CONTEMPORARY CHINESE ENVIRONMENTAL GOVERNANCE
AND REGIME LEGITIMACY

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By

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This paper aims to explain the causal variable which motivates the Chinese Communist Party’s (CCP) environmental policies up to 2016. In the wake of environmental degradation with an ongoing transition from an export-based to consumer-based economy, why would the CCP pursue stronger environmental policies despite knowing that this short-term loss of GDP growth would cause domestic instability? Many theories have been proposed, but these theories have been unsatisfactory or partially correct. They overlook the critical causal variable of the CCP’s preference: to maintain regime control by addressing issues that threaten its legitimacy. The middle class represents a stronger faction within Chinese domestic politics than China’s migrant workers, where the middle class is more capable of destabilizing China and has become more outspoken in voicing discontent. It is because of the middle class’ ability to destabilize China, rising interest in China’s environmental condition, and its political significance as urban hukou residents, that the CCP is compelled to calculate its decisions based off of middle class interests. The paper will analyze four alternative explanations – energy reform, health issues, international image, and improving GDP growth – and three case studies to support this argument.
The research and writing of this thesis
is dedicated to
Dr. Victor Cha for his advice and feedback,
Dr. Kirstin Looney for teaching me the field,
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And my mother, Karen, for her editing, feedback, and support.

This work would not have been possible without your assistance,
Sean Yu
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Introduction

Why has China supported stricter environmental reforms in the past decade despite knowing that this short-term loss of growth undermines its domestic stability? For the Chinese Communist Party (CCP), economic growth has been the hallmark of their domestic legitimacy. The “China Miracle” signified decades of rapid economic development, but came at the cost of severe environmental degradation. If economic stability and growth are the foundation for the CCP’s legitimacy, what explains the rationale for handicapping its economic growth by implementing stricter environmental policies during an economic slowdown while shifting its economy from an export-led to a consumer-based economy? Many theories have been proposed to explain China’s decision making, but these theories have been unsatisfactory or are only partially correct. They overlook the critical causal variable of the CCP’s preference: to maintain regime control by addressing issues that threaten its legitimacy.

I argue that the middle class represents a stronger faction within Chinese domestic politics than China’s laborers, where the middle class is more capable of destabilizing China. The CCP believes it is more important to placate this group’s interest because they can mobilize, gather support, and are financially better off than China’s laborers. The Chinese middle class has also become more outspoken in voicing its discontent via Weibo or has acted by protesting in the streets. It is because of the middle class’s ability to destabilize China, if galvanized to do so, as well as its political significance by being a majority of urban hukou residents, that the CCP is compelled to calculate its decisions based on middle class interests. Failure to comply, control, or to misread the middle class has led to various incidents of disorder, the most significant being the nationwide protests during the Tiananmen Incident.

The Chinese government is aware that its environmental condition is causing unrest. China’s environmental degradation has spanned several decades and is evidenced by China’s air, water, and soil pollution. Unlike other domestic crises, such as the 2008 milk powder scandal, revelations of shoddy construction after the 2008 Wenchuan earthquake, environmental pollution has been a constant and observable destabilization factor. Environmental pollution has caused a range of issues, from cardio-respiratory diseases to loss of GDP growth. These issues are galvanizing the Chinese middle class, who are becoming increasingly vocal and want the government to address China’s environmental condition.

This article aims to add to the growing field of literature at the intersection of environmental policy and Chinese authoritarianism up to 2016. Most works tend to separate the two studies. Many scholars have covered China’s environmental situation as well as China’s energy reforms.1

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The field of Chinese authoritarianism is also well developed, with several subsets and schools of thought.²

The article is organized into three sections. The first section will provide a background on Chinese environmental policy, covering several significant policy shifts from the Maoist era to the present. I will also give an overview of China’s environmental condition, detailing air, water, and soil pollution, desertification, and deforestation. The second section will detail fragmented Chinese authoritarianism, citing recent examples of when China’s government reacted to middle class interests. It will first define the parameters of China’s middle class: its constituents, income range, locality, and interests.

The final section will cover alternative explanations to my argument, demonstrating why they are incomplete or insufficient answers. Some of these alternative explanations are complementary to the main thrust of this paper, however, they only explain the symptoms of China’s environmental policy and not its causal root. These explanations address various factors that motivate the CCP’s actions, from energy sector reform, international image concerns, to addressing cardio-respiratory diseases. However, these factors are only descriptive actions carried about by the CCP in response to environmental degradation and are not the causative actions which motivated them to act.

Background

China’s transformation from a war-torn agrarian post-1949 society into a polluted industrial economy was one of the most dramatic changes of the 20th century. Despite the different developmental policies that Mao Zedong and Deng Xiaoping implemented, both aimed to expand China’s economy. These developmental goals often came at the cost of China’s environment.

Maoism, with aspects of Marxism, and Western science, influenced the CCP’s leadership to view science as a tool to control nature.³ The Maoist-era policies, as described by Judith Shapiro, are called “Mao’s war against nature.”⁴ Both Mao and Deng believed that via science, humans could control nature. The key difference was, Mao viewed nature as a malleable resource, and Deng viewed it as a reserve to be plundered.⁵ There were several key exploitive environmental policies carried out by the CCP. The following section will detail how China’s leadership exploited the environment for economic development and how the CCP made efforts to restore China’s ecology.

Soil

One of the first environmental challenges that faced the CCP was deforestation. After 1949, there were four waves of deforestation. Prior to the first “Great Cutting”, China had approximately 5 to 8.6 percent forest cover. The deforestation campaigns fueled China’s steel furnaces during the Great Leap Forward, converted all arable land into grain production during the Cultural Revolution, built homes for rural population during the 1980s, and boosted lumber sales in the 1990s.

Another major challenge for the CCP is desertification. Desertification is the process by which land in arid regions that had grasses or shrubs were removed and became bare unproductive land. In 2000, more than a quarter of China’s landmass was classified as a desert. Blame for China’s loss of grassland has been appropriated to population growth, the conversion of grassland to farmland during the Great Leap Forward and the Cultural Revolution, as well as urbanization.

Water

There are two historical water projects that the CCP undertook, dam construction and water scarcity alleviation. Dam construction in China has been a mix of successful cases but mired with several notable failures. The most notable disasters were when Yellow River dam collapsed and killed 85 thousand people and when Huai became an industrial waste dump for China’s factories during the 1990s. The most successful case was China’s Three Gorges dam, but even this case sparked controversy due to its displacement of citizens, loss of biodiversity, and destruction of cultural relics.

The South-to-North Water Transfer Project (SNWTP) was a nation-wide pipeline constructed to reallocate water. The project aims to divert water from the south, to China’s more arid north, as well as diverting water from Qinghai-Tibetan plateau to China’s interior. While this project can solve China’s water scarcity problems in the short-run, it is not a long-term solution and is unlikely capable of providing enough water for a modernizing China.

Air

China’s industrialization and economic reform-era was powered by coal power plants. Air pollution was becoming more evident as China’s energy demand rose in tandem with its economy. By 1989, China surpassed the Soviet Union to become the world’s largest coal producer. Its coal power plants supplied 75 percent of the country’s electricity and burned “largely uncleaned coal, with minimal or no air pollution controls.” Small local mines are the most dangerous, where safety and pollution checks are disregarded through the bribing of local

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7 Marks, Robert. 287.
9 Ibid.
10 Marks, Robert. 301.
11 Ibid., 304.
12 Ibid., 313.
officials. These mines account for nearly one-third of China’s coal production, but also 75 percent of miners’ deaths.\textsuperscript{14}

\textit{Ecological Construction}

As evidenced by Mao and Deng-era policies, the CCP believes that through human effort and science, nature can be tamed. Since the 1990s, the CCP pursued an environmental policy called ecological construction (\textit{生态建设}).\textsuperscript{15} Its principle objective is to “rebuild nature and the landscape through planting and engineering efforts, with a focus on establishing productive landscapes.”\textsuperscript{16} The policy aims to improve China’s ecological systems in a quantifiable manner using three metrics: number of trees planted, areas developed, and vegetation coverage.

The most ambitious of the CCP’s ecological programs is the Three-North Shelterbelt program. The program aims to establish 35.6 million hectares of protective forests in north China, and increase forest cover from 5 to 15 percent.\textsuperscript{17} The program’s largest failure is its one-size-fits-all approach for all of China’s ecosystems. This is particularly notable in China’s drylands, where trees need to be replanted every 3-4 years, and the limited diversity of tree species leave trees vulnerable to disease. For example, only 15 percent of trees planted in China’s drylands since 1949 have survived and a disease in Ningxia led to a loss of 1 billion poplar trees.\textsuperscript{18}

\textit{Current Policies and Environmental Condition}

On the global climate change negotiation stage, China is a key actor. China is a central member of several international organizations and is the self-proclaimed leader of the developing countries. China is also the largest emitter of greenhouse gases (GHG), surpassing the United States in 2007.\textsuperscript{19} It is also a major coal consumer, faces growing energy demands, and has severe air, water, and soil pollution.

China has participated in global climate negotiations since the 1990s. China has supported the UN Convention framework as well as the Kyoto Protocol framework, especially the “common but differentiated” principle.\textsuperscript{20} China has long advocated for the inclusion of “historic emission quantities” by developed countries within the calculus of determining future global policies. China has also pushed for securing future GHG emission leeway for developing countries,

\textsuperscript{16} Ibid.
including itself. While the Kyoto Protocol demonstrated the possibility of gathering the world’s leaders to address climate change, developing countries were not incentivized to fulfill their commitments. Benjamin Gilman summarized China’s position at the Kyoto Conference as China’s “Three Nos”: “no obligations, no voluntary commitments, and no future negotiations to bind China.” The Chinese government saw the Kyoto Protocol, and by extension the push by developed countries for limiting GHG emissions, as an attempt to limit developing countries from growing and to maintain the state of global power disparity in favor of the West.

In 2007, China changed its position on climate change at the Bali Conference. This was the first time where developing countries, proposed that developing countries should also reduce their GHG emissions by 2020. This momentum was carried into the 2009 Copenhagen meeting but was ultimately unsuccessful because several key developing countries rejecting the legally binding GHG emission commitments. After Copenhagen, the United States, under the Obama administration, continued to engage with China on GHG commitments. The U.S. called on China to become a “responsible stakeholder” in the international system and to address its severe environmental condition. This added importance on U.S.-Chinese cooperation showed merit by the 2015 Paris Climate Change Conference, wherein maximum temperature targets were set and an international fund for green technology was established.

While the above provides a summary of elite level politics, it still does not address what motivated the CCP to change course. International pressure and global initiatives may have influenced China’s leaders to a degree, but the primary explanation for the shift from China’s hardline position to its cooperative approach originates from domestic stability. Change ultimately occurred after the CCP realized that China’s environmental condition became a middle class interest, thus forcing the CCP to address this issue before it deteriorates any further.

**Regime Legitimacy**

China’s decision to address its environmental condition was driven by legitimacy sensitivity. In recent years, international pressure, rising environmental protests, and the middle class’ interest in improving China’s environment have forced the CCP to act. Because domestic stability was tied to China’s environmental condition, the CCP chose to prioritize domestic stability over other considerations, even GDP growth.

Legitimacy sensitivity, as described by James C. Scott’s *Seeing like a State*, is when an authoritarian state is faced with an event or crisis that threatens its survival, the state will adopt policies to respond to the crisis. The CCP is keenly cognizant of legitimacy sensitivity. It is a regime that was not elected by popular vote, therefore, its domestic legitimacy is performance based, namely economic growth. Like all governments, the CCP is also expected to demonstrate

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21 Ibid.
good governance, protect its citizens, and provide public goods. In the case of the CCP, failure to perform, results in the delegitimization of China’s current regime.\textsuperscript{25}

To address issues that threaten its legitimacy, the CCP must administer effective policymaking. The most convincing governance model that describes the CCP is Lieberthal and Oksenberg’s “fragmented authoritarianism.”\textsuperscript{26} This model asserts that since the late 1970s, Chinese bureaucracy outside the inner circle has become increasingly fragmented. Fragmented authority requires that one or more core leaders must enthusiastically support the initiation of a major project or policy for it to overcome the bureaucratic impasses at the lower levels of governance.\textsuperscript{27} Furthermore, the outcomes of the center’s policies are shaped by the interests and implementation strategies carried out by the lower levels of China’s government. Andrew Mertha’s fragmented authoritarian argues that “previously excluded members of the policymaking process in China—officials only peripherally connected to the policy in question, the media, non-governmental organizations and individual activists—have successfully entered the political process.”\textsuperscript{28}

The fragmented authoritarianism model explains how policy entrepreneurs, “the advocates for proposals and new ideas”, influence Chinese policymaking. According to Mertha’s authoritarianism 2.0 model, there are three key policy entrepreneurs in China: disgruntled officials, the media, and NGOs.\textsuperscript{29} In Mertha’s \textit{Water Warriors}, some officials engaged in the contentious hydroelectric dam project at Dujiangyan and supported local citizens to protest its construction. Media policy entrepreneurs, have faced cyclical liberalization and constriction of their speech. Recently, the parameters of acceptable discourse in Chinese media has been tightened, as demonstrated by President Xi Jinping’s visit to Renmin Ribao’s headquarters in 2016. Lastly, NGOs have had success in advocating for reform in China. Their success is due to their ties with media organizations and by sheer volume, with estimates ranging from 300,000 to one million Chinese NGOs.\textsuperscript{30} These policy entrepreneurs use various means to rally participants to their causes. This is called issue framing. By framing issues as “Protect our cultural heritage!” policy entrepreneurs were able to halt hydroelectric dam projects in Dujiangyan and Yanliubu.\textsuperscript{31}

\textbf{The Chinese Middle Class}

Chinese middle class have been active participants in environmental issues. The middle class, according to the National Bureau of Statistics, comprises 19 percent of China’s workforce.\textsuperscript{32} While numerically smaller than China’s migrant workers, the middle class’ purchasing power parity is double that of migrant workers.\textsuperscript{33} With regards to web-interconnectedness, over 50

\textsuperscript{27}Ibid. \\
\textsuperscript{28}Mertha, Andrew. ""Fragmented Authoritarianism 2.0": Political Pluralization in the Chinese Policy Process." \textit{The China Quarterly} 200 (2009): 996. doi:10.1017/s0305741009990592. \\
\textsuperscript{29}Ibid. \\
\textsuperscript{30}Ibid. \\
\textsuperscript{32}国家统计局. "2015年国民经济和社会发展统计公报." 中华人民共和国国家统计局, April 23, 2016. \\
percent of China’s population, called “netizens” (Chinese Internet users), accessed the Internet regularly in 2015.³⁴ Netizens often post on forums and use Weibo to voice their opinions on environmental protection and food security, as well as to expose corruption and misconduct.³⁵ Furthermore, 68 percent of China’s middle class live in urban settings, with a majority living in Beijing, Shanghai and Guangzhou.³⁶ As argued by works discussing Chinese urban bias, the CCP’s ability to provide public goods and appease urbanites is more important than China’s rural population.³⁷ Urbanites live in key political, industrial, and financial centers, where failure to control or appease them can lead to blockage or disruption.

The Chinese view air and water pollution as the second and third most endemic issues to China.³⁸ This is further evidenced by an earlier poll where public concern over China’s air and water quality rose from 36 to 47 percent and 33 to 40 percent, respectively. In 2015 Under the Dome reached over 300 million views during the one week it was aired online before being censored. Controversially, it was praised by China’s environmental protection minister and was even covered by the People’s Daily.³⁹ The film investigated China’s environmental condition and uncovered “the war against an invisible enemy.” Despite being censored and potentially misused as government propaganda to galvanize support over closing coal plants, the film illustrated China’s environmental condition to a significant portion of its population and encouraged other netizens to post photos or stories about environmental degradation in their locality.

Civilian interests are also evidenced by the state petition system. The petition system is organized into “letter and visits” (信访) offices, where “citizens, legal persons, or other organizations give information, make comments, or lodge complaints.”⁴⁰ The petition system serves as an important information channel between leaders and citizens. It also helps address a wide range of issues, due to the absence of a strong legal system.⁴¹ By acting within the system, citizens may voice their discontent or raise awareness to officials without being potentially reprimanded.⁴² In a perfect system, the petition should serve as warning signs for the CCP as well as provide civilian oversight, where citizens can keep local authorities and companies

accountable to national law. This would provide the CCP with information to put out small fires, to prevent larger ones. However, the petition system’s effectiveness is disputed. Citizen complaints through the petition system are often ignored, mishandled, or manipulated. In many cases, petitioning offices often pay off petitioners, using assets from the stability maintenance budget for “expedient concessions.”

The failure of petitioning offices has resulted in policy entrepreneurs to voice their complaints by protesting. Official figures from China’s Public Security Bureau’s last public publication reported that 87,000 protests occurred in 2005. While available figures are unconfirmed, public discontent is still observable. In the past decade, there has been a rise in public outrage over a variety of environmental issues. While there are countless local issues that have been framed by Chinese policy entrepreneurs, I have highlighted three case studies which evolved into national issues. The primary difference between local and national environmental issues are their impact. The CCP prioritizes addressing national issues due to their potential for large-scale disruption and damage to domestic legitimacy.

Contentious Issues

2008 Milk Scandal

The 2008 milk scandal was one of the largest Chinese food safety incidents to date. The scandal involved contaminated infant milk formula that had been adulterated with melamine, a toxic industrial compound. The contaminated milk formula affected around 300,000 infants, 54,000 hospitalized for kidney stones, and six fatalities. The scandal devastated China’s milk industry and called into question China’s food safety regulations. Twenty two Chinese dairy companies were investigated, including three of China’s more well-known brands, Sanlu, Mengniu, and Yili.

The scandal’s aftermath resulted in both domestic uproar and international concern. Domestically, Chinese consumers were outraged by the government’s inability to regulate the milk industry. Netizens vented their anger on Weibo and Sanlu’s website, the company that was discovered as producing the majority of the contaminated milk. Sanlu’s website was also hacked on several occasions by unconfirmed actors. Consumer confidence in domestic milk products also dropped. After the scandal, over half of China’s milk formula market was dominated by international brands, with imports from Hong Kong, Taiwan, and Australia being the most

45 Ibid.
predominant. Chinese lawyers who volunteered to assist the victims came under pressure by the Beijing Lawyers’ Association. In a leaked meeting report, the lawyers were ‘encouraged’ to retract their services and to “act together, and help maintain [domestic] stability.”

Notably, Chinese citizens working within the fragmented authoritarian framework did not appropriate blame with the center, but rather local officials and the CEOs of the milk companies. It was the local officials, not the CCP, from either negligence or corruption, who failed to oversee milk powder consumer safety regulations.

2008 Wenchun Earthquake

On May 12, 2008, an 8.0 magnitude earthquake occurred in Wenchuan County, Sichuan province. It was one of China’s deadliest earthquakes in the past century, affecting nearly 15 million people. Official figures state that approximately 69 thousand people died as a result of the earthquake. Initial media coverage reported how Chinese search and rescue groups were rapidly dispatched, as well as how China was willing to accept foreign assistance.

Despite the CCP’s impressive disaster response to the 2008 earthquake, investigations into why over 7,000 schools collapsed during the earthquake created the “school construction scandal of 2008.” The schools were discovered to have been poorly engineered, with netizens nicknaming the buildings as “tofu-dregs schoolhouses.” The shoddy construction revealed that the old 1970s buildings were constructed with low-grade cement and used thin iron wires instead of steel rods, suggesting that local officials had cut corners in renovating the schools to meet national standards. Furthermore, due to the “One Child Policy”, many families lost their only child, jeopardizing their future financial stability.

The revelations of the Wenchun schoolhouses outraged China’s citizens. While netizens were demanding answers, the parents affected by the earthquake were protesting in front of local administration offices. Their anger at local corruption and lack of government oversight was illustrated by the lone government building still standing erect, while all but one school was reduced to rubble. After the CCP issued a period of national mourning, they ordered state meetings to discuss the issue.

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57 Vause, John. "In Chinese Town, Quake Shakes Faith in School Construction."
media to curtail coverage of the issue, and to focus more on the upcoming Olympics.\textsuperscript{58} Local governments were pressured to silence the outraged parents. Local officials bought the parent’s silence, by bribing them to sign gag-order contracts and by shaming them into considering their nation’s international image in the wake of the upcoming Olympics.\textsuperscript{59} These actions demonstrate how the CCP, acting through local government, stifled middle class vocalization, to inhibit galvanizing other actors into supporting the affected parents and to preserve their international image.

\textit{Illegal Dumping}

Illegal chemical dumping in China is, unfortunately, nothing new. Businesses and factories have been dumping their waste products into China’s rivers or disposing it in the countryside for decades. Recent notable examples include, the Huang Pu pig scandal in 2013 and the Jian River turning red in 2011.\textsuperscript{60} Chemical dumping contaminated China’s rivers to a severe level. In 2015, 61.5 percent of China’s underground water was classified as “relatively poor” or “very poor,” up from 59 percent in 2013, rendering it “unsuitable for human consumption.”\textsuperscript{61}

Repeated cases of chemical dumping has called into question the CCP’s ability to effectively govern. For example, there was another chemical dumping incident in 2016, which affected a nearby school and its students.\textsuperscript{62} This was yet another case where loose regulation and ineffective oversight allowed factories to cut-corners and dump toxic chemicals. Public outrage was aimed at local officials for failing to uphold regulations and at factory owners. This resulted in the Ministry of Environmental Protection launching an investigation to both appease the affected parents as well as to learn from this case, thereby enacting stronger legislation to deter factories from illegally dumping in the future.\textsuperscript{63}

As evidenced by the aftermath of these scandals, policy entrepreneurs were limited from engaging with the issues. In the milk scandal case, lawyers were urged not to enflame the issue and official media coverage was eventually curtailed.\textsuperscript{64} After the Wenchuan earthquake, parents were paid to maintain their silence. These counter-measures imply that while the CCP is willing to allow a small degree of unrest to occur over a crisis, the CCP will limit its coverage and public engagement if it is projected to cause a large degree of domestic instability. Furthermore, by airing out the crisis, the CCP can reprimand the local officials who were indicted, thus shifting


\textsuperscript{63} Ibid.

the blame away from the center. This is further evidenced by middle class opinions, where they trust the core of the CCP but not necessarily their local officials. The center, by this logic, creates policies for the betterment of China, whereas local officials collude with profit-seeking businesses and only seek the advancement of their careers.

**Chinese Communist Party’s Response to Environmental Degradation**

Domestic legitimacy is a primary concern of the CCP. Recent food, environment, and construction scandals have caused nationwide outrage and are legitimacy flashpoints for the Chinese regime. A rising middle class interest is China’s environmental condition. The middle class’ discontent with the current situation is demonstrated by repeated environmental protests, netizen reactions, and increased pressure on policy entrepreneurs to not advocate for the affected individuals.

The CCP is a responsive-authoritarian regime. Various bottom-up channels such as petitions, protests, web-forums, and media coverage provide the CCP information on the country’s issues. With regards to environmental degradation, the CCP has shifted its policy from an exploitation model, such as the “pollute first, then control later” policy, to an ecological construction policy. There are a range of environmental policies and programs that the CCP are conducting, the following section will focus on air and water pollution, and policy reforms.

**Air And Water Pollution**

China’s rivers are polluted. Water pollution has several public health implications, the most common of which are: gastrointestinal issues, digestive cancers, hepatitis, and cholera. Water scarcity and conservation are key concerns for Chinese policymakers, for 80 percent of China’s surface and groundwater originates from the south. In 2015, the National Statistics Bureau broke down domestic water consumption as: “65 percent agriculture, 23 percent industry, and 12 percent domestic usage.” While only 12 percent of China’s water is used for domestic use, nearly one-third of China’s freshwater supply originates from the Tibetan-Qinghai plateau. To supply its citizens who live in China’s densely populated coast, the CCP constructed the trans-China SNWTP pipeline, which reallocates water from Tibet toward China’s interior and ultimately closer to its city centers.

To address water scarcity, the CCP is quadrupling its desalination capacity. Currently, China has 57 desalination plants which produces nearly 1 million meters$^3$ of water per day and aims to increase this figure to 3 million meters$^3$ per day by 2020. However according to a 2014 World Resources Institute study, a desalination plant requires four kilowatt-hours per cubic meter of freshwater, while wastewater reuse requires less than 1 kilowatt-hour to produce the same.

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66 国家统计局. "2015年国民经济和社会发展统计公报."


quantity. While efforts to reduce coal-generated energy in China’s energy portfolio are underway, it still maintains a sizeable majority at 74%. Therefore, it is likely that these desalination plants will likely be coal-powered for the near future, which only adds demand to China’s energy sector, furthering air pollution. Lastly, water pollution most severely affects China’s rural population, where outdated infrastructure and chemical dumping by factories has polluted local water supplies.

In western China, 45 percent of rural drinking water did not reach basic health and safety standards and some drinking water supplies were contaminated with hazardous chemicals. Using an urban-bias lens, the CCP must supply clean water to its urban population to continue placating the middle class constituency. Failure to provide this public good would imply that the CCP’s government is ineffective, leading to urban destabilization and loss of legitimacy due to performance failure.

Chinese cardio-respiratory disease cases are rising. The cause of these cases are directly linked to China’s air pollution. Severe air pollution has ailed China’s citizens causing: weakened immune systems, reduced lung capacity, and linkages to premature death. Air pollution has been directly linked to causing premature death in China. From 1997 to 2003, premature death cases due to air pollution has risen from 100,000 to 300,000, resulting in a reduced workforce.

In 2013, nearly one quarter of China’s land territory was affected by severe smog and Beijing experienced 25 days of smog that January. Long term exposure can increase one’s chances of developing lung cancer. Lung cancer rates in the past 30 years have increased nearly 435 percent, making it “China’s deadliest cancer.” This economic loss is illustrated by the increase in “pollution caused welfare damage”, which has increased from 22 billion in 1975 to 112 billion by 2005. The most recent research by environmental specialists reported that in 2015, air pollution contributed to 17 percent of all Chinese deaths. According to the data collected by the U.S. embassy in Beijing, 2014 had more than 200 days that fell under the “unhealthy” range, 21 days “hazardous”, and only 10 days that were “good.”

Air pollution protests have occurred throughout the country by middle class and migrant workers on a near-weekly basis. In northeastern China, where most of China’s coal is mined, Chinese

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70 Ibid.


76 Ibid.


78 United States Beijing Embassy. 2014
citizens have protested the construction of new power plants due to “air pollution.” The middle class yearns for a cleaner China and is concerned that domestic food products may be contaminated due to pollution. Films such as Under the Dome have raised public awareness of China’s environmental condition and the lack of visible progress. The CCP must address these issues to maintain its domestic legitimacy and to prevent further domestic unrest over pollution.

Current Policy Reforms

With rising environmental protests, food safety scandals, and shoddy construction revelations, how is the CCP reacting to secure its domestic legitimacy and to address these issues? From an administrative perspective, the CCP’s new Environmental Minister, Chen Jining, is trying to revive Hu Jintao’s “Green GDP” concept in cadre performance evaluations. Previous cadre performance evaluations focused on economic growth. Chen is advocating to incorporate “Green GDP”, where GDP is recalculated to reflect the cost of pollution. After the first report in 2004, the results were sobering because the reevaluated growth rate was near zero or negative after adjustment and a second report was never filed due to local government resistance. This amounts to anywhere between three to ten percent of China’s GDP. The CCP also strengthened its language and internal goals for the past three Five-Year-Plans. The 13th Five-Year-Plan outlined several environmental policies: more clean energy production and industries, establishing a green development fund for investment, implement the strictest water management system, national water and air monitoring systems, increased forest protection, and continued ecological construction.

China has also revised its 1989 environmental protection law, allowing the Ministry of Environmental Protection to increase fines levied against businesses and factories that fail to comply with national guidelines. Coupled with China’s policy entrepreneurs, corrupt local officials colluding with polluting businesses have been brought to trial. However, environmental litigation in China is extremely difficult for the average citizen to succeed. The limited success of litigation is explained by the CCP’s fear to allow law to take its course, which undermines the rule of law for average citizens.

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81 Liang, Wei. "Changing Climate? China's New Interest in Global Climate Change Negotiations."
Lastly, the CCP values middle class stability over migrant workers. The middle class as a whole, the key constituents of Xi Jinping’s “China Dream”, are economically more empowered, are concerned with China’s environmental condition, and have permanent residency in urban settings. The hukou system marginalizes China’s migrant workers by restricting their permanent residency to their hometown. Because of this, when factories are closed, migrant workers are forced to either 1) find another job in the locality, 2) relocate to another city, or 3) return home. This structural limitation allows the CCP to close coal mines knowing that migrant workers are unlikely to stay and protest and will likely relocate. By addressing middle class interests – improving China’s environmental condition – the CCP is able to enact stronger environmental reforms and close coal mines despite knowing that this short-term loss of growth will cause a temporary amount of instability from migrant workers but will ultimately strengthen both its domestic legitimacy and stability among its middle class constituents.

Alternative Explanations

There are many rational alternative explanations as to why the CCP has enacted stronger environmental policies. While I argue that the primary reason is based on domestic stability and legitimacy, the following section will detail four alternative factors that are either complementary or are only descriptive explanations.

To Adapt Its Energy Sector, Thus Reducing Imports And Improving China’s Energy Security

The CCP has enacted various energy sector reforms and initiatives to improve China’s energy profile. China needs to reduce its coal consumption to achieve long-term success with reducing pollution. Coal generated energy in China’s still maintains a sizeable majority at 74 percent but is projected to decrease to 60 by 2025. In 2009, Hu Jintao pledged to increase China’s renewable energy sector by 15 percent by 2020 and in 2015, President Xi Jinping enlarged this pledge to 20 percent by 2030.

Regionally, China’s “One Belt, One Road” initiative is also indicative of energy reform. Part of this program’s aim is to improve China’s energy security by broadening its energy import points of entry beyond its coastal cities by developing both land and maritime routes with its neighbors. Domestically, China is closing or halting the construction of coal power plants as well as investing into more renewable energy technology. This will improve China’s energy portfolio and reduce overall GHG emissions.

While China’s energy sector reforms are a key component to its overall environmental reform policy, it is a descriptive variable. Energy sector reforms are actionable policies and observable factors carried out by a regime, however they must be driven by something larger. Furthermore, energy sector reforms do not explain why the CCP is exploring offshore drilling and has access

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91 Bloomberg News. "Beijing to Shut All Major Coal Power Plants to Cut Pollution."
to developed coal reserves. Coal is economically viable in China and the closure of coal power plants solely for the sake of addressing pollution is only a surface-level analysis of the CCP’s decision.

To Improve China’s International Image As The Leader Of The Developing Countries

China is playing a larger role in the international arena. The CCP has become more cooperative with global climate change initiatives and is working bilaterally with the U.S. China committed $3.1 billion USD to set up the China South-South Climate Cooperation Fund to support other developing countries to combat climate change. At this year’s G20 Meeting in Hangzhou, Presidents Obama and Xi agreed to ratify 2015’s Paris accord. This agreement further elevates China as a key actor in fight against climate change, and will provide more diplomatic pressure to countries who have not signed the accord.

However, as the proponent of the “China Model” of economic growth, China must demonstrate how it’s possible to overcome polluting its environment after achieving high levels of growth. The CCP cares about its international image, and was angry that the U.S. published data about pollution in Beijing, which was perceived as an attempt to smear China’s image. Nevertheless, international pressure is only a concern if China’s domestic audience also cares about it. Domestic politics is often a stronger push factor than international pressure. The CCP has rebuffed international pressure on climate change up until recently, when domestic pressure urged the CCP to take action on China’s environmental condition.

To Address China’s Outstanding Environmental Condition, Which Is Causing Health Problems

Poor air quality affects cardio-respiratory systems. Long-term exposure to air pollution can increase one’s chances of developing lung cancer. In the past 30 years, lung cancer rates have increased 435 percent, making it “China’s deadliest cancer.” Furthermore, Chinese workers who are ill and cannot work as effectively as healthy workers, which will handicap economic growth across all affected sectors by reducing one’s work hours, motivation, ability to perform, and can result in early retirement. The resulting economic loss is illustrated by the increase in “pollution caused welfare damage”, which has increased from 22 billion in 1975 to 112 billion by 2005. To address this economic loss, in 2015, the CCP launched a pilot carbon cap-and-trade program in two cities and is planning to expand it to the national level by 2017. Xi Jinping cited the American sulfur dioxide program of the 1990s as a successful model that China should imitate.

While addressing China’s affected citizens is a key marker of effective public-health policy, this explanation is only a minor variable of the causal argument, domestic stability. The middle class is cognizant of rising health issues and this becomes an avenue for them to voice their annoyance.

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92 “U.S.-China Joint Presidential Statement on Climate Change”
95 Ibid.
The CCP is engaging with this issue but is more concerned with the larger picture of domestic stability, where health problems are only an aspect of middle class unrest.

**Conclusion**

China supported stricter environmental reforms in the past decade despite knowing that this short-term loss of growth undermines its domestic stability because the constituents affected by this policy, migrant workers, are not as politically sensitive as the middle class. While a key component of the CCP’s domestic legitimacy is China’s economic performance, middle class interest in environmental degradation supersedes short-term losses in economic growth.

The CCP values the middle class over migrant workers due to the middle class’ purchasing power parity, as key drivers of the “Chinese Dream”, their interest in environmental degradation, netizen activism, and their urban hukou residency. The middle class is becoming more outspoken as a variety of scandals emerge. Their urban residency places them China’s cities, which must be placated by the continued provision of public goods to maintain order. China’s cities are also politically more sensitive than the countryside, as a rioting city quickly becomes a flashpoint and is more likely to rally other disenfranchised citizens.

While the earlier case studies are all examples of local scandals, their implications are often applicable to the national level and can be long lasting. For example, China’s milk power market has yet to rebound and its domestic reputation is still in tarnishes. The reason why I chose China’s environmental condition as the principal destabilization factor is because it occurs on the national level. It is easily observable, affects several of China’s key sectors, and is a growing concern for Chinese citizens.

By addressing middle class interests – improving China’s environmental condition – the CCP is able to enact stronger environmental reforms and close coal mines despite knowing that this short-term loss of growth will cause a temporary amount of instability from migrant workers, but will ultimately strengthen both its domestic legitimacy and stability with its middle class constituents.
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