchange, to rectify this trade imbalance (National Army Museum, 2024). Silver gained from opium sales to China was then used to purchase tea and other goods. Based on this, by 1839, opium sales to China had covered all the British tea trade (National Army Museum, 2024).

With the large influx of illegal British imports of opium, there were millions of addicts across the country by 1840, while trade relations between China and Great Britain began to erode (National Army Museum, 2024). After the Chinese authorities banned the opium trade, the opium war began in 1840, and the fall of Shanghai led to the Treaty of Nanking and the unequal and forcible opening of Chinese treaty ports with British residence and trade rights awarded to foreign imperialist powers (USC US-China Institute, 1842). Other countries, including the United States, France, and Russia took advantage of this treaty to sign off similar conditions (Britannica, 2024). In 1850, the Western powers were involved in helping China during the Taiping Rebellion, believing that Taiping's win would result in a centralized China that could resist Western penetration (Britannica, 2024). After the second opium war, more Western nations, including Germany, Italy, Denmark, The Netherlands, Spain, Belgium, and Austria-Hungary as well as Japan, took advantage of the situation to sign unfavorable treaties, opening 90 Chinese ports with foreign privileges that often undermined local authorities' rule (Britannica, 2024). By the end of the 1800s, China was infiltrated by Western empires, the US, and Russia, with "humiliating trade treaties, (which) subordinated and exploited China economically, and controlled it politically" (Sierakowski, 2019).

In 1904, Lodovico Nocentini described China as "a hub of colonial and commercial development for European powers", describing Western powers as "carving up" China into spheres of varying foreign influence (De Angeli, 2014, 27). What the current authorities in China would call the "semi-colonial, semi-feudal" era of the Western powers would continue until 1949 and the founding of the People's Republic of China (Ministry of Foreign Affairs, the People's Republic of China, 2021). After the end of European influences, Soviet Russia became the envisioned path to fully recover Chinese economic and political sovereignty (Godement, 2020, 252).

Century of Humiliation

In Chinese history, this period between the first opium war from 1839-1842 to 1945, with China emerging out of the Second World War as one of the Big Four and becoming a permanent member of the United Nations Security Council, is known as the

"Century of Humiliation"(百年国耻 bǎinián guóchǐ), where "foreign powers dominated China for their benefit, leading to wars and rebellions, and ultimately to the overthrow of the Qing Dynasty by revolutionaries" (Rafatjoo, 2020). This period and the idea of the 'Century of Humiliation' are often used by official Chinese narratives in antiforeign policies by the political leadership (Hunter & Sexton, 1999). Elliot disputes the impact of Western imperialism on Chinese society, especially its citizens, by questioning how Chinese society was traumatized by Western victories since 90% of the Chinese population lived outside concessions and did not feel humiliated by Western victories (Elliott, 2002). Still, the term has shaped official national narratives, which you would see in any newspaper, in official speeches, and when talking to Chinese citizens (Kaufman, 2011). Through this characterization, the country has shaped its political and economic identity, and the idea of humiliation has been a crucial part of resurgent Chinese nationalism (Callahan, 2004).

Upon self-reflection, the Chinese leadership has concluded that the country was "falling behind the Western powers technologically", which allowed Western powers to dominate the ports at that time (Harper, 2019). These painful experiences and perhaps shame, motivated China to be strongly determined to grow as a world power. Thus, through internationally competitive manufacturing, China grew as an economic powerhouse, illustrating how China's past experiences have guided its strategies and created a fascination for growth (MERICS, 2019). From this, we see that the 'Century of Humiliation' has been a force in China's foreign policy in how it has perceived other countries and motivated its drive for a greater status globally.

The Chinese People's Political Consultative Conference and The National People's Congress

China is the world's largest socialist state, with a one-party system led by the Communist Party. The Chinese Communist Party (CCP) controls the central government known as the State Council, and 30 regional divisions like provinces,

municipalities, and special administrative regions. Although there are eight other political parties, they have no power and can only offer advice to the CCP (Baptista, 2021). Every year, there is a large national event called the "Two Sessions" held at the same time, which are 2 key meetings, "The Chinese People's Political Consultative Conference (CPPCC)" and "The National People's Congress (NPC)". The first is the advisory body, which consists of the minor parties, alongside prominent people outside the political sphere, and it conducts a political conference "designed to liaise with non-Communist Party members – and ultimately see them work with the CCP to advance its interests." (Tiezzi, 2021).

While the attendees have no voting rights on legislation, they can put forward proposals for the major issues concerning the state, that may have been overlooked by the government (Tiezzi, 2021). Environmental issues have been historically put forward in these proposals, where for instance in 2023, the governing body selected a proposal on improving the environmental public interest litigation system (The National Committee of the Chinese People's Political Consultative Conference, 2024). According to Zhou et al., their study on the role of CPPCC in environmental governance suggests that CPPCC can lead to a cleaner environment, as the government enforces environmental laws more strictly after hearing the proposals, as well as encouraging public expenditure on environmental protection (Zhou et al., 2019).

Another important event is the gathering of the National People's Congress (NPC). This is China's top legislative body, where the pre-written economic and social development annual and five-year plans, created by the Chinese Communist Party, are approved (Liu et al., 2023). This is where China's long-term key energy and climate targets are set. The "CO2 emission peak" and "carbon neutrality" were two of the most popular topics among the participants in 2021 (Carbon Brief, 2021). This illustrates the importance of enforcement mechanisms in achieving environmental goals as well as the role of CPPCC and NPC in influencing environmental policy. Environmental issues greatly concern the public and see the government as the entity most responsible for tackling climate action (Liu, 2023).

Contrary to popular belief, many Chinese believe that the country's economic achievements stem from the authoritarian form of government, with over 95% of respondents being satisfied with the Beijing government, according to the July 2020 polling data from Ash Center at Harvard's Kennedy School of Government (Mitter & Johnson, 2021). Of course, the waves of environmental concerns go beyond this, and the effects of climate change such as air pollution, water scarcity, and soil contamination directly threaten the livelihood of ordinary Chinese citizens, who have turned to the government to do something. In the future, the government's inability to address these issues could potentially result in the citizens questioning the capability of China's ruling body.

Economic Growth of China

Before the late 1970s, China had a restricted economy that kept the country isolated from the rest of the world. China was devastated by the 11 years of cultural revolution, which caused the government subsequently to raise the living standards of its citizens through economic growth. After Deng Xiaoping came to power, the Chinese government began to pursue an open-door policy, where it "began to focus on economic growth through the active introduction of foreign capital and technology while maintaining its commitment to socialism" (Kobayashi et al., 1999). China turned its vast labor resource and space to rapid economic growth, making it one of the world's fastest-growing economies, described by the World Bank as "the fastest sustained expansion by a major economy in history" (Daniel & Frayer, 2023). By doubling its GDP every 8 years, lifting approximately 800 million people out of poverty, and improving citizens' access to education, health care, and other crucial sources, China dramatically limproved the livelihood of its citizens (The World Bank, 2024).

In recent years, China's economy has matured, with its real GDP growth slowing down significantly, projected by the International Monetary Fund to fall to 5.5% in 2024 (*People's Republic of China and the IMF*, 2024). The government has acknowledged the slower growth as the "new normal". The country has acknowledged

the necessity to shift to a new growth model that focuses less on fixed investments and low-cost exports, and more on boosting private consumption, expanding the service sector, and fostering innovation to sustain economic growth (Maddison, 2019). In 2022, China reported its first population decline since 1961, shaking the Chinese economy and bringing the need to revisit its long-term national growth strategies (Lo, 2023). With it maturing as an "upper-middle-income country", now, its challenge is transitioning to a high-income economy.

The concept of the 'middle-income trap', first coined by Indermit Gill and Homi Kharas, observes that countries that have undergone rapid growth through cheap labor, basic technology catch-up relocation of labor, and capital from traditional agriculture to manufacturing are often followed by lower growth (Larson et al., 2016). As seen in the cases of Latin America and the Middle East, these countries find it challenging with either low-wage countries that dominate manufacturing industries or high-income countries that lead in innovative high-technology sectors with rising costs and declining competitiveness (Larson et al., 2016). This inevitably prevents them from "escaping" middle-income status or delays the process. In the words of the IMF, China accounted for one-third of global growth in 2023, increasing the Asian average economic growth by 0.3% (International Monetary Fund, 2023). Still, the question is how China will sustain its development, and whether it can break the middle-income barrier.

Implication of China's new growth patterns

China's largely export-oriented economy has been seen to reach its limits. The economic reform in the late 1970s created strong growth in China's economy, pushing it as a major global economic power. The World Bank states that the current challenge lies in finding new growth opportunities "while addressing the social and environmental legacies of China's previous development path" (The World Bank, 2024). The fully developed economic and industrial capacity, bolstered by a large population and extensive infrastructure, has resulted in significant energy consumption and high levels of air pollutant emissions. Managi and Kaneko estimate that pollution damage cost during rapid economic growth is estimated to be around \$54 billion annually, close to

8% of China's GDP (Managi & Kaneko, 2004). Wen and Chen argue with the current issues such as environmental damage and resource depletion, China's long-term economic growth would be unsustainable (Wen & Chen, 2008). Whether China can even pursue environmentally sustainable growth also is debated by experts (Zhang, 2013), especially with the quickly approaching deadline and unclear details of how change can be delivered (International Renewable Energy Agency, 2022).

The term 'Degrowth' was coined in 1972 by Austrian and French social philosopher André Gorz and has since been used by advocates and researchers to call for "societies that prioritize social and ecological well-being instead of corporate profits, over-production and excess consumption" (degrowth). It criticizes the current global focus on growing and expanding economies and suggests the end of measures such as the Gross Domestic Product (GDP) to describe a country's economic progress (Masterson, 2022). Fuest, however, contends that citizens of developing countries and emerging economies are unlikely to let opportunities of greater prosperity go away, and "demanding such sacrifices can be morally questionable" (Fuest, 2023).

China claims that it is in the middle of development, which has gradually become protested by international leaders due to the label having benefits like preferential tariff treatment from developed countries (Kanwit, 2023). China claims itself as a 'developing country' in the WTO while being labeled as various things in another context, as the World Bank and U.N. Development Program classify China as an "upper middle income" country, and the IMF calls the country an "emerging and developing economy" (UNDP, 2024; The World Bank, 2024; Country Composition of WEO Groups, 2024).

Among those criticizing China for this status is the US, which unanimously voted in their senate for an amendment conditioning ratification of Montreal Protocol updates on action to remove China's designation as a developing nation (Lieberman, 2024). The US House of Representatives bill "PRC Is Not a Developing Country Act" was passed in March 2023; it requires the US State Department to take action to prevent China from being classified as a developing country (Congress.gov, 2023). Several

months later, the US Senate Foreign Relations Committee approved a similar bill. Considering the longstanding rivalry between the US and China, and now their battle for geopolitical influence, China benefiting from special provisions and support despite its actual economic power and global influence, irks the US and other global superpowers.

China's claim to be a 'developing country' can also be seen as a strategy to avoid being held accountable for its continuous increase in highly polluting emissions. In 2023, during a BRICS summit in Johannesburg, President Xi Jinping said in a dialogue that China will "forever be a member of the developing world." (Bandurski, 2023). Some may argue that China has no intention of removing the "developing" title and will continue to gain preferential treatment in trade and carbon emissions. By identifying as a developing nation, China strategically solidifies its position as a leader and advocate for the global south, deepening diplomatic ties with countries in Africa, Latin America, and Asia to foster collaboration in projects like its Belt and Road Initiative (BRI). In addition, China has historically curated its identity as a leader in the fight against colonialism, imperialism, and hegemonism, with other developing together with countries that experienced similar experiences in foreign domination and exploitation (Global Times, 2021).

Amidst divided opinions on China's status, one thing that can be agreed on is that China still shows signs of developing country traits. Currently, China has approximately 180 million people who do not have access to clean cooking technology that doesn't use high-polluting fuels such as coal, though is expected to achieve universal access by 2028 (iea, 2022). China's current GDP per capita in US dollars is \$12,720, placing it at 68th rank globally and far behind the GDP per capita of \$60,000 in the US (The World Bank). There is especially an income gap between urban and rural areas in China, where many rural areas lack infrastructure such as transportation, healthcare, and education resources (Frazier, 2013). For China to continue its development, there is no doubt that it needs to complement its current technological innovations and social progress toward environmental protection. Preserving natural capital is essential for China to continue its economic development.

China and its path towards Sustainable Development

China's official history of environmental protection started in 1972 (Xie, 2020). Before that, China experienced the effects of climate change, but the Chinese government claimed that "no environmental pollution existed in socialist countries, and industrial pollution was only the result of capitalism" (Xie, 2020). Chinese officials realized differently after participating in the United Nations Conference on the Human Environment in Sweden in June 1972 (Wang, 2023). It was also the first time China had been invited to an international conference since it regained its United Nations seat in 1971 (Wang, 2023). After this, the State Council Environmental Protection Leading Group, and the first environmental protection document of China, the "Provisions on Protecting and Improving Environment" were created (Xie, 2020). In energy policy, China has addressed energy conservation as a strategic issue of equal treatment to development and conservation since the 1980s (National Development and Reform Commission, 2007). China ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, a framework for international cooperation to combat climate change by limiting temperature increases (United Nations Climate Change, 2024).

During the economic opening in China, the economy flourished, resulting in mass urban construction and development with almost 10,000 economic development zones and industrial development zones registered (Xie, 2020). However, a tremendous amount of ecological damage and environmental pollution have been done in the process, which led to a common Chinese saying "The water is fit to wash rice and vegetables in the 1950s and for irrigating the land in the 1960s, but the water quality deteriorates in 1970s, the fishes and shrimps die in 1980s, and the water is not fit to wash the toilet lids in 1990s" (Xie, 2020). Due to frequent eco-disasters such as desertification, sandstorms, flooding, and water loss, the authorities amended the Environmental Protection Law in December 1989 to speed up ecological and environmental protection (Xie, 2020).

In 2007, China released the National Climate Change Programme, their first global warming policy initiative, targeting greenhouse gas emissions, energy production and use, agriculture, forestry, and waste (National Development and Reform Commission, 2007). In the official report, China emphasized that while the largest share of historical and current emissions is coming from developed countries, "the share of the developing countries will grow to meet their social and developing needs" and thus the developed countries should take the lead in combating climate change (National Development and Reform Commission, 2007). In 2013, it released an ambitious environmental reform plan, including new pollution control, waste treatment, environment cleanup rules, taxing greenhouse gas emissions, and shrinking carbonintensive industries such as coal (Asia Society, 2021).

National Congress's 13th Five-Year Plan (2016-2020) emphasized green development and environmental protection, and the current 14th Five-Year Plan (2021-2025) focuses on carbon peaking and achieving carbon neutrality. The National People's Congress has announced the goal of achieving carbon neutrality by 2060 and a peak in emissions by 2030 in these plans (Climate Change Laws, 2021). China is also home to the world's biggest producer of solar panels, accounting for more than 80% of global production that stems from "deep state support, rapid domestic demand growth, and intense local competition." (White, 2024). In addition, China is also a leading country in other clean tech industries, including wind power, batteries, and electric vehicles, now accounting for 40% of global renewable capacity expansion between 2019 and 2024 (Ahmed, 2024). With a massive population, China is the largest market for electric vehicles, nearly accounting for 60% of electrical vehicle sales worldwide, greatly surpassing the United States, Scandinavian countries, and even automotive-focused markets like Germany and Japan (Lin, 2024). In 2019, China was developing and testing a new metric to measure the contribution of nature to human well-being, coined the "Gross Ecosystem Product", making them the first country to ever do so (Earth.org, 2019).

In 2018, China introduced a set of values and development concepts called the 'Ecological Civilization (生态文明, shēngtài wénmíng)', a comprehensive framework

for achieving Sustainable Development that "stresses the harmonious coexistence of man and nature" (Ministry of Ecology and Environment, 2021). China's environmental policy draws from ancient philosophy, in which "beliefs about people living in harmony with nature" are emphasized, as opposed to the mentality of conquering nature, especially during the transition from agriculture to industrialization (Hanson, 2019). It was later written in their constitution in 2018 and is described as a "vision of sustainable development with Chinese characteristics and refers to Chinese philosophical and civilizational traditions" (Gulangyu & Kuhn, 2019). According to Wang, this thought is derived from Marxism's statement on "man lives on nature" and that humanity lives, produces, and develops by continuously interacting with nature (Guangsha, 2023). Xi Jinping combined this thought with Chinese realities of ecological conservation, to formulate a theory where the "core principles of development emphasized unity and symbiosis between man and nature" (Xue et al., 2023).

While there are similarities with the idea of Sustainable Development, Sustainable Development has a larger international scope with specific goals and indicators (Curia Rationum, 2024). In comparison, Ecological Civilization is ideologically driven and focused on the holistic transformation of society's relationship with nature, unique to China's development context. Xi Jinping argues that China "always respects and loves nature, the Chinese people have cultivated rich ecological elements in the culture during more than 5,000 years of Chinese civilization" (Xi Jinping, 2023). China is set to achieve its previously promised 2030 Nationally Determined Contribution, with carbon emissions peaking by 2025 (Lui, 2022). This, however, may not suffice, as it doesn't fulfill the requirements of an ambitious enough target that could stop the warming of the planet. Every 5 years, the Paris Agreement requests members to submit their next round of Nationally Determined Contribution plans, meaning the next round will be in 2025, a pivotal moment in the global effort to mitigate climate change (United Nations Climate Change, 2024). Whether China can pledge an ambitious enough target that can fulfill the global need, is the big question.

Figure 1

Key differences between China's Ecological Civilization and UN framework on Sustainable Development

Aspect	Ecological Civilization (China)	Sustainable Development
Origin	Rooted in Chinese philosophical and civilizational traditions	Coined in the Brundtland Report by the United Nations in 1987
Philosophical Basis	Harmony between man and nature	Meeting the needs of the present without compromising future generations
Core Principles	Unity and symbiosis between human activity and the natural world	Balancing economic growth, social inclusion, and environmental protection
Cultural Context	Emphasizes traditional Chinese values and Marxist ideology	Broadly applicable across different cultures and nations
Policy Focus	Holistic transformation of society's relationship with nature	Integration of environmental, social, and economic policies
Implementation Approach	Top-down government-led initiatives	Multi-stakeholder involvement including governments, NGOs, and businesses
Primary Goals	Ecological harmony, environmental restoration, and cultural integration	Economic growth, environmental sustainability, and social equity
Strategic Tools	State-driven plans, ecological red lines, and green technology	Sustainable Development Goals (SDGs), international agreements like the Paris Agreement
Global Influence	Unique to China's development context, influencing domestic and some international policies	Widely adopted framework guiding global environmental and developmental policies
Key Documents and Plans	14th Five-Year Plan, National Plan on Ecological Civilization	Brundtland Report, Agenda 21, SDGs, Paris Agreement
Public Engagement	Government-directed with some public participation	Emphasizes participation from all sectors of society
Economic Integration	Emphasizes green growth within China's economic model	Encourages decoupling of economic growth from environmental degradation
Technological Development	Focus on green technology and innovation supported by state funding	Promotes technology transfer and innovation across nations

Note. Own illustration, data are compiled based on the following sources: Eyraud, L., Clements, B., & Wane, A. (2013). Green investment: Trends and determinants. International Monetary Fund. Gulangyu, C., & Kuhn, A. (2019). China's approach to sustainable development: A comprehensive framework. Hanson, A. (2019). China's ecological civilization: Green transformation through new development philosophy. Ministry of Ecology and Environment, PRC. (2021). Ecological civilization: A concept of harmony between human and nature. United Nations. (1987). Report of the World Commission on Environment and Development: Our common future (Brundtland Report). United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. World Bank. (2022). Sustainable development overview. Xue, J., & Guangsha, H. (2023). Ecological civilization: Perspectives and practices in China.

China's Current Challenges with Environmental Protection

China's challenge lies in the fact that its economic growth "is based on the use of coal and other fossil fuels" (Lu, 2019). S&P Global reports that coal accounted for 60% of the total supply in 2023, exhibiting that the massive increase in solar and wind power capacities isn't directly reflected in China's energy supply (Yin, 2024). Its heavy

reliance on coal for energy production is still evident, with the country being responsible for 95% of new coal power plant construction in 2023 (Lempriere, 2024). China is the largest funder of fossil fuel infrastructure abroad, where it plans to build hundreds of coal-fired power plants in countries around the world through the Belt and Road Initiative (Maizland, 2021). Many of the coal plants are losing money, with data from the Electricity Council revealing that more than half of its large coal firms made a loss in the first half of 2022 (Stanway & Xu, 2023). So why is China so dependent on Coal? Ritchie suggests that while most of the world is used to using gas, China doesn't want "another geopolitical burden when it has coal resources at home" (Ritchie, 2024). Energy security is a top priority for China, and to maintain a steady supply, coal power is a reliable source that is not vulnerable to weather and not dependent upon imports. With frequent droughts, its large hydropower fleet's electricity output plunges frequently. Coal power has been used to cover these gaps in energy output, suggesting that the central government finds coal projects the best option for ensuring energy security.

China's economic slowdown has also raised concerns about inflating the real estate market and boosting construction, which are seen as a repeating pattern when economic growth falls (Myllyvirta & Qin, 2023). The government continues to strongly endorse the coal power expansion through the National Energy Administration, according to Myllyvirta and Qin's translation (Myllyvirta & Qin, 2023). This coal dependency is a source of concern, and a puzzle for countries that moved away from coal a long time ago. Further research to understand China's dependency on coal, as well as exploring methods of green transition is important.

EU leading the global fight against climate change

Europe has remained the world's largest sustainable investment market, and sustainable development has been a focus of the European Union (EU) since the Treaty of Amsterdam in 1997 (Government of France, 2023). The EU has set some of the most

ambitious climate targets, with the recent Green Deal aiming to make Europe the first climate-neutral political space by 2050 (European Commission, 2023). In 2024, the European Union recommended that the countries further cut greenhouse gas emissions by 90% by 2040 (Liboreiro, 2024). This is necessary to comply with the 2015 Paris Agreement, which stipulates that the committed countries should keep the earth's long-term average temperature well below 2°C, ideally below 1.5°C (United Nations Climate Change, 2024). While this is a nonbinding ambition, it is a recommendation that has kick-started political debates, motivated citizens, and send a signal on how to invest and plan effectively for the long run, according to the European Commission (European Commission, 2019).

The EU has significantly invested in renewable energy sources as well, currently with 44% of renewables in the EU electricity mix (Brown, 2024). The EU Emissions Trading System is currently in its fourth phase, covering 45% of EU greenhouse gas emissions, the EU Emissions Trading System, has also been implemented since 2005 (European Commission, 2024). The Environmental Protection Agency notes that it is a "cap and trade" scheme where a "limit/cap" is placed on the right to emit specified pollutants over a geographical area and companies can trade emission rights within that area" (Environmental Protection Agency, 2024). With its global leadership role in international climate negotiations, the EU has been a strong advocate for stronger global climate action and has committed substantial financing to support developing countries through loans from the European Investment Bank. All in all, the EU has been a frontrunner in persuading countries to work towards a greener world, leading the world's decarbonization movement.

At the same time, the EU does have significant challenges in fulfilling its environmental protection initiatives. As mentioned, the EU has significantly decreased its dependency on coal power, however some member states, particularly in Eastern Europe remain heavily dependent on coal for energy. Europe's biggest economy, Germany, is the largest coal producer in Europe, with 18.9% of coal power used in the total energy consumption (Venditti & Ross, 2023). Considering per capita carbon emissions from fossil fuels and industry, countries like Luxembourg, Iceland, and

Germany produce more than China (Global Carbon Budget, 2023). Transition to a low-carbon economy becomes a significant challenge for countries that are heavily reliant on fossil fuel industries, to support workers and communities. There are also technological and infrastructure barriers to accelerating the green transition. Currently, Europe produces fewer than 3% of the solar panels required to reach its solar target of having 42.5% of energy generated by renewable sources by 2030 (Solarpower Europe, 2023). 97% of solar panels are imported from China, which has been a concern in recent years due to geopolitical tensions (European Commission, 2024).

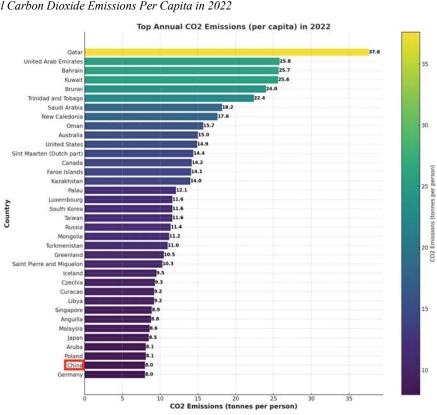


Figure 2

Top Annual Carbon Dioxide Emissions Per Capita in 2022

Note. Own illustration, Source: Global Carbon Budget (2023); Population-based on various sources (2023) – with major processing by Our World in Data. "Per capita CO2 emissions – GCB" [dataset]. Global Carbon Project, "Global Carbon Budget"; Various sources, "Population" [original data]. Retrieved June 11, 2024, from https://ourworldindata.org/grapher/co-emissions-percapita

The question of who is most responsible for global warming is one of the biggest debates in climate change. According to a nonprofit think tank based in Washington, D.C., and London, from 1850 to 2011, developed countries caused 79% of the carbon emissions, with the European Union and the United States accounting for

more than half of the emissions (Center for Global Development, 2011). A New York Times article in 2021 further reinforces the previous claim, stating that 23 rich industrialized countries are responsible for half of the historical carbon dioxide emissions over the past 170 years (Plumer & Popovich, 2021). Globally, the richest 1% of the global population is responsible for the same amount of carbon emissions as the world's poorest two-thirds, or five billion people (Oxfam, 2023).

Current EU-China Relations on Sustainable Development

From geopolitical challenges and possible opportunities, the EU-China relationship on sustainability has been described as a complexity of competition and cooperation. Chinese and European firms are increasingly at odds over market shares, customers, and technological leadership (Oertel et al., 2020). The EU's liberaldemocratic market economy is completely different from China's authoritarian party state (Oertel et al., 2020). The rising China has caused geopolitical tensions, and China's efforts for a stronger economic and diplomatic position in international relations have concerned global actors, no doubt in the EU as well. The tensions between China and the United States are also a great concern for the EU, and an IRI poll in 2023 revealed that 34% of interviewees in the EU said that their view on China worsened due to its close relations with Russia as well as human rights abuses allegations (International Republican Institute, 2023). The EU defines China as a "partner, competitor and a systemic rival" (European Union, 2023), but relations have come under strain recently as is evident in the EU's moving investments and supply chains away from China in recent years (BRINZA, 2024). In 2024, the EU notified China that it intends to impose tariffs up to 38% on imports of Chinese electric vehicles, triggering more than USD 2.1 billion in duties per year (O'Carroll, 2024). A trade war would be catastrophe for the climate, with the chances of achieving the sustainable development goals becoming slimmer.

China views the EU as an important player in geopolitical relations, with mutual interests in economic and geopolitical development (Chen, 2024). In 2024, China's Foreign Minister Wang Yi emphasized the nation's willingness to cooperate with the

EU, stating that "China is ready to be a long-term partner with the EU in economic and trade cooperation, a priority partner in scientific and technological cooperation, and a trustworthy partner in cooperation on industrial, supply and data chains" (Ministry of Foreign Affairs, the People's Republic of China, 2024). Amidst the ongoing power struggle between China and the United States, China views the European Union as a strategic ally, particularly because the EU does not fully align with US strategies. With seemingly shifting interests and smaller areas for cooperation, how EU-China relations will evolve in the coming years is a key concern for global politics.

Still, hope is not all lost. Many experts have described EU-China relations on sustainable development as the "Oasis in the desert" (Tsang & Schäpe, 2023), and climate diplomacy is seen as one of the few commonly acknowledged issues on which a partnership is possible. China and the EU do not see eye to eye on many environmental issues but maintain similar interests on issues such as global climate goals, technology, and innovation, as well as green finance initiatives, which can improve bilateral relations and ultimately contribute to global sustainability. China and the EU are both committed to the Paris Agreement and have jointly agreed on flagship research initiatives on food, agriculture, biotechnology, climate change, and biodiversity (European Commission, 2022). The EU has encouraged China to adopt more ambitious carbon emission reduction targets, specifically advocating for China to join a global initiative to cut methane emissions and commit to tripling the worldwide capacity for renewable energy by 2030 (Reuters, 2023). In China's climate diplomacy with the EU, there is a need for China to adopt a stronger climate commitment. The fight against climate change ultimately goes beyond borders, and it is in everyone's interest to stop the world from breaking a dangerous environmental boundary. With shifting interests and narrowing scope for cooperation, the future trajectory of EU-China relations remains a crucial issue in global politics. Understanding the cultural differences and varying perspectives on sustainable development between the two entities, while providing greater context to each area's concerns, is key to growing mutual understanding that allows deeper cooperation.

Finding the Research Gap

EU-China relations are a significant relationship for both of the parties, one that can impact the entire global order. China could greatly benefit from accelerating its green transition efforts while maintaining its political position. Environmental damage goes beyond national borders, significantly affecting China and its citizens. The world asks: So, what is stopping them from fixing it? Despite substantial literature contextualizing differences between the EU and Chinese approaches, there are few comparative studies on future collaborative opportunities for sustainability. Everyone is aware of the difficulties in addressing climate change, especially with coming from different values. Further research and analysis into how existing policies can be adapted are required to make a significant change in sustainable development. The technological and innovation gaps are an issue for both the EU and China as well, while this is something that could be complimented by one another. Understanding how this gap can be bridged through different forms of agreements can be beneficial for China. Both parties' understanding of each other may be constrained by the biases present in available information. The EU can benefit from gaining a deeper understanding of China's indoctrinated 'ecological civilization', beyond the current existing understanding of China. In addition, a deeper understanding and engagement with China's experience in environmental policymaking would greatly benefit the West and environmental advocates. This approach can bridge the knowledge gap and challenge existing biases about China, fostering more effective and collaborative solutions for global environmental issues.

Developing a thesis that is impartial and comprehensive, allows for an unbiased and mutually beneficial reading that provides deeper insights from both perspectives. The geopolitical implications of a stronger EU-China cooperation require more attention on the international level. China should consider the strategic use of sustainable development projects in the broader context of its global rivalry, especially with the United States. Sustainable development is an opportunity for China. Addressing the gaps can provide a greater outlook on how EU-China relations can develop through sustainable development, benefiting both regions and setting a positive example of collectively working towards global environmental goals.

3. Theoretical Framework

Sustainable Development, first coined by Norwegian Prime Minister Mrs. Gro Harlem Brundtland in 1987, is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Insee, 2016). To understand the potential for greater EU-China cooperation on sustainable development, exploring key theoretical perspectives that shed light on the complexities of international relations and sustainable development is necessary. In this section, the different theories used to analyze significant dimensions of EU-China relations, as well as China's current international standing, will be discussed.

The path forward for developing countries

In 1960, Rowstow coined the "5 stages of economic growth", which presented the 5 phases that all countries must pass to become developed, which are traditional society, preconditions to take-off, take-off, drive to maturity, and age of high mass consumption (Jacobs, 2024). As early as 2030, even without China, developing countries will contribute more than half of greenhouse gas (GHG) emissions, while simultaneously being the most vulnerable to climate change (Bhattacharya et al., 2023). Historically speaking, economic growth has been tied to growing carbon dioxide emissions worldwide. According to Mardani et al, due to the bidirectional causality, policies to reduce emissions can negatively impact economic growth, and thus are not a desirable outcome for emerging and developed nations (Mardani et al., 2019).

It is no secret that developed countries have industrialized with little regard for environmental sustainability, relying heavily on fossil fuels and unregulated activities abroad, resulting in severe environmental consequences that now require developing countries to incorporate sustainability into their growth strategies. Kirda et al highlight this point, stating that "future generations will not have a green, clean, and healthy planet if developing countries continue on the traditional development line that developed countries have taken" (Kirda & Aytekin, 2023). With stricter environmental and labor regulations, global competition, technological gaps, global trade policies, resource depletion, and unnoticed long-term economic impacts of colonial debt and legacy, developing countries have a harder time catching up with developed countries.

As claimed by Beniot, "for structural reasons, energy demand, energy use in China is going to increase for several years until they achieve a level of development" (Kanwit, 2023), highlighting the difficulty of developing countries achieving development at the same pace as its predecessors. Although China may no longer be able to claim itself as a 'developing country' in the international eyes, countries including China, are now held to stricter environmental standards in comparison with developed countries that benefited from a lack of regulations before. This shift highlights the evolving expectations and responsibilities of developing nations in the context of global environmental sustainability.

Hegemonic Stability Theory:

The hegemonic stability theory, associated with political economists Charles P. Kindleberger and Robert Gilpin, argues that the international system is more likely to remain stable and orderly when a single nation-state, known as the hegemon, provides leadership and sets rules and norms for the system (The Kootneeti Team, 2022). Webb and Krasner note that this theory has been used to understand economic relations among advanced capitalist countries since 1945, explaining the hegemonic global order (Webb & Krasner, 1989). With this theory, the hegemonic state can provide guidance and a sense of predictability, whereas other states can rely on the hegemonic state to address global challenges. The theory also notes that the dominance of a single state can lead to resentment from other nations and may be challenged by the emergence of new powers or the decline of the hegemonic state (The Kootneeti Team, 2022). These dynamic puts significant pressure on the hegemon to maintain its leadership and address the concerns of other states. This can be applied to the US dominance in global power since 1945. For a long time, the US has assumed the leading role in international institutions, with the world's most powerful military and economy (BBC).

As a result of the application of this theory, it is possible to examine how China's environmental efforts will affect its rise as a global superpower. As a leader in green technology, it could become a more influential global player, notably through stronger collaboration with the EU.

Cronin contends that the US had to deal with the paradox of hegemony, a responsibility that struggles with balancing self-interest with international responsibility, as seen in the US's relationship with the United Nations. (Cronin, 2001). That the US gradually lost credibility in the eyes of the international community has significantly impacted its leadership, causing a decline in its persuasiveness as well. Rizzi argues that since 2001, a series of events has caused the US to transition from a unipolar scenario with the US as the "undisputed superpower with its western allies, to an agitated, assertive and multipolar power" (Rizzi, 2023). When Donald Trump was elected as the president of the US in 2016, he led the state with the "America First" policy, focusing on reducing trade deficits and rebalancing burden sharing within alliances, claiming the "right of all nations to put their interests first." (Maizland, 2021). This led to withdrawing membership from the (then emerging) Trans-Pacific Partnership, banning the immigration of 6 Muslim majority countries in 2017, and leaving the 2015 Paris climate accord (Maizland, 2021).

Fast forward, Donald Trump may be reelected for a second term, which could further decouple the US from its supposed role as a hegemonic leader. While Trump's orders during his presidency were short-lived, this sent a signal of unreliability towards global leaders, impacting their perceptions of what the future global order may be. The power dynamics of the EU and China can be observed as well, and the quest for global influence leads to their cooperation and competition in the sustainability realm. The application of the hegemonic stability theory allows for an examination of China's rise in global governance through climate diplomacy. The analysis will discuss the importance of strategic alliances and shared goals in tackling sustainability amidst shifting global power dynamics.

Ecological Modernization Theory (EMT):

EMT notes that economic development and environmental protection are not necessarily contradicting goals, as through technological innovation, regulatory reforms, and institutional changes, economic growth can be decoupled from environmental degradation (Mol & Spaargaren, 2000). Although balancing

environmental protection and economic growth may be difficult, it is not impossible. Studies show that China can achieve significant energy savings and emission reductions with a 7.8% annual growth rate, requiring the promotion of sustainable energy conservation, emission reduction, and transforming industries to maintain low energy consumption and carbon emission intensities through effective policies (Xu et al., 2023). Globally, Sustainable Development Goals have been a driving force for investment in recent years, as well as a growing standard for determining investment opportunities. As interest rates have remained low, fuel prices have remained high, and policies like carbon pricing schemes and feed-in tariffs have led to an increase in green energy investments in China as well (Eyraud et al., 2013). Despite this, Su argues that green investments do not offer strong returns, and therefore require investors to pay a premium for going green, due to not offering protection from extreme downside risks (Su, 2020). Nevertheless, the economic significance that green investments and green infrastructure will have in the future is substantial. In 2023, renewable energy contributed USD 1.6 trillion to China's economy, accounting for most of the investment and economic growth in the country (Myllyvirta et al., 2024). What China now needs is to identify the current issues that hinder them from achieving this progress.

China as the 'other' and post-colonial Theory

Current International Relations (IR) theories fail to question the notion of the perceived 'superiority' of Western civilization compared to non-Western countries, making Western imperialism the norm in the global order (Hobson, 2007). American scholars have dominated IR theories and are centered around US foreign policy, written from the perspective of maintaining US power (Politics for India, 2020). It is therefore a challenge to fit the current rise of China in traditional IR theory, considering that non-western countries were not considered a part of this power struggle during that time, but more as colonies. In Edward Said's *Orientalism* writing, he explains the oversimplification of non-Western identities, where the rivalry between the Muslim world and the West is discussed and portrayed using stereotypes (Said, 1994). China's stereotypical representations in US politics are also another case, as Lucenti describes terms like "Thucydides' Trap" and "New Cold War" which were instrumental in embedding the China threat narrative, particularly during the Trump administration

(Lucenti, 2024). These narratives tend to generalize the complex relationship between the US and China, where some may have a one-dimensional understanding of one another. Harper also criticizes the popular rhetoric that China has a "grand scheme" to secure world leadership. China's actions, according to Harper, are more responsive, "where its foreign policy is adapted to respond to recent developments rather than being in a long-term scheme for domination" (Harper, 2023). Ratuva highlights that Sinophobia, or anti-Chinese sentiment, has been traced back to the 19th century when the "myth of racial European superiority and corresponding inferiority of the Chinese was weaponized as an ideological justification for colonial domination, exploitation of cheap labor and appropriation of China's resources and wealth." (Ratuva, 2022). Ratuva also points out that America, France, and Australia have expressed Sinophobia rhetoric in their geopolitical strategies, based on racialized framings and prejudices from the past (Ratuva, 2022).

The view of China as the 'global threat to liberal international order', narrows the scope for cooperative diplomatic dialogue and policy decisions. While the West identifies the non-West in the 'other' category, providing an understanding of the global powers through current IR theory, a world that is increasingly becoming more diverse, may have its limits. China's aspirations greatly differ from previous Western powers, as much as they are a puzzle to them. Post-colonial theory and competitive liberalism provide some context to China's case, which had historical experiences with Western and Japanese imperialism, which impacted its formation of national identity and foreign policy. The narrative of overcoming imperialism and regaining sovereignty is a frequently used rhetoric for China, used to legitimize the ruling Communist party's authority. China's rapid growth since its open-door policy can be analyzed as a strategy to assert its independence and challenging the existing Western dominance. Initiatives like the Belt and Road Initiative fall under the category of China's efforts to expand its global trade capabilities. The actions of Chinese simply cannot be explained just with modern IR theory, due to its non-western nature, and different political structure. Given the emerging prominence of China, and the rest of the global south, there is a need to incorporate non-Western ideas into mainstream IR theory. By adopting a nontraditional

postcolonial perspective, a nuanced analysis of China's intentions regarding EU-China relations and their joint efforts toward global sustainability can be achieved.

These theoretical perspectives collectively have provided a comprehensive framework for analyzing EU-China cooperation on sustainable development. This analysis provides a foundation to explore opportunities for future collaboration by identifying factors that influence EU-China relations. In addition, a theoretical foundation showcases diverse perspectives on sustainable development, while also ensuring reliability and validity.

4. Research Methodology

This paper aims to explore the future opportunities for EU-China cooperation in advancing global sustainable development under the current geopolitical and environmental landscape. Although field research in China and Belgium were not conducted, extensive online resources and expert interviews were leveraged to gather data. Semi-structured interviews with experts in EU-China relations and sustainable development were conducted, which allowed for updated data that focused more on onthe-ground perspectives past the stage of policy making. The experts were selected based on their experience and contribution to the field, including from an independent climate change think tank E3G, the non-governmental organization Germanwatch, the German development agency Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), an Energy and Climate Specialist at Client Earth, EIB Regional Representation to China and Mongolia, and the head of zero-carbon village project in China. The questions asked included questions focused on areas of cooperation, challenges, and opportunities from the expert view, tailored to their background. Their responses were analyzed with secondary research, granting me a real-life understanding of what is happening in discussions in the EU and China. Informed consent was obtained from all interview participants, ensuring they understood the purpose of the research as well as their rights. Data confidentiality will be maintained, and all data will be stored securely to protect participant privacy.

This study also relies on secondary research, drawing from a wide array of sources including books, scholarly articles, online news platforms, and official statements from the Ministry of Foreign Affairs of the People's Republic of China and the European Commission. Thematic analysis will be used to identify patterns within the interview data. By combining secondary research and interviews, a well-rounded and comprehensive insights were obtained, contemporary policies and pressing issues, which contributed to formulating well-informed recommendations that reflects the reality of EU-China cooperation. In the potential biases may arise from the purposive sampling method, but this will be mitigated by ensuring a diverse range of interviewees.

Furthermore, limitations to the data collection methods, such as the availability of up-to-date secondary data, will be acknowledged.

My multicultural background—being half Chinese and half Japanese, having lived in Hong Kong, Japan, Singapore, and Canada, and now pursuing my master's degree across Italy, Germany, and France—has instilled in me a profound appreciation for global perspectives and the collective good. This Master's thesis hopes to contribute to a deeper understanding of cultural dynamics and foster stronger EU-China collaboration for a sustainable future.

5. Analysis

To reiterate, the research questions guiding my thesis were: What are the main drivers and obstacles for China in aligning its climate policies with the EU's sustainability goals? In what ways can China become a more proactive partner with the EU in global climate diplomacy? In this section the findings of the interview and secondary research will be analyzed, to identify key challenges and opportunities that China can consider.

Attention to detail is key

Working towards sustainability is an economic, environmental, social, and geopolitical advantage for China, and its political structure allows for a top-down approach, quick in addressing environmental issues. There were almost no solar power plants in China five years ago, yet China now has more solar power than all the electricity generated in the UK combined (Clifford, 2015). The top 5 largest solar companies in the world are from China, selling to EU member states, Australia, the US, and all around the world (Lebreton, 2024). Clifford notes that this extremely fast development can be attributed to the country's top-down engineering-oriented approach, to setting big goals and reaching them (Clifford, 2015). In an interview with an expert from GIZ with experience working in China, they mentioned how they never saw a Chinese politician deny climate change, as it is already decided as a strategic focus at the high political level.

The GIZ expert noted that in the EU, there is a significantly larger bottom-up approach to tackling climate change, and some politicians in other countries would be seen to deny climate change. The rise of right-wing populism and climate change denial is a concerning issue in the EU and the US. EU right-wing parties share ideological similarities with the Trump-era GOP, marked by populism and anti-science, anti-environment stances, with well-documented financial ties between these ideologies and fossil fuel industries (Berwyn, 2024). In this sense, the heavy top-down approach for China pushes climate change mitigation to the top of the agenda and it then trickles down to each province that is motivated to follow through with its promises.

However, for China, 'attention to detail' is an issue. Now China is drawing criticism for the overproduction of green technology, where the US and the EU are calling it an 'unfair trade practice', with Chinese clean tech manufacturing boosted beyond the capacity needed to meet domestic demand (Vidal Liy, 2024). The US and several EU countries call this 'unfair trade practices' as Chinese factories can flood international markets with cheaper products, due to generous state incentives and cheaper labor costs (Martin, 2024). The world's biggest solar company, Longi company executive, says that the US and EU raising tariffs and restricting renewable energy supply chains would risk "slower decarbonization of their economies" (White, 2024). The politicization of climate change makes it harder for all countries to achieve carbon goals, caused by the ideological divide and narrowing global cooperation.

Lo counters this argument and states that this perspective is not shared by the "rest of the world", as leaders like Samaila Zubairu of the Africa Finance Corporation call for China to leverage Africa's resources and renewable energy potential to support its green industry supply chains (Lo, 2024). How the Chinese boost economic growth is different from the West; Western countries, like the US, stimulate economic growth by increasing domestic demand rather than exports (Lo, 2024). To Lo's point, the Chinese government's commitment to focus on green transition and achieve technological progress in a short amount of time is impressive. Still, this is true. From this, it can be suggested there are different reactions being expressed to China's 'overproduction' issue, which is also framed within the context of geopolitical tensions.

China's 'overproduction' issue is an issue that needs to be addressed. Taking the example of wind turbines, stakeholders are seen to build them to gain political favor, rather than to generate electricity most efficiently (Clifford, 2015). The expert from GIZ gives his/her insight, saying that "China is a country that likes to overachieve", and that while the Chinese government is good at making fast decisions, the demand assessment is not wholly conducted in wide-scale projects. This April, the world's largest solar power producer, Longi Green Energy Technology announced tens of thousands of layoffs in its effort to slash costs, due to overcapacity and low prices of solar panels (Cossins, 2024).

Moreover, the better utilization of existing energy resources should be considered. With the growing energy demand, China is building far more coal power capacity than it uses (Ritchie, 2024). In 2000, the plants were running 70% of the time, but their utilization rate is now 50% (Ritchie, 2024). The coal plants are also bleeding money, with a 50% net financial loss in 2018 (Ritchie, 2024). Therefore, utilization data should be considered to evaluate the need for new plants. China is leveraging its large labor force to significantly expand its green energy capacity. While this rapid increase is positive, overproduction risks wasting efforts and resources, which ultimately is worse for the planet. To optimize output, production should be more orderly and based on thorough demand assessments.

'Quick wins' for provinces in China

One topic that was discussed by several experts in the interviews, was the gap between the state and provincial level in terms of pursuing sustainable development. With currently 22 provinces with 56 official ethnic groups, the way of life in rural areas is vastly different from the urban area. There is a huge gulf between urban and rural incomes in China because of the country's Hukou system, a household registry that prevents most migrants from moving permanently to cities (American Economic Association, 2022). As a result, there is an uneven development in China that widens the development gap between the rural and urban areas, with challenges such as "non-agriculturalization, non-grain preference, abandonment of farmland use, weakening rural development, and unfair urban-rural allocation of capital" (Long et al., 2016). In our interview, the Client Earth expert also emphasized that more focus on the rural area is needed, suggesting that while the Chinese authorities are used to dealing with pollution, they are not used to the recent Emission Trading System.

Client Earth expert, currently working in China, mentioned the pressure to find new sources of growth, and in the areas that lack options, local provinces may still turn to coal industries. According to Ritchie, since 2014, the authority to approve new coal plants has been delegated to the provincial level (Ritchie, 2024). This decentralization means that each province aims to ensure its own consistent and reliable energy supply,

reducing dependence on neighboring provinces for any potential shortfall (Ritchie, 2024). This suggests that perhaps renewable energy is therefore considered to be unreliable still, reinforced by the previously mentioned notion of it failing due to droughts and needing coal power to supplement the energy pool (Fabbri, 2023).

The GIZ expert mentioned that CCP party officials in the provinces are always looking to have quick wins with their superiors, which includes the development of coal plants. This was seen in 2020, when China saw a spike in coal power plants (Myllyvirta, 2021), as the creation of these infrastructures generates income to combat the slowed economic growth. However, this is an inefficient way of creating infrastructure for China's long-term growth, as these plants lose money as time progresses and become redundant. Looking at the case of the coal-rich Shanxi province, a strict coal-burning ban was set in 2017 at the provincial level (Feng, 2017). To ease the transition, the local government installed free natural gas heaters, but residents couldn't afford the gas, as operating the heaters cost as much as a resident's annual salary (Wang, 2022). The EIB representative mentioned in the interview that the reason why the EIB invests in Chinese provinces is because the central government has its own priorities, whereas the financing and developing needs of undeveloped areas is overlooked. Even though China has highly ambitious goals for its green transition, if its intentions are watered down in the rural areas, and resources and emissions are wasted in the process. Therefore, China needs to make sure that support for the transition is given to everyone for it to enforce these laws, especially in rural areas.

Chinese citizen's sustainability awareness and action

Another challenge that should be tackled is the Chinese population's awareness of sustainability. Climate change is felt hard by Chinese citizens, with frequent mega natural disasters. While they consider climate change to be an issue and studies show that Chinese citizens have a high awareness of the existence and anthropogenic causes of climate change, they consider climate change less urgent than air pollution (Liu, 2023). This is also connected to how the Chinese government speaks about natural disasters in China. The GIZ expert mentions how natural disasters are communicated to the citizens as 'once in a century' disasters, rather than as a byproduct of climate change

(Liang, 2024). How the Chinese citizens see the central government as the entity most responsible for acting on climate change (Liu, 2023), can be seen as an indication that ordinary citizens don't see themselves as responsible for contributing to climate change mitigation action, but that this is rather something that could be improved through the government's efforts. The GIZ expert mentions how in the EU, there are more bottomup approaches to tackling climate change, where EU citizens are focused on lifestyle changes and what they can individually do. In China, fewer people are concerned with individual actions, and there are currently few environmental regulations that apply to individual consumers, making this an area for improvement. The general Chinese citizen's current understanding of environmental protection is thought to be insufficient, causing issues such as unreasonable consumption, enormous waste, misconception about packaging, and a misconnection between 'green' and 'environmentally friendly' products (Li et al., 2023). Consumers fail to look at their current consumption habits, and this shows that there is a need to revise their consumption habits to lower the daily emission of greenhouse gas emissions. The government should consider its role in regulating consumer behavior to establish standards and influence consumer consumption patterns.

Nevertheless, since the COVID-19 pandemic, the Chinese consumer's relationship with sustainability has shifted. According to the PwC's June 2022 Global Consumer Insights Pulse Survey, PwC's June 2022 Global Consumer Insights Pulse 34 % of Chinese consumers 'often' or 'always' agree that a business's environmental actions influence purchase behavior compared to 29% in the US (PwC Global, 2023). In addition, there has been an increase in Chinese citizens willingness to pay more for sustainable products. According to EY's report from 2021, Chinese consumers will pay between 11% and 30% more for electric vehicles than US consumers (Atwal, 2022). From this, a education on sustainability and increasing public awareness of climate change issues in China can be considered.

Areas of Possible International Cooperation

All experts agreed that the area of possible cooperation is getting narrower. With increasing geopolitical tensions and security concerns, what the EU and China could work on together may become smaller and smaller. However, in our interview, the

Germanwatch expert notes that without climate change cooperation, EU-China relations would be much worse, and the dimension of green issues can be seen as a stabilizing one. The common interest in coordinating and collaborating on it allows for an open dialogue on this issue, while the dimension for trade and security becomes narrow. He/she also noted that climate change cooperation between the two entities is a door opener and key to building a stronger relationship and building dimension to other fields. In our interview, EIB expert said that they witnessed the Chinese citizen's change in attitude towards climate change and that local climate change mitigation projects applied EU standards, after seeing the benefit. Talking about things that the EU and China can work on, the expert from E3G mentioned technological cooperation and training, as the EU leads initiatives on working with sustainable development. Among the examples cited by Germanwatch experts is the EU's Carbon Border Adjustment Mechanism (CBAM), which is the first carbon tariff on carbon-intensive imports to the EU, including steel, cement, and some electricity (Blenkinsop & Abnett, 2023). In discussions with Chinese local entities, they saw that CBAM is something that they must talk about more due to misconceptions, and distrust, with holes to fill. In addition, the E3G expert said that getting to local organizations, and overcoming language and cultural barriers is relevant in joint projects. Hosting more open dialogues on technology would allow for a greater understanding of each other's green initiatives.

The GIZ expert also mentioned that the EU and China are similar in the sense that are overachievers, as well as what they see as significant challenges in current and future cooperations. From their experience, the GIZ expert sees that the EU requires a lot of flexibility in projects that are politically driven. Sometimes the expert would see that there would be a need to prepare a 250-person conference in 4 weeks. This, according to the expert, is challenging and hard to implement in China, which requires a lot of planning. Therefore, it is thus imperative that the EU and China strengthen their relations by considering each other's cultural contexts. The GIZ expert also mentions that setting international rules and aligning rules of the road for green transition is something that on-the-ground experts can engage in. They mention that the two parties can find a way to de-escalate solar power and vehicle trade issues, since the EU needs the technology to meet climate goals, while China needs the market to sell. Aligning the

support for developing countries is a realistic goal that would allow for the overall movement toward achieving global sustainability.

While China's human rights violations are a key concern for the EU, EU experts in the interview mentioned that this is something that is not on the table for environmental discussions with China. In the 38th session of EU-China Human Rights Dialogue in 2023, the EU "expressed serious concern at the persistent restrictions on the exercise of fundamental freedoms, use of forced labor, limits on due process rights and lack of judicial independence in China" (EEAS Press Team, 2023), especially with China's treatment of Uyghurs, Tibetans and persons belonging to religious, ethnic and linguistic minorities, and freedom of expression in Hong Kong (EEAS Press Team, 2023). At the same session, China expressed concerns about the "situation and treatment of refugees and migrants in the EU and manifestations of racism and xenophobia in the EU" (EEAS Press Team, 2023). For the EU, human rights are one of the pillars of achieving sustainable development, and it is something that cannot be overlooked, with the 3 pillars of sustainable development being economic, environmental and social (European Commission). Still, according to the E3G think tank expert in our interview, the human rights issue is separated from climate diplomacy talks between EU-China, as this is not the place to mix two things. He also noted that of course, this is inevitably linked due to human rights issue being ingrained in China's economy.

The EU and the World's Spill-Over Effect

One issue that is often overlooked is Europe's indirect emissions associated with the production of the goods and services consumed in Europe but manufactured abroad. With Europe's efforts to tackle emissions within European borders, there is also a need to act on the global carbon footprint of European consumption. This is called the negative 'spillover', which is "unintended external economic, social, environmental and security-related consequences" (Droste et al., 2023). Droste et al. reveal that while high-income countries perform well on the SDG index, they fare poorly on the spillover index due to unsustainable production and consumption patterns (Droste et al., 2023). For instance, Germany ranked 149th out of 163 in 2022. Conversely, countries in the

Global South lead in this field. In 2021, Malik emphasized the EU's spillover effects in the textile supply chains, noting that "Italy, Germany, France, Spain, Poland, Belgium and Portugal are collectively responsible for about 80% of both fatal- and non-fatal accidents that are attributed to the EU's consumption-based footprint" (Malik et al., 2021). By Becqué et al's accounting method of totaling European member state carbon emissions that includes the consumption of imported goods, EU emissions were shown to have grown by 11% from 1995 to 2009 (BECQUÉ et al., 2017). Becqué et al criticized the high-income countries for taking advantage of the 'carbon loophole' that let 22% of global greenhouse gas emissions pass through this loophole, reinforcing the notion that the EU continues to have an international spillover effect through its consumption of imported goods and textile supply chains. This inconvenient truth of outsourcing emissions may push the EU further away from achieving its carbon neutrality goals in the future. Addressing this loophole, as well as raising its green technological capabilities, is one of the EU's concerns in achieving sustainable development.

China and Innovation

Innovation has become a top priority for the Chinese government. In 2006, the Chinese government outlined the National Medium-and Long-term Science and Technology Development Plan (2006-2020), which put 'Innovation' as the new national strategy, seeking it as the core of industrial restructuring and growth mode transformation (Gang). China's Minister of Science and Technology stated the congestion of energy, natural resources, and the environment had become increasingly constraining the country's development. As a result of a focus on innovation, a harmonious society with innovation as its main driving force could lead to resource-saving, environmentally friendly, and sustainable development (Gang). The nation expressed interest at that time in strengthening cooperation with the US specifically in areas like clean energy, environment, public health, and agriculture through governmental and academic partnerships (Gang). In the 14 planned years, China spent 2.4% of GDP towards R&D and made significant progress towards its goals (Xiaomin, 2023). The country became a leader in producing digital frontier technologies like AI,

5G, and cloud computing, with information and communications technology (ICT) patents now comprising 14% of the global total (Hua, 2024), pushing up its ranking on the Global Innovation Index from 34th in 2012 to 12th in 2023 (WIPO, 2023). This makes China the only middle-income country in the top 15, highlighting its commitment to innovation-driven development. Since then, China has pursued its strategic focus on innovation through the 14th Five-Year Plan (2021-2025) and the 2021-2035 long-term blueprint.

In 2006, China had completely different levels of economic, military, and political influence than it does today. With China's rise as an economic powerhouse, and becoming a global leader in science and technology, geopolitical tensions also grew. Concerns about intellectual property rights, trade disputes, and data security grew, hindering deeper cooperation. At this point, the West argues that while some sectors and companies in China are innovative, it doesn't apply to other parts of the economy. This explains China's productivity growth decline since the 2008 financial crisis (West, 2021). Funded by large government subsidies, Chinese companies are inefficient with their innovation, and technologies produced there are used for the country's surveillance state, which deters innovation due to a lack of freedom of speech, as well as because of the influence of propaganda and censorship (West, 2021). Abrami et al. suggest that perhaps China's innovation strategies lag behind other countries due to its top-down approach, much like in other areas of development (Abrami et al., 2014). China's examples often demonstrate its ability to set and achieve ambitious goals within extremely short timelines due to government support in infrastructure setting, funding, and human capital allocation.

However, it can constrain entrepreneurial creativity, and Abrami et al. suggest that the issue isn't the innovative or intellectual capacity of Chinese citizens, but rather structural problems, cultural factors, and ultimately the communist system in which their universities, businesses, and institutions operate (Abrami et al., 2014). To fill this innovative gap, Chinese firms try to acquire foreign companies to gain access to advanced technologies and expertise, a trend seen notably in automotive and telecom

industries (Braw, 2020). This can also be applied to China's current struggle with green innovation.

To address rural communities with fuel shortages, Chinese provinces have begun an initiative on zero carbon villages, which are villages that "reduce their emissions more than they emit carbon" (Rong, 2023). According to the interviewed supervisor of zero-carbon villages in China, "the concept of zero-carbon villages has gradually emerged as one of the strategies and action directions in response to the increasingly severe background of climate change and carbon emission issues". With capital from public and private stakeholders, many provinces have zero-carbon demonstration village projects, which are initially led by the government. "After the completion of the project, the local government organizes exchanges and learning sessions with governments from other regions. Both successful experiences and lessons learned are shared for other local governments to promote and learn from, and relevant experts also participate in the process. The enterprises involved will also take their cases of participating in zero-carbon demonstration villages to engage with more governments and experts, promoting the experience of zero-carbon village projects in the hope of securing more projects.", says the expert. He also noted that given China's vastness with 5,000 km from east to west, there are significant differences in climate conditions and the level of industrial and agricultural development, meaning the efficiency of renewable energy in each region differs as well. He also noted that while there are not a lot of exchanges with other countries on this subject, technological exchanges and knowledge are one of the initiatives that can be done.

China's International Reputation

China doesn't have a great international reputation. In fact, it's getting worse. According to the Pew Research Center survey in 2023, across 24 countries, 67% of adults expressed unfavorable views of China, with higher-income countries seen to have a harsher opinion towards the country (Silver et al., 2023). Higher-income countries, like the EU member states and the US, may see China as a competitor and as a potential disruptor of the existing global order. By contrast, lower-income countries

may see China more favorably due to its strong efforts in economic assistance in the Belt and Road Initiative, as well as the non-interference policy, which is unlike Western aid with conditionalities and interference (Moosvi, 2024). After China's economic opening to the world in 1978, for some time, there was an assumption in the Western community that China was becoming a more democratic country. This was evident in the United States embracing China's new membership in the World Trade Organization (WTO) in 2000. US President Bill Clinton said at the time "By joining the WTO, China is not simply agreeing to import more of our products, it is agreeing to import one of democracy's most cherished values: economic freedom." (Elizalde, 2022). This, of course, was not the case. China and the US relations have since severely deteriorated.

Sustainable development projects will advantage China in its rivalry with the US, especially in improving relations with the EU. Compared to EU and Chinese citizens, US citizens were most likely to doubt or deny climate change, according to a climate survey by the European Investment Bank (European Investment Bank, 2024). According to the EIB representation in China, the bank has invested 3.1 billion euros in China's green infrastructure, technology, and climate mitigation, although new projects have been halted since 2020 due to COVID-19 and geopolitical tensions. With China forecasted to take over the US's economy by 2028 (BBC, 2020), the effects of geopolitical tensions and conflicts may become even bigger shortly. Geopolitical tensions are an interconnected issue with the environment as well, becoming unexpected drivers of environmental damage by examples of increasing rerouting that amplifies carbon footprint, a critical mineral concentration that suppresses the adoption of sustainable practices of extraction, and many more (Barbarà & Galea, 2024). All in all, the continuation of geopolitical tensions pushes all countries further away from achieving global emission targets, while using resources unnecessarily.

Regardless, it's evident that China can benefit from improving its global reputation. This also extends to its climate policy and the benefit that China could gain from collaborating with other countries. Currently, geopolitical tensions between China and other countries are escalating, and China is under international diplomatic pressure to lower its emissions. According to Gulangyu and Kuhn, China is now reevaluating its

status as a developing country to avoid reducing emissions, as well as its orthodox interpretation of the previously mentioned 'Common but Differentiated Responsibility' to engage climate protection more actively and constructively (Gulangyu & Kuhn, 2019). A greater EU-China collaboration would help China achieve that, especially with the growing disagreement with the US. From the indoctrination of 'ecological civilization' in their constitution, heavy investment in green infrastructure, and Xi's speeches, it's apparent that China is serious about its commitment to climate change. While regarding its unpredictability, as well as a completely different political system, the EU can find benefit in sustaining its cooperation with China on sustainability.

This study acknowledges limitations that should be considered when analyzing the findings. First, due to the constraints of time and resources, primary field research in China and Belgium was not conducted. Instead, the study relied on extensive online resources and expert interviews, which may not capture all perspectives of the situation on the ground. While efforts were made to have a diverse range of experts, interviewed experts were based on their availability and expertise, which potentially leads to a selection bias. In addition, their perspectives may not represent the view of all stakeholders involved in EU-China relations and sustainable development. While the writing was intended to be objective as possible, the possibility of biases in the analysis, topics discussed and focused recommendations due cultural biases may arise. This was mitigated by using a diverse source of secondary research and interviews.

The nature of international relations and environmental policy quickly evolves, and this research recognizes that the findings and recommendations would change as new developments occur. For future research, new developments should be considered, incorporating more recent data, as well as expanding the scope to include additional stakeholders in the private sector and regions.

6. Recommendations

Based on the findings, I recommend the following strategies for China to improve its green initiatives, to become a more proactive partner in global climate diplomacy. One, China's reliance on the clean-technology sectors to drive growth and achieve key economic targets allows for the higher economic and political importance of sustainable development. To further this, increasing support in all areas to encourage a smoother green transition should be considered.

1. Focus on provincial-level engagement

The urban-rural divide should be addressed, focusing on the provincial level engagement to diminish the gap between relatively poor rural areas and rich cities. The central government should ensure that support for the green transition reaches both urban and rural areas, with frequent checkups with the provincial officers. This includes notably providing affordable and sustainable alternatives to coal for heating in rural areas. From the results, it has been revealed that decentralizing coal authority has led provinces to prioritize their energy security, above environmental concerns. The government therefore can encourage inter-provincial cooperation and thus help create a more unified approach to sustainability.

2. Strengthen Public awareness and involvement

Enhancing the general public's understanding of the link between natural disasters and climate change can foster greater individual responsibility in mitigating climate change. Aside from regulation of companies, the government should regulate consumer behavior to encourage sustainable consumption patterns. Better education on the environmental impact of products and promoting green consumption will benefit China's green agenda. Daily decisions, such as buying groceries and clothes, and choosing what activity to do, all can be considered as opportunities where nudges can take place to nurture and facilitate the desire to live sustainably, as well as accelerating demand for sustainable products and services (BCG, 2022). When it comes to making a consumption decision, using behavioral insights to present information in a compelling and easy-to-digest way is key to ensuring consumers make an informed choice.

Individuals could be motivated to take sustainable actions through societal motivations, by changing the social norms and highlighting the importance of sustainable behavior. How consumers use social media to make purchasing decisions cannot be overlooked. Using media campaigns, public endorsements by influencers, or community initiatives that promote sustainable choices can be forms of nudging individuals to choose sustainable products.

3. Conduct Thorough Demand Assessment and Resource Allocation

China can improve its demand assessments to avoid overproduction in green technology sectors. This can help prevent resource wastage and address international concerns about unfair trade practices. In addition, before investing in new infrastructure, China should focus on better utilization of existing resources. For instance, ensuring that coal plants operate efficiently rather than underutilizing them would be more economically and environmentally sustainable. There should be a stronger communication pipeline between the rural and urban areas, to make sure that provincial leaders and communities have enough financial and social support with the transition.

4. Engage in open dialogues with the EU

Hosting more open dialogues on technology and green initiatives can bridge gaps in understanding and build trust between China and the EU. Identifying mutual areas of interest, and emphasizing technological cooperation, training, and aligning policies for green transitions should be explored by the Chinese government. With the EU's experience with navigating green technology, the EU can help with restructuring and stabilizing wind, solar, and hydrogen power, increasing the Chinese authority's confidence in renewable energy to make it more appealing than coal power. Considering China's current projects on zero carbon villages, increasing the EU's awareness of these villages, and hosting technological exchange would be good for other countries, especially in collaboration with supporting other developing countries together.

The external impact of European consumption must be on the EU's agenda. The EU should also take initiative in monitoring its spill-overs and set a goal to limit them, reflecting external consumption in their SDG reporting. To further this effort, China and the EU can work together to address the EU's negative spillover effect on other countries through the EU's reevaluation of its imports. EU and China can consider discussing potential investment opportunities in financing green technology to improve production processes in EU importing countries.

7. Conclusion

Without the earth, the concept of countries becomes irrelevant. Ishii et al. underline the importance of "the stable and resilient Earth systems on which human prosperity and security depend" (Ishii et al., 2023). Governments across the world tend to focus on their domestic policy priorities, ignoring the significant negative environmental impacts they have on other countries contributing to global warming. China is no exception, and its dependency on coal worries experts in its negative output to existing climate change mitigation initiatives, as Leo Robert of climate change think tank E3G states; "China's coal boom is undermining significant progress away from coal in all other parts of the world" (Fabbri, 2023). China and the EU can benefit from stronger cooperation on sustainability initiatives while maintaining the integrity of their domestic borders. Cooperation on sustainable development should be done in coordination with economic and political partnerships for full effect but can certainly help ease tension. With China and the Global South's growth, there is a need to diversify theoretical frameworks used in IR, incorporating alternative perspectives that balance and reflect the existing stakeholders.

This research underscores the potential of collaborative green initiatives and soft power in advancing EU-China cooperation on sustainability. The findings emphasize the importance of fostering global cooperation on sustainability challenges by building bridges between different political and economic systems. A successful EU-China cooperation can be used as a future model for promoting global sustainability leadership, extending its importance beyond their bilateral relations, and offering insights for other international partnerships.

This thesis was guided by the following research questions: What are the main drivers and obstacles for China in aligning its climate policies with the EU's sustainability goals? In what ways can China become a more proactive partner with the EU in global climate diplomacy? In addressing the research questions, the thesis delved into the primary drivers and obstacles for China in aligning its climate policies with the EU's sustainability goals. Additionally, how China can become a more proactive partner

with the EU in global climate diplomacy was explored, through a combination of qualitative research, including expert interviews and secondary data analysis. Upon research, optimized utilization and output of resources, increased support for rural areas, and the Chinese citizen's sustainability awareness and education were identified as key areas of improvement for China. Implementing these recommendations would help China grow its role as a proactive partner in global climate diplomacy, align its policies with EU sustainability goals, and contribute significantly to global efforts to combat climate change.

The Chinese Premier Xi Jinping declared in 2022 that China's low-carbon goals would not be achieved easily and that they should not compromise energy and food security or 'normal life' (Ni, 2022). The world continuing its 'normal' life is what led to the current state of the world. Humanity lives beyond the world's limits, technologically advancing and environmentally degrading earth by prioritizing convenience and consumption. The world uses the equivalent of 1.71 earths (Global Footprint Network, 2024) to provide for the resources humans need, or think humans need, and absorb our waste. Addressing this issue requires every country in the world to engage in cooperation and collaborative efforts. The 8th Secretary-General of the United Nations (UN), Ban Ki-moon once said, "We don't have a plan B because we also don't have a planet B" (IBRAM). By proactively engaging in sustainable development, China can strengthen its multilateral relations and, most importantly, safeguard its environment for future generations.

Bibliography

Abrami, R. M., Kirby, W. C., & McFarlan, F. W. (2014). *Why China Can't Innovate*. Harvard Business Review. Retrieved May 30, 2024, from https://hbr.org/2014/03/why-china-cant-innovate

Ahmed, V. (2024, May 2). *China's green capacity brings opportunities for developing countries' industrialization*. Global Times. Retrieved May 22, 2024, from https://www.globaltimes.cn/page/202405/1311577.shtml

Amelang, S. (2023, July 14). *Germany vows to push China for more ambitious climate targets in new strategy*. Clean Energy Wire. Retrieved May 21, 2024, from https://www.cleanenergywire.org/news/germany-vows-push-china-more-ambitious-climate-targets-new-strategy

American Economic Association. (2022, January 26). *The income gap in China*. American Economic Association. Retrieved June 8, 2024, from

https://www.aeaweb.org/research/charts/china-income-gap-rural-urban

Arthur, H. (2019, December). Ecological Civilization in the People's Republic of China: Values, Action, and Future Needs. *Asian Development Bank East Asia Working Papers*, *21*. http://dx.doi.org/10.22617/WPS190604-2

Asia Society. (2021). Environmental Policy Reform — The China Dashboard Winter 2021 — Asia Society Policy Institute and Rhodium Group. The China Dashboard. Retrieved June 4, 2024, from

https://chinadashboard.gist.asiasociety.org/winter-2021/page/environment Atwal, G. (2022, July 5). What Chinese Consumers Really Think About Sustainability. Jing Daily. Retrieved June 12, 2024, from

https://jingdaily.com/posts/chinese-consumers-sustainability

Bandurski, D. (2023, August 30). What Does Xi Jinping Mean By "Forever"? China Media Project. Retrieved June 1, 2024, from

https://chinamediaproject.org/2023/08/30/what-does-xi-jinping-mean-by-forever/

Baptista, E. (2021, June 11). *Are there other political parties in China?* South China Morning Post. Retrieved June 11, 2024, from

https://www.scmp.com/news/china/politics/article/3136835/communist-party-not-chinas-only-political-party-there-are-eight

Barbarà, L., & Galea, C. (2024, March 12). 4 ways geopolitical tensions are increasing carbon emissions | World Economic Forum. The World Economic Forum. Retrieved June 7, 2024, from

https://www.weforum.org/agenda/2024/03/geopolitics-carbon-emissions-ukraine-red-sea/

BBC. (n.d.). *The role of the US as a world power - The USA's international influence - Higher Modern Studies Revision*. BBC. Retrieved June 7, 2024, from https://www.bbc.co.uk/bitesize/guides/z6frqp3/revision/2

BBC. (2020, December 26). *Chinese economy to overtake US 'by 2028' due to Covid*. BBC. Retrieved June 7, 2024, from https://www.bbc.com/news/world-asia-china-55454146

BECQUÉ, R., DUBSKY, E., & HAMZA, D. (2017, September). *Europe's Carbon Loophole*. Europe's Carbon Loophole. Retrieved June 6, 2024, from https://www.climateworks.org/wp-content/uploads/2017/09/EU-carbon-loophole final-draft-for-consultation.pdf

Berwyn, B. (2024, June 7). *Europe's Swing to the Right Threatens Global Climate Policy*. Inside Climate News. Retrieved June 8, 2024, from https://insideclimatenews.org/news/07062024/eu-parliamentary-election-global-climate-policy/

Bhattacharya, A., Kharas, H., & McArthur, J. W. (2023, March 3). *Developing countries are key to climate action*. Brookings. Retrieved June 3, 2024, from https://www.brookings.edu/articles/developing-countries-are-key-to-climate-action/

Blenkinsop, P., & Abnett, K. (2023, September 30). EU launches first phase of world's first carbon border tariff. *Reuters*.

https://www.reuters.com/business/environment/eu-launches-first-phase-worlds-first-carbon-border-tariff-2023-09-30/

Braw, E. (2020, December 3). Chinese Acquisitions of Western Tech Firms Are Only Part of the Problem. Secret Venture Capital Is Handing Power to Beijing. *Foreign Policy*. https://foreignpolicy.com/2020/12/03/how-china-is-buying-up-the-wests-high-tech-sector/

BRINZA, A. (2024, March 26). *EU-China relations: De-risking or de-coupling* – the future of the EU strategy towards China | Think Tank. European Parliament. Retrieved June 6, 2024, from

https://www.europarl.europa.eu/thinktank/en/document/EXPO_STU(2024)7544 46

Britannica. (2024). Western colonialism - Opium Wars, China, Britain.

Britannica. Retrieved May 29, 2024, from

https://www.britannica.com/topic/Western-colonialism/The-Opium-Wars

Brown, S. (2024, February 7). European Electricity Review 2024 | Ember.

Ember Climate. Retrieved June 5, 2024, from https://ember-

climate.org/insights/research/european-electricity-review-2024/

Callahan, W. A. (2004). National Insecurities: Humiliation, Salvation, and Chinese Nationalism. In *Alternatives: Global, Local, Political* (Vol. 29, pp. 199-218). National Insecurities: Humiliation, Salvation, and Chinese Nationalism Carbon Brief. (2021, March 12). *Q&A: What does China's 14th 'five year plan' mean for climate change?* CarbonBrief. Retrieved June 5, 2024, from https://www.carbonbrief.org/qa-what-does-chinas-14th-five-year-plan-mean-for-climate-change/

Center for Global Development. (2011). *Developed Countries Are Responsible* for 79 Percent of Historical Carbon Emissions. Center for Global Development. Retrieved May 7, 2024, from https://www.cgdev.org/media/who-caused-climate-change-historically

Chen, D. (2024, June 5). What China Sees When It Looks Towards Europe. ISPI. Retrieved June 6, 2024, from

https://www.ispionline.it/en/publication/what-china-sees-when-it-looks-towards-europe-175789

Clifford, M. (2015, June 4). Can China's top-down approach fix its environmental crisis? *The Guardian*. https://www.theguardian.com/sustainable-business/2015/jun/04/can-chinas-top-down-approach-fix-its-environmental-crisis

Climate Action Tracker. (2023, June 6). *China*. Climate Action Tracker. Retrieved May 8, 2024, from https://climateactiontracker.org/countries/china/Climate Change Laws. (2021). *14th Five-Year Plan and 2035 Long-Term Objectives*. Climate Change Laws. Retrieved June 3, 2024, from https://climate-laws.org/document/14th-five-year-plan 0496

Columbia University Asia for Educators. (2024). *China and Europe, 1500-2000 and Beyond: What is "Modern"?* China and Europe, 1500-2000 and Beyond: What is "Modern"? Retrieved May 29, 2024, from

https://afe.easia.columbia.edu/chinawh/web/s5/s5 4.html

Congress.gov. (2023). *All Info - H.R.1107 - 118th Congress (2023-2024): PRC Is Not a Developing Country Act.* Congress.gov. Retrieved June 1, 2024, from https://www.congress.gov/bill/118th-congress/house-bill/1107/all-info Convention on Biological Diversity. (n.d.). *Main Details*. Main Details. Retrieved May 8, 2024, from https://www.cbd.int/countries/profile?country=cn Cossins, A. (2024, March 20). *World's biggest solar company Longi to cut thousands of jobs*. Power Technology. Retrieved June 8, 2024, from

https://www.power-technology.com/news/longi-plans-thousands-of-jobs-cuts-solar-crisis/

Country Composition of WEO Groups. (2024). IMF. Retrieved June 1, 2024, from https://www.imf.org/en/Publications/WEO/weo-

database/2023/April/groups-and-aggregates

Cronin, B. (2001). The Paradox of Hegemony. *European Journal of International Relations*, 7, 103-130.

https://doi.org/10.1177/1354066101007001004

Curia Rationum. (2024). Sustainable development goals. European Court of Auditors. Retrieved June 4, 2024, from

https://www.eca.europa.eu/en/sustainable-development-goals

Daniel, W., & Frayer, K. (2023, August 26). China is exporting its deflation and growth globally. *Fortune*. https://fortune.com/2023/08/26/chinas-economy-deflation-growth-exporting-globally/

Dasgupta, P. (2021). *The Economics of Biodiversity: the Dasgupta Review* (P. Dasgupta, Ed.). HM Treasury.

De Angeli, A. (2014). At the Dawn of Modern Italo-Chinese Relations:

Ludovico Nocentini's Experience. In *Italy's Encounters with Modern China* (pp. 27–47). Palgrave Macmillan, New York.

https://doi.org/10.1057/9781137290939 2

degrowth. (n.d.). What is degrowth. degrowth. Retrieved June 1, 2024, from https://degrowth.info/degrowth

destatis. (n.d.). *Trade with China increasingly important - German Federal Statistical Office*. Statistisches Bundesamt. Retrieved May 21, 2024, from https://www.destatis.de/Europa/EN/Topic/Foreign-

trade/EU_tradingPartner.html

d'Hooghe, D. I., & Lammertink, J. (2020, October). Towards Sustainable Europe-China Collaboration in Higher Education in Research.

https://leidenasiacentre.nl/wp-content/uploads/2020/10/Towards-Sustainable-

Europe-China-Collaboration-in-Higher-Education-and-Research.pdf

Droste, L., Lütkes, L., & Waltenberg, T. (2023, May 22). EMBEDDING

SPILLOVER EFFECTS IN THE GERMAN SUSTAINABLE DEVELOPMENT

STRATEGY. IDOS. Retrieved June 5, 2024, from https://www.idos-

research.de/en/the-current-column/article/embedding-spillover-effects-in-the-german-sustainable-development-strategy/

Dyvik, E. H. (2024, April 15). *Countries with the most natural disasters 2023*. Statista. Retrieved May 12, 2024, from

https://www.statista.com/statistics/269652/countries-with-the-most-natural-disasters/

Earth.org. (2019, January 14). *Valuing Nature: China Protects Areas for Biodiversity and Ecosystem Services*. Earth.Org. Retrieved May 30, 2024, from https://earth.org/valuing-nature-china-protects-areas-for-biodiversity-and-ecosystem-services/

Earth.org. (2019, January 14). *Valuing Nature: China Protects Areas for Biodiversity and Ecosystem Services*. Earth.org. Retrieved June 3, 2024, from https://earth.org/valuing-nature-china-protects-areas-for-biodiversity-and-ecosystem-services/

EEAS Press Team. (2023, February 17). *China: 38th Human Rights Dialogue with the European Union takes place in Brussels*. EEAS. Retrieved June 13, 2024, from https://www.eeas.europa.eu/node/425784 fr

Elizalde, D. (2022, February 28). Globalization, China, and the United States.

The Public Purpose. Retrieved June 7, 2024, from

https://thepublicpurpose.com/2022/02/28/globalization-china-and-the-united-states/

Elliott, J. E. (2002). Some Did it for Civilisation, Some Did it for Their Country: A Revised View of the Boxer War. Chinese University Press.

Environmental Protection Agency. (2024). *EU Emissions Trading System*. Environmental Protection Agency. Retrieved June 5, 2024, from https://www.epa.ie/our-services/licensing/climate-change/eu-emissions-trading-system-/

European Commission. (n.d.). *Sustainable development has three pillars*. EU Trade. Retrieved June 13, 2024, from

https://policy.trade.ec.europa.eu/development-and-sustainability/sustainable-development en

European Commission. (2019, July 22). *State aid: compensation to Poste Italiane approved*. European Union. Retrieved June 5, 2024, from https://ec.europa.eu/commission/presscorner/detail/en/ip_24_588

European Commission. (2022, April 1). *EU-China Summit: Restoring peace and stability in Ukraine is a shared responsibility*. European Commission. Retrieved June 6, 2024, from

https://ec.europa.eu/commission/presscorner/detail/en/IP 22 2214

European Commission. (2023, October 9). *Delivering the European Green Deal - European Commission*. European Commission. Retrieved June 5, 2024, from https://commission.europa.eu/strategy-and-policy/priorities-2019-

2024/european-green-deal/delivering-european-green-deal en

European Commission. (2024). Development of EU ETS (2005-2020) -

European Commission. Tips for your home - European Commission. Retrieved June 5, 2024, from https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/development-eu-ets-2005-2020_en

European Commission. (2024, April 15). Commission supports European photovoltaic manufacturing sector with new European Solar Charter.

Wikipedia. Retrieved June 5, 2024, from

https://energy.ec.europa.eu/news/commission-supports-european-photovoltaic-manufacturing-sector-new-european-solar-charter-2024-04-15_en

European Investment Bank. (n.d.). 2019-2020 EIB climate survey (1/3).

European Investment Bank. Retrieved May 10, 2024, from

https://www.eib.org/en/surveys/2nd-climate-survey/climate-change-impact.htm European Investment Bank. (2021). *THE EUROPEAN INVESTMENT BANK IN CHINA 25 YEARS OF PROGRESS ON CLIMATE AND DEVELOPMENT*. European Investment Bank.

European Investment Bank. (2024). *US citizens most likely to doubt or deny climate change*. European Investment Bank. Retrieved June 7, 2024, from https://www.eib.org/en/infographics/us-citizens-doubt-deny-climate-change European Union. (2023, December 7th). *EU-China Relations factsheet* | *EEAS*. EEAS. Retrieved May 21, 2024, from https://www.eeas.europa.eu/eeas/eu-china-relations-factsheet en

European Union. (2023, December 13). *EU-China Relations factsheet* | *EEAS*. EEAS. Retrieved June 6, 2024, from https://www.eeas.europa.eu/eeas/eu-china-relations-factsheet en

Eye on Asia. (n.d.). *China - A country profile - China - A country profile*. Eye on Asia. Retrieved May 9, 2024, from

https://www.eyeonasia.gov.sg/china/know/overview-of-china/china-a-country-profile/

Eyraud, L., Clements, B., & Wane, A. (2013). Green investment: Trend and determinants. *Energy Policy*, 60, 852-865.

https://doi.org/10.1016/J.ENPOL.2013.04.039.

Fabbri, V. (2023, September 15). Is China's increasing reliance on coal undermining global climate efforts? *Geopolitica.info*.

https://www.geopolitica.info/is-chinas-increasing-reliance-on-coal-undermining-global-climate-efforts/

Feng, C. (2017, October 3). *China's Coal Hub Bans Coal*. Caixin. Retrieved June 8, 2024, from https://www.caixinglobal.com/2017-10-03/chinas-coal-hub-bans-coal-101153185.html

Frazier, M. W. (2013, September 24). *Narrowing the Gap: Rural-Urban Inequality in China*. WPR. Retrieved June 1, 2024, from

https://www.worldpoliticsreview.com/narrowing-the-gap-rural-urban-inequality-in-china/

Fuest, C. (2023, September 12). *Can Economic Growth and Ecological Sustainability Coexist?* | *Opinions* | *Econpol Europe*. EconPol Europe.

Retrieved May 30, 2024, from https://www.econpol.eu/opinion-economic-growth-ecological-sustainability

Gang, W. (n.d.). *Innovation Strategy of China*. Ministry of Science and Technology of the People's Republic of China. Retrieved May 30, 2024, from https://en.most.gov.cn/pressroom/200706/t20070613_50394.htm

Global Carbon Budget. (2023, December 12). *Population based on various sources (2023)* – *with major processing by Our World in Data*. Our World in Data. Retrieved June 5, 2024, from https://ourworldindata.org/grapher/coemissions-per-capita?tab=table

Global Footprint Network. (2024). *Measure what you treasure*. Global Footprint Network: Home. Retrieved June 13, 2024, from

https://www.footprintnetwork.org/

Global Times. (2021, July 6). Never Seek Hegemony — China's Voice at the UN General Assembly. Global Times. Retrieved June 1, 2024, from

https://www.globaltimes.cn/page/202107/1227967.shtml

Godement, F. (2020). China's Relations with Europe. In D. L. Shambaugh (Ed.), *China & the World* (pp. 251–269). Oxford University Press.

https://doi.org/10.1093/oso/9780190062316.003.0012

Government of France. (2023, July 19). *In Europe and worlwide - The 2030 Agenda for Sustainable Development in France*. Agenda 2030. Retrieved June 4, 2024, from https://www.agenda-2030.fr/en/agenda-2030/in-europe-and-worldwide/article/in-europe-and-worlwide

Guangsha, W. (2023, September 13). *Adhering to the Chinese Modernization Path of Harmony Between Humanity and Nature*. Qiushi. Retrieved June 4, 2024, from http://en.qstheory.cn/2023-09/13/c_918831.htm

Gulangyu, X., & Kuhn, B. (2019, September). Ecological civilisation in China. *Dialogue of Civilizations Research Institute*.

Harper, T. (2019, July 11). *How the Century of Humiliation Influences China's Ambitions Today*. Imperial & Global Forum. Retrieved May 29, 2024, from https://imperialglobalexeter.com/2019/07/11/how-the-century-of-humiliation-influences-chinas-ambitions-today/

Harper, T. (2023, October 2). Five things that the west doesn't understand about China's foreign policy. The Conversation. Retrieved June 8, 2024, from https://theconversation.com/five-things-that-the-west-doesnt-understand-about-chinas-foreign-policy-213188

Hausfather, Z. (2017, December 13). *Analysis: Why scientists think 100% of global warming is due to humans*. Carbon Brief. Retrieved May 6, 2024, from https://www.carbonbrief.org/analysis-why-scientists-think-100-of-global-warming-is-due-to-humans/

Hobson, J. M. (2007, April). Is critical theory always for the white West and for Western imperialism? Beyond Westphilian towards a post-racist critical IR. *Review of International Studies*, *33*, 91-116.

https://www.jstor.org/stable/45128071

Howe, C., & Cao, E. (2023, November 30). *In China's coal country, full steam ahead with new power plants despite climate pledges*. Reuters. Retrieved May 22, 2024, from https://www.reuters.com/sustainability/chinas-coal-country-full-steam-ahead-with-new-power-plants-despite-climate-2023-11-30/

Hua, L. (2024, March 11). China's advancements in global innovation dynamics inspiring - Opinion - Chinadaily.com.cn. *China Daily*.

https://www.chinadaily.com.cn/a/202403/11/WS65ee3b5ba31082fc043bbbae.ht ml

Hunter, A., & Sexton, J. (1999). Contemporary China. Macmillan.

IBRAM. (n.d.). "There is no planet B", warns Ban Ki-moon – Amazônia e novas economias. Conferência Internacional Amazônia e Novas Economias. Retrieved June 13, 2024, from

https://amazoniaenovaseconomias.com.br/en/noticias/there-is-no-planet-b-warns-ban-ki-moon/

iea. (2022). *Access to clean cooking*. iea. Retrieved June 1, 2024, from https://www.iea.org/reports/sdg7-data-and-projections/access-to-clean-cooking

iea. (2024). Energy system of China. Wikipedia, the free encyclopedia.

Retrieved June 3, 2024, from https://www.iea.org/countries/china

Insee. (2016, October 13). Definition - Sustainable development. Insee.

Retrieved June 7, 2024, from

https://www.insee.fr/en/metadonnees/definition/c1644

International Monetary Fund. (2023, March 26). *Remarks by Managing Director Kristalina Georgieva at the 2023 China Development Forum*. International Monetary Fund (IMF). Retrieved May 29, 2024, from

https://www.imf.org/en/News/Articles/2023/03/25/032623md-chinadevelopment-forum-remarks

International Renewable Energy Agency. (2022, July 6). *China's Route to Carbon Neutrality: Perspectives and the Role of Renewables*. IRENA. Retrieved May 30, 2024, from https://www.irena.org/Publications/2022/Jul/Chinas-Route-to-Carbon-Neutrality

International Republican Institute. (2023, January 18). *IRI Poll Across 13 European Countries Shows Concerns with China-Russia Partnership, a Desire for Action Against Human Rights Abuses, Economic Anxiety*. IRI. Retrieved June 6, 2024, from https://www.iri.org/news/iri-poll-across-13-european-countries-shows-concerns-with-china-russia-partnership-a-desire-for-actionagainst-human-rights-abuses-economic-anxiety/

Ishii, N., Schmidt-Traub, G., Lafortune, G., Franke, J., Cornehl, F., & von Preussen, A. (2023, December 19). *Tackling international spillovers: an overview of policy options*. Tackling international spillovers: an overview of policy options. Retrieved June 12, 2024, from https://cgc.ifi.u-tokyo.ac.jp/wp-content/uploads/2023/12/cgc_spillovers.pdf

Jacobs, J. (2024, May 17). *Rostow's 5 Stages of Economic Growth and Development*. Wikipedia. Retrieved June 3, 2024, from https://www.thoughtco.com/rostows-stages-of-growth-development-model-

https://www.thoughtco.com/rostows-stages-of-growth-development-model-1434564

Kanwit, G. (2023, August 28). *Is China Still a Developing Country?* VOA. Retrieved June 1, 2024, from https://www.voanews.com/a/is-china-still-a-developing-country/7244652.html

Kaufman, A. A. (2011, March 10). *The "Century of Humiliation" and China's national narratives*. U.S.-China Economic and Security Review Commission. Retrieved June 11, 2024, from

https://www.uscc.gov/sites/default/files/3.10.11Kaufman.pdf

Kirda, K., & Aytekin, A. (2023, May 14). Assessing industrialized countries' environmental sustainability performances using an integrated multi-criteria model and software. *Springer Nature*, 1-46. doi: 10.1007/s10668-023-03349-z Kobayashi, S., Baobo, J., & Sano, J. (1999). *MThe "Three Reforms" in China: Progress and Outlook*. Japan Research Institute. Retrieved May 29, 2024, from https://www.jri.co.jp/english/periodical/rim/1999/RIMe199904threereforms/

The Kootneeti Team. (2022, September 19). *Hegemonic Stability Theory: Definition, Pros and Cons.* The Kootneeti. Retrieved June 7, 2024, from https://thekootneeti.in/2022/09/19/hegemonic-stability-theory-definition-prosand-cons/

Larson, G., Loayza, N., & Woolcock, M. (2016, March). The Middle-Income Trap: Myth or Reality? *Research & Policy Briefs From the World Bank Malaysia Hub*.

Lebreton, T. (2024, January 5). *The 7 Largest Solar Panel Manufacturers in the World (2024)*. The Eco Experts. Retrieved June 8, 2024, from https://www.theecoexperts.co.uk/solar-panels/largest-solar-panel-manufacturers Lempriere, M. (2024, April 11). *China responsible for 95% of new coal power construction in 2023, report says*. Carbon Brief. Retrieved June 4, 2024, from https://www.carbonbrief.org/china-responsible-for-95-of-new-coal-power-construction-in-2023-report-says/

Li, F., Vai, L. V., & He, Y. (2023, November 24). On Regulating Chinese Consumer Environmental Behaviour To Reduce Global Warming: Some Reflections. *Environmental Policy and Law*, *53*(4), 247-258. 10.3233/EPL-230010

Liang, X. (2024, April 21). *China issues 'once in a century' flood warning for Guangdong's Bei River zone*. South China Morning Post. Retrieved June 9, 2024, from https://www.scmp.com/news/china/politics/article/3259806/china-issues-once-century-flood-warning-guangdongs-bei-river-zone Liboreiro, J. (2024, February 6). *Brussels recommends new EU climate target: a 90% cut of all greenhouse gas emissions by 2040*. Euronews.com. Retrieved June 5, 2024, from https://www.euronews.com/my-europe/2024/02/06/brussels-recommends-new-eu-climate-target-a-90-cut-of-all-greenhouse-gas-emissions-by-2040

Lieberman, B. (2024, March 13). Forcing the UN's Hand on China. Competitive Enterprise Institute. Retrieved June 1, 2024, from https://cei.org/studies/forcing-the-uns-hand-on-china/
Lin, C. (2024, January 3). 3 Drivers of China's Booming Electric Vehicle Market. Harvard Business Review. Retrieved June 3, 2024, from https://hbr.org/2024/01/3-drivers-of-chinas-booming-electric-vehicle-market Liu, H., Evans, S., Zhang, Z., Song, W., & You, X. (2023, November 29). The Carbon Brief Profile: China. Carbon Brief. Retrieved June 5, 2024, from https://interactive.carbonbrief.org/the-carbon-brief-profile-china/
Liu, J. C.-E. (2023, February 23). Public opinion on climate change in China—Evidence from two national surveys John Chung-En Liu. PLOS Climate. Retrieved June 5, 2024, from

https://journals.plos.org/climate/article?id=10.1371/journal.pclm.0000065 Lo, A. (2024, June 5). *China's economic strategy is not about overproduction, dumping*. Wikipedia. Retrieved June 8, 2024, from

https://www.scmp.com/opinion/china-opinion/article/3265504/chinas-economic-strategy-not-about-overproduction-dumping

Lo, K. (2023, September 4). China's economy has entered 'new new normal', leading policy adviser warns in call for systemic reform. *South China Morning Post*. https://www.scmp.com/economy/china-economy/article/3233266/chinas-economy-has-entered-new-new-normal-leading-policy-adviser-warns-call-systemic-reform

Long, H., Tu, S., Ge, D., Li, T., & Liu, Y. (2016, October). The allocation and management of critical resources in rural China under restructuring: Problems and prospects Author links open overlay panel. *Journal of Rural Studies*, 47(B), 392-412. https://doi.org/10.1016/j.jrurstud.2016.03.011

Lu, H. (2019, December 3). *China and Sustainable Development: Growth and Future Challenges in achieving the SDGs*. Sustainability Knowledge Group. Retrieved June 4, 2024, from https://sustainabilityknowledgegroup.com/china-and-sustainable-development-growth-and-future-challenges-in-achieving-the-sdgs/

Lu, M., & Dickert, C. (2023, December 6). *Ranked: Per Capita Carbon Emissions by Country*. Visual Capitalist. Retrieved May 21, 2024, from https://www.visualcapitalist.com/ranked-per-capita-carbon-emissions-by-country/

Lucenti, F. (2024, January 15). The 'China Threat': Stereotypical representations in the US competition with China. *International Politics*. https://doi.org/10.1057/s41311-024-00555-y

Lui, S. (2022, May 19). *Guest post: Why China is set to significantly overachieve its 2030 climate goals*. Carbon Brief. Retrieved June 4, 2024, from https://www.carbonbrief.org/guest-post-why-china-is-set-to-significantly-overachieve-its-2030-climate-goals/

Maddison, A. (2019, June 25). *China's Economic Rise: History, Trends, Challenges, and Implications for the United States*. Every CRS Report. Retrieved May 29, 2024, from

https://www.everycrsreport.com/reports/RL33534.html

Maizland, L. (2021). *Timeline: Trump's Foreign Policy Moments*. Council on Foreign Relations. Retrieved June 7, 2024, from

https://www.cfr.org/timeline/trumps-foreign-policy-moments

Maizland, L. (2021, May 19). *China's Fight Against Climate Change and Environmental Degradation*. Council on Foreign Relations. Retrieved June 5, 2024, from https://www.cfr.org/backgrounder/china-climate-change-policies-environmental-degradation

Malik, A., Lafortune, G., Carter, S., Li, M., & Lenzen, M. (2021, October 1). International spillover effects in the EU's textile supply chains: A global SDG assessment. *Journal for Environmental Management*, 295. https://doi.org/10.1016/j.jenvman.2021.113037

10.1010/j.jenvinam.2021.11303/

Managi, S., & Kaneko, S. (2004). Analysis of Technologies in Economy and Environmental Sectors in China. *Asian Pacific Confederation of Chemical Engineering congress program and abstracts*, 343-343.

https://doi.org/10.11491/apcche.2004.0.343.0

Mardani, A., Streimikiene, D., Cavallaro, F., Loganathan, N., & Khoshnoudi, M. (2019, February 1). Carbon dioxide (CO2) emissions and economic growth: A systematic review of two decades of research from 1995 to 2017. *Science of The Total Environment*, 649, 31-49. https://doi.org/10.1016/j.scitotenv.2018.08.229 Martin, N. (2024, April 10). *From solar to EVs: How China is overproducing green tech – DW – 04/10/2024*. DW. Retrieved June 8, 2024, from https://www.dw.com/en/from-solar-to-evs-how-china-is-overproducing-green-tech/a-68782157

Masterson, V. (2022, June 15). *Degrowth – what's behind the economic theory and why does it matter right now?* Wikipedia. Retrieved June 1, 2024, from https://www.weforum.org/agenda/2022/06/what-is-degrowth-economics-climate-change/

MERICS. (2019, July 2). *Evolving Made in China 2025* | *Merics*. Mercator Institute for China Studies (MERICS). Retrieved May 29, 2024, from https://www.merics.org/en/report/evolving-made-china-2025

Ministry of Ecology and Environment. (2021, October 15). *Vision of ecological civilization provides solutions for global crises*. Ministry of Ecology and Environment. Retrieved June 3, 2024, from

https://english.mee.gov.cn/News_service/media_news/202110/t20211015_9566 92.shtml

Ministry of Foreign Affairs, the People's Republic of China. (2021, July 5). *The Choice of the Chinese Path*. Ministry of Foreign Affairs, the People's Republic of China. Retrieved May 29, 2024, from

https://www.mfa.gov.cn/eng/wjb_663304/zwjg_665342/zwbd_665378/202107/t 20210705 9169782.html

Ministry of Foreign Affairs, the People's Republic of China. (2024, April 1). Wang Yi: For Europe, China is an Opportunity, Not a Risk, and a Partner, Not a Competitor. Ministry of Foreign Affairs, the People's Republic of China.

Retrieved June 6, 2024, from

 $https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/202404/t20240403_11276053.html$

Mitter, R., & Johnson, E. (2021, May). What the West Gets Wrong About China. Harvard Business Review. Retrieved June 5, 2024, from

https://hbr.org/2021/05/what-the-west-gets-wrong-about-china

Mol, A. P., & Spaargaren, G. (2000). Ecological Modernisation Theory in

Debate: A Review. *Environmental Politics*, 9(1), 17-49.

https://doi.org/10.1080/09644010008414511

Moosvi, A. (2024, February 24). *Comparing Western Foreign Aid To Chinese Assistance*. Friday Times. Retrieved June 6, 2024, from

https://thefridaytimes.com/24-Feb-2024/comparing-western-foreign-aid-to-chinese-assistance

Myllyvirta, L. (2021, February 5). *China Dominates 2020 Coal Plant Development*. CREA. Retrieved June 8, 2024, from

https://energyandcleanair.org/publication/china-dominates-2020-coal-plant-development/

Myllyvirta, L., & Qin, Q. (2023, August 10). *Analysis: China's CO2 emissions in Q2 2023 rebound to 2021's record levels*. Carbon Brief. Retrieved June 4, 2024, from https://www.carbonbrief.org/analysis-chinas-co2-emissions-in-q2-2023-rebound-to-2021s-record-levels/

Myllyvirta, L., Qin, Q., Dai, J., Shen, X., & Qiu, C. (2024, January 25). *Analysis: Clean energy was top driver of China's economic growth in 2023*. Carbon Brief. Retrieved June 5, 2024, from

https://www.carbonbrief.org/analysis-clean-energy-was-top-driver-of-chinas-economic-growth-in-2023/

The National Aeronautics and Space Administration. (n.d.). *Is it too late to prevent climate change?* NASA Science. Retrieved May 22, 2024, from https://science.nasa.gov/climate-change/faq/is-it-too-late-to-prevent-climate-change/

National Army Musuem. (2024). *First China War*. National Army Museum. Retrieved May 29, 2024, from https://www.nam.ac.uk/explore/first-china-war-1839-1842

The National Committee of the Chinese People's Political Consultative Conference. (2024, January 31). *CPPCC announces excellent proposals for 2023*. The National Committee of the Chinese People's Political Consultative Conference. Retrieved June 5, 2024, from http://en.cppcc.gov.cn/2024-01/31/c 962122.htm

National Development and Reform Commission. (2007, June). *China's National Climate Change Programme*. Permanent Mission of the People's Republic of China to the UN. Retrieved June 3, 2024, from http://un.chinamission.gov.cn/eng/gyzg/200911/P020210831857195086675.pdf
Ni, V. (2022, January 27). *Low-carbon ambitions must not interfere with 'normal life', says Xi Jinping*. Euractiv. Retrieved June 12, 2024, from https://www.euractiv.com/section/climate-environment/news/low-carbon-ambitions-must-not-interfere-with-normal-life-says-xi-jinping/
O'Carroll, L. (2024, June 12). *EU to put tariffs of up to 38% on Chinese electric vehicles as trade war looms*. The Guardian.

https://www.theguardian.com/business/article/2024/jun/12/eu-import-tariffs-chinese-evs-electric-vehicles-trade-war

Oertel, J., Tollman, J., & Tsang, B. (2020, December). CLIMATE SUPERPOWERS: HOW THE EU AND CHINA CAN COMPETE AND COOPERATE FOR A GREEN FUTURE. *European Council On Foreign Relations*.

Otero-Iglesias, M., Seaman, J., & Ekman, A. (2015, October). *Mapping Europe-China Relations A Bottom-Up Approach* (M. Huotari, Ed.). MERCATOR INSTITUTE FOR CHINA STUDIES FRENCH INSTITUTE OF INTERNATIONAL RELATIONS (Ifri) ELCANO ROYAL INSTITUTE. Our World In Data. (2023, December 12). *Per capita CO2 emissions*. Our World in Data. Retrieved May 21, 2024, from https://ourworldindata.org/grapher/co-emissions-per-capita

Oxfam. (2023, November 20). *Richest 1% emit as much planet-heating pollution as two-thirds of humanity*. Oxfam International. Retrieved June 4, 2024, from https://www.oxfam.org/en/press-releases/richest-1-emit-much-planet-heating-pollution-two-thirds-humanity

Paddison, L. (2023, January 12). Exxon accurately predicted global warming from 1970s – but continued to cast doubt on climate science, new report finds. CNN. Retrieved May 7, 2024, from

https://edition.cnn.com/2023/01/12/business/exxon-climate-models-global-warming/index.html

People's Republic of China and the IMF. (2024). International Monetary Fund (IMF). Retrieved May 29, 2024, from https://www.imf.org/en/Countries/CHN Pester, P. (2021, December 12). When did scientists first warn humanity about climate change? Live Science. Retrieved May 7, 2024, from

https://www.livescience.com/humans-first-warned-about-climate-change Ping, Q. (2023, November 22). *The Logic of the Modernization of Harmony Between Humanity and Nature*. Qiushi. Retrieved June 4, 2024, from https://subsites.chinadaily.com.cn/Qiushi/2023-11/22/c 941010.htm

Plumer, B., & Popovich, N. (2021, November 12). Who Has The Most Historical Responsibility for Climate Change? (Published 2021). The New York Times. Retrieved May 7, 2024, from

https://www.nytimes.com/interactive/2021/11/12/climate/cop26-emissions-compensation.html

Politics for India. (2020, April 20). *Evolution of International Relations Theory*. Politics for India. Retrieved June 7, 2024, from

https://politicsforindia.com/evolution-of-ir-theory/

PwC Global. (2023, June 26). *Global Consumer Insights Pulse Survey June 2023*. PwC. Retrieved June 12, 2024, from

https://www.pwc.com/gx/en/industries/consumer-markets/consumer-insights-survey.html

Rafatjoo, A. (2020). A Century of Humiliation. In *Modern China: Financial Cooperation for Solving Sustainability Challenges*. Springer International Publishing. https://doi.org/10.1007/978-3-030-39204-8

Ratuva, S. (2022). The Politics of Imagery: Understanding the Historical Genesis of Sinophobia in Pacific Geopolitics. *Springer Nature*, *39*(1), 13–28. 10.1007/s12140-021-09376-9

Reuters. (2023, October 12). *EU energy chief urges China to commit to renewables target, methane pledge*. Wikipedia. Retrieved June 6, 2024, from https://www.reuters.com/sustainability/climate-energy/eu-energy-chief-urges-china-commit-renewables-target-methane-pledge-2023-10-12/

Ritchie, H. (2024, February 14). *China is building more coal plants but might burn less coal*. Sustainability by numbers. Retrieved June 4, 2024, from https://www.sustainabilitybynumbers.com/p/china-coal-plants

Ritchie, H. (2024, February 14). *China is building more coal plants but might burn less coal.* sustainabilitybynumbers.com. Retrieved June 8, 2024, from https://www.sustainabilitybynumbers.com/p/china-coal-plants

Rizzi, A. (2023, November 13). *How the changing balance of power is shaking up the world*. EL PAÍS English. Retrieved June 7, 2024, from https://english.elpais.com/international/2023-11-13/how-the-changing-balance-of-power-is-shaking-up-the-world.html#

Rong, Y. (2023, November 30). *What is zero-carbon village?* CGTN. https://news.cgtn.com/news/2023-11-30/What-is-zero-carbon-village-1p93hgFbU4M/index.html

Roper, W. (2020, January 16). *Infographic: Europe Leads the World in Environmental Protection*. Statista. Retrieved May 21, 2024, from https://www.statista.com/chart/20500/european-countries-healthiest-environments/

Routley, N., & Conte, N. (2024, January 30). *China's Real Estate Crisis, Shown in Two Charts*. Visual Capitalist. Retrieved May 22, 2024, from https://www.visualcapitalist.com/china-real-estate-boom-and-crisis/Said, E. W. (1994). *Orientalism*. Knopf Doubleday Publishing Group.

Sierakowski, S. (2019, December 18). Europe's Age of Humiliation. DGAP. Retrieved May 29, 2024, from

https://dgap.org/en/research/publications/europes-age-humiliation Silver, L., Huang, C., & Clancy, L. (2023, July 27). *China's Approach to Foreign Policy Gets Largely Negative Reviews in 24-Country Survey*. Pew Research Center. Retrieved June 6, 2024, from

https://www.pewresearch.org/global/2023/07/27/chinas-approach-to-foreign-policy-gets-largely-negative-reviews-in-24-country-survey/

Solarpower Europe. (2023, November 29). Over 420 European organisations warn of irresponsible trade defence measures on solar products. SolarPower Europe. Retrieved June 5, 2024, from https://www.solarpowereurope.org/press-

releases/over-420-european-organisations-warn-of-irresponsible-trade-defence-measures-on-solar-products

Stanway, D., & Xu, M. (2023, March 22). *China's new coal plants set to become a costly second fiddle to renewables*. Reuters. Retrieved June 4, 2024, from https://www.reuters.com/business/energy/chinas-new-coal-plants-set-become-costly-second-fiddle-renewables-2023-03-22/

Stockholm Resilience Centre. (n.d.). *Planetary boundaries*. Stockholm Resilience Centre. Retrieved May 28, 2024, from

https://www.stockholmresilience.org/research/planetary-boundaries.html Su, X. (2020, February 20). Can Green Investment Win the Favor of Investors in China? Evidence from the Return Performance of Green Investment Stocks. *Emerging Markets Finance and Trade*, *57*(11), 3120-3138. Taylor&Francis. https://doi.org/10.1080/1540496X.2019.1710129

Sun, Y., Zhang, X., Ding, Y., Chen, D., Qin, D., & Zhai, P. (2021, June 29). Understanding human influence on climate change in China. *National Science Review*, *9*(3). https://doi.org/10.1093/nsr/nwab113

Tiezzi, S. (2021, March 4). *What Is the CPPCC Anyway? – The Diplomat*. The Diplomat. Retrieved June 5, 2024, from https://thediplomat.com/2021/03/what-is-the-cppcc-anyway/

Tsang, B., & Schäpe, B. (2023, September 4). *Islands and oases: EU-China climate diplomacy in times of geopolitical challenges*. E3G. Retrieved May 21, 2024, from https://www.e3g.org/news/islands-and-oases-eu-china-climate-diplomacy-in-times-of-geopolitical-challenges/

Tsang, B., & Schäpe, B. (2023, September 4). *Islands and oases: EU-China climate diplomacy in times of geopolitical challenges*. E3G. Retrieved June 6, 2024, from https://www.e3g.org/news/islands-and-oases-eu-china-climate-diplomacy-in-times-of-geopolitical-challenges/

UNDP. (2024). *China*. UNDP. Retrieved June 1, 2024, from https://www.undp.org/china/about-china-0

United Nations. (2023, September 19). *Annual cost for reaching the SDGs? More than \$5 trillion*. UN News. Retrieved May 6, 2024, from https://news.un.org/en/story/2023/09/1140997

United Nations Climate Change. (n.d.). *History of the Convention*. Wikipedia. Retrieved June 3, 2024, from https://unfccc.int/process/the-convention/history-of-the-convention

United Nations Climate Change. (2024). *Key aspects of the Paris Agreement*. UNFCCC. Retrieved June 5, 2024, from https://unfccc.int/most-requested/key-aspects-of-the-paris-agreement

United Nations Climate Change. (2024). *Nationally Determined Contributions* (*NDCs*). UNFCCC. Retrieved June 4, 2024, from https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs

USC US-China Institute. (1842, December 28). *Treaty of Nanjing (Nanking)*, 1842 | US-China Institute. USC U.S.-China Institute. Retrieved May 29, 2024, from https://china.usc.edu/treaty-nanjing-nanking-1842

Venditti, B., & Ross, J. (2023, July 26). Which Countries Are Most Reliant on Coal? Visual Capitalist. Retrieved June 5, 2024, from

https://www.visualcapitalist.com/which-countries-are-most-reliant-on-coal/

Vidal Liy, M. (2024, April 8). *Chinese overproduction in clean energy, the new source of friction between the US and China*. EL PAÍS English. Retrieved June 8, 2024, from https://english.elpais.com/economy-and-business/2024-04-

08/chinese-overproduction-in-clean-energy-the-new-source-of-friction-between-the-us-and-china.html

Voiland, A. (2010, January 22). 2009: Second warmest year on record; end of warmest decade – Climate Change: Vital Signs of the Planet. Climate Change. Retrieved May 7, 2024, from https://climate.nasa.gov/news/249/2009-second-warmest-year-on-record-end-of-warmest-decade/

Wang, X. (2023, July 4). The 1972 Stockholm Conference and China's diplomatic response. *Cultures of Science*, *6*(2).

https://doi.org/10.1177/20966083231184691

Wang, Y. (2022, March 29). *Beijing's Green Fist*. Human Rights Watch. Retrieved May 30, 2024, from https://www.hrw.org/news/2022/03/29/beijingsgreen-fist

Wang, Y. (2022, March 29). *Beijing's Green Fist*. Human Rights Watch. Retrieved June 8, 2024, from https://www.hrw.org/news/2022/03/29/beijingsgreen-fist

Webb, M. C., & Krasner, S. D. (1989). Hegemonic stability theory: an empirical assessment. *Review of International Studies*, 15, 183-198.

https://doi.org/10.1017/S0260210500112999.

Webster, J. (2022, November 1). *China's energy security realities and COP27 ambitions*. Atlantic Council. Retrieved May 22, 2024, from https://www.atlanticcouncil.org/blogs/energysource/chinas-energy-security-realities-and-cop27-ambitions/

Wen, Z., & Chen, J. (2008). A cost-benefit analysis for the economic growth in China. *Ecological Economics*, 65, 356-366.

https://doi.org/10.1016/J.ECOLECON.2007.07.007.

West, J. (2021, May 10). China's innovation dilemma. Lowy Institute.

https://www.lowyinstitute.org/the-interpreter/china-s-innovation-dilemma

White, E. (2024, February 15). *World's biggest solar company warns west not to cut out Chinese suppliers*. Wikipedia. Retrieved June 3, 2024, from https://www.ft.com/content/ba27f8d3-df06-4e2a-96b7-a8bbc06632a2

White, E. (2024, February 16). *World's biggest solar company warns west not to cut out Chinese suppliers*. Financial Times. Retrieved June 8, 2024, from https://caliber.az/en/post/223092/

WIPO. (2023). China Ranking in the Global Innovation Index 2023. WIPO. Retrieved May 31, 2024, from https://www.wipo.int/gii-ranking/en/china Woolston, C. (2024, March 5). What China's leading position in natural sciences means for global research. nature. Retrieved May 10, 2024, from https://www.nature.com/articles/d41586-023-02159-7

The World Bank. (n.d.). *GDP per capita (current US\$)*. The World Bank. Retrieved June 1, 2024, from

https://data.worldbank.org/indicator/NY.GDP.PCAP.CD

The World Bank. (2022, October 12). *China's Transition to a Low-Carbon Economy and Climate Resilience Needs Shifts in Resources and Technologies*. World Bank. Retrieved May 8, 2024, from

https://www.worldbank.org/en/news/press-release/2022/10/12/china-s-transition-to-a-low-carbon-economy-and-climate-resilience-needs-shifts-in-resources-and-technologies

The World Bank. (2022, October 12). *China's Transition to a Low-Carbon Economy and Climate Resilience Needs Shifts in Resources and Technologies*. World Bank. Retrieved May 10, 2024, from

https://www.worldbank.org/en/news/press-release/2022/10/12/china-s-transition-to-a-low-carbon-economy-and-climate-resilience-needs-shifts-in-resources-and-technologies

The World Bank. (2024). *China Overview: Development news, research, data*. World Bank. Retrieved May 29, 2024, from

https://www.worldbank.org/en/country/china/overview

The World Bank. (2024). *The World by Income and Region*. The World Bank. Retrieved June 1, 2024, from https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html

World Commission On Environment And Development. (1987). *Our Common Future*. Oxford University Press.

The World Economic Forum. (2023, October 12). *Climate change is costing the world \$16 million per hour: study*. The World Economic Forum. Retrieved May 10, 2024, from https://www.weforum.org/agenda/2023/10/climate-loss-and-damage-cost-16-million-per-hour/

worldometer. (2024). *China Population (2024)*. Worldometer. Retrieved May 22, 2024, from https://www.worldometers.info/world-population/china-population/

Xiaomin, Z. (2023, March 24). Report shows R&D spending on the rise - Chinadaily.com.cn. *China Daily*.

 $https://www.chinadaily.com.cn/a/202303/24/WS641d84b2a31057c47ebb66ef_1.html$

Xie, Z. (2020, January 1). China's historical evolution of environmental protection along with the forty years' reform and opening-up. *Environmental Science and Ecotechnology*. doi: 10.1016/j.ese.2019.100001

Xu, H., Xia, B., & Jiang, S. (2023, November 22). The Impact of Industrial Added Value on Energy Consumption and Carbon Dioxide Emissions: A Case Study of China. *Sustainability*, *15*(23). https://doi.org/10.3390/su152316201 Xue, B., Han, B., Gou, X., Yang, H., Thomas, H., & Stückrad, S. (2023, July 13). Understanding ecological civilization in China: From political context to science. *Ambio*, *52*, 1895-1909.

https://link.springer.com/article/10.1007/s13280-023-01897-

2#:~:text=Throughout%20the%20%E2%80%9Cecological%20civilization%E2%80%9D%20of,are%20fundamental%20to%20its%20construct.

Yanzhu Zhang. (2021, June 11). EU-China Green Partnership for Better Global Governance. In *The Multinational Development Policy Dialogue*. KAS-MDPD. https://www.kas.de/en/web/mned-bruessel/european-green-deal/detail/-/content/eu-china-green-partnership-for-better-global-governance Yin, P., Brauer, M., Cohen, A. J., Wang, H., Li, J., & Burnett, R. T. (2020, September). The effect of air pollution on deaths, disease burden, and life expectancy across China and its provinces, 1990–2017: an analysis for the Global Burden of Disease Study 2017. *The Lancet*, 4(9), E386-E398. PlumX

Yin, I. (2024, January 31). *Coal still accounted for nearly 60% of China's electricity supply in 2023: CEC*. Spglobal.com; S&P Global Commodity Insights. https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/013124-coal-still-accounted-for-nearly-60-of-chinas-electricity-supply-in-2023-

cec#:~:text=Coal%20still%20accounted%20for%20nearly

Metrics. https://doi.org/10.1016/S2542-5196(20)30161-3

Yu, J., Bohmann, F., & Xiang, K. (2023, November 29). *Connecting the dots: ESG regulations in China and the EU*. PwC Deutschland. Retrieved March 13, 2024, from https://www.pwc.de/en/international-markets/german-business-groups/china-business-group/connecting-the-dots-esg-regulations-in-china-and-the-eu.html

Zhang, J. (2013, January 10). *Is Environmentally Sustainable Economic Growth Possible in China?* The Diplomat – Asia-Pacific Current Affairs Magazine. Retrieved May 30, 2024, from https://thediplomat.com/2013/01/is-environmentally-sustainable-economic-growth-possible-in-china/ Zhou, Y., Zhi, X., Wu, H., & Li, Y. (2019, June 27). The role of Chinese people's political consultative conference in environmental governance: Evidence from environmental proposals. *Sustainability Accounting, Management and Policy Journal*, 11(5).