

**LIGHT AS THE BEST DISINFECTANT: HOW CHINA’S LACK OF
TRANSPARENCY PREVENTS EFFECTIVE ENVIRONMENTAL
POLICY IN COMPARISON TO THE UNITED STATES AND DENMARK**

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I. INTRODUCTION

The United States and China have become somewhat notorious for their contributions to the international issue of planet pollution. Some environmental advocates even consider the two countries to be the leading polluters in the world, with China at number one and the United States just behind in 2017.¹ The fact that the United States and China are two of the three most populous nations explains some of these data.² However, the United States has achieved a significantly higher score on an environmental performance index (EPI) than China has recently.³ The EPI is an environmental measure compiled through the use of third party data.⁴ This prevents the EPI from using data that comes directly from world governments and ensures a greater degree of reliability.⁵ The EPI uses “32 performance indicators across 11 issue categories.”⁶ The indicators show “how close countries are to established environmental policy targets” and “offers a scorecard that highlights leaders and laggards in environmental performance and provides practical guidance for countries that aspire to move toward a sustainable future.”⁷ The United States received an index rating of 69.3 while China received a meager 37.3.⁸ Unlike the United States, three of China’s cities claim top ten spots as “most severely polluted

* I would like to extend my sincere thanks to Professor Christopher L. Griffin Jr. of the University of Arizona James E. Rogers College of Law. Professor Griffin’s role as an advisor to this note was central to the direction of my research and the resulting finished product. At every step of the writing process it was clear that he took great care to offer me all of the advice possible based on his experience and expertise.

¹ *Top 10 Biggest Polluters in the World*, CEASEPOLLUTION.COM, https://ceasepollution.com/top-10-biggest-polluters-in-the-world/?gclid=EA1aIQobChMIz7SBkNam7AIVLB-tBh3ykgg4EAAYASAAEgLedPD_BwE (last visited Oct. 8, 2020).

² *U.S. Census Bureau Current Population*, U.S. CENSUS, <https://www.census.gov/popclock/print.php?component=counter> (last visited Oct. 8, 2020).

³ Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile United States*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/usa>; Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile China*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/chn>.

⁴ *FAQs*, ENV’T PERFORMANCE INDEX, epi.yale.edu/faq/epi-faq.

⁵ *Id.*

⁶ *About the EPI*, ENV’T PERFORMANCE INDEX, epi.yale.edu/about-epi.

⁷ *Id.*

⁸ Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile United States*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/usa>; Z.A. Wendling et al. *2020 Environmental Performance Index Country Profile China*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/chn>, <https://epi.yale.edu/downloads/epi2020technicalappendix20200803.pdf> (This score is calculated by incorporating various measures for how a country is pursuing environmental goals covering environmental health as well as protection of ecosystems. The score is on a scale from 0-100 that factors in policy targets in a given country.).

cities.”⁹ China has made it a priority for years to become a manufacturing superpower, feeding its propensity to lead the world in pollution.¹⁰ Understanding the difference between these global powers leads to an important question: does the extent to which a government’s lack of transparency and openness impact the effectiveness of environmental policy?

For such an inquiry, the fundamental differences between the two countries could not be starker. The United States Constitution protects the right to a free press that is able to push government officials for information on the country’s environmental performance and what is being done to curtail negative environmental impacts.¹¹ Alternatively, China has been criticized for avoiding transparency, most recently with regard to the coronavirus pandemic.¹² This aversion to openness about data, coupled with China’s disdain for free inquiry into the status of their policies, makes for a troubling combination. The squashing of dissent in Tiananmen Square during the late 1980s was a tragic example;¹³ more recently, China has arrested protesters representing the interests of Hong Kong.¹⁴ As for Denmark, from an environmental perspective they are among the world leaders in performance according to the EPI with a score of 82.5.¹⁵ They are also widely regarded as a model of consistency when it comes to governmental transparency and openness.¹⁶

This Note explores whether differences between the United States and China, in terms of governmental transparency, inhibit good environmental policy, and better environmental protection outcomes. Part II will assess the legal backgrounds of the United States, China, and Denmark regarding each country’s environmental policy. This survey will lay the groundwork for why the black letter law in each country cannot account for the significant differences they have in effectiveness of environmental policy. Part III will specifically examine air quality measures in all three countries. This will show that while the substantive law is

⁹ Stefanie Beyer, *Environmental Law and Policy in the People’s Republic of China*, 5 CHINESE J. INT’L L. 185, 193 (2006).

¹⁰ *Id.* at 191.

¹¹ U.S. CONST. amend. I.

¹² Lily Kuo, *China Withheld Data on Coronavirus From WHO, Recordings Reveal*, GUARDIAN (June 2, 2020) <https://www.theguardian.com/world/2020/jun/02/china-withheld-data-coronavirus-world-health-organization-recordings-reveal>.

¹³ *Tiananmen Square Protests*, HISTORY.COM (May 31, 2019), <https://www.history.com/topics/china/tiananmen-square>.

¹⁴ Helen Davidson & Verna Yu, *Hong Kong Crisis: At Least 360 Arrested as China Protests Grow*, GUARDIAN, (May 27, 2020)

<https://www.theguardian.com/world/2020/may/27/hong-kong-trump-china-security-crackdown-protests>.

¹⁵ Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile United States*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/usa>; Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile Denmark*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/dnk>.

¹⁶ *See Denmark*, STUDY IN DENMARK, <https://studyindenmark.dk/news/denmark-is-the-least-corrupt-country-in-the-world>.

similar in this specific policy area, performance remains extremely varied between China, the United States, and Denmark. Part IV will survey the government styles of the three countries and consider how the degree of centralization could impact environmental performance. Part V analyzes the transparency and openness in each country's government and assesses the impact that could have on environmental policy effectiveness. Part VI evaluates the enforcement mechanisms in each country and determines how well the laws comport with the policy outcomes. Part VII accounts for the level of journalistic freedom in China, the United States, and Denmark. This factors in because environmental policy would figure to suffer if criticism of a government's procedures for carrying out its laws was stifled. Part VIII will explore some potential solutions to the problems facing environmental policy going forward in light of the issues discussed. Part IX quickly concludes with a call to action to increase the focus on governmental honesty rather than specific policymaking.

II. THE ROLE OF GOVERNMENT CENTRALIZATION

One distinguishing factor between Denmark and the United States and China is the level of government centralization. It is important to denote this difference before discussing the effect government transparency has on environmental policy. Paths to enforcement become more streamlined with greater centralization. When different municipalities have the ability to make environmental law more tailored to the needs or desires of their people the overall aggressiveness of national environment goals figures to slow down.

A. United States Centralization Structure

The story of the governmental structure in the United States is well known. The Constitution formed in Philadelphia in 1787 took an approach of limiting "concentration of powers in the nation's central institutions."¹⁷ The Constitution left a significant amount of legal power to the individual states to determine their own legislation.¹⁸ Even the national government that was created with the Constitution had some features that limited centralization.¹⁹ These include the bicameral Congress, the separation of the court system, and the also separate executive branch of government.²⁰

However, the United States has shown cracks over time in their overwhelmingly federalist theme.²¹ The national government and the states always seem to be at odds in their efforts to gain or retain power, but the trend has been

¹⁷ Ronald L. Watts, *The American Constitution in Comparative Perspective: A Comparison of Federalism in the United States and Canada*, 74 J. AM. HIST. 769 (1987).

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.* at 773.

“increasing predominance of the national government in Washington.”²² In the opinion of some authors, the United States has begun to look less like a true federalist style government and more like a centralized government given the spheres of influence that Washington has been able to secure.²³ One author pointed out that “[i]n the United States, power has been flowing to Washington steadily since the Roosevelt era.”²⁴ This has predictably resulted in some legislation that is a blend of both national influence as well as state input.

One of the ways this central power has grown over this time period is the rise of federal administrative law in the United States. From 1900–2000, the United States experienced a “dramatic rise in the scope and intensity of administrative regulation.”²⁵ Some of this can absolutely be viewed as necessary for creating fair play in the economic system.²⁶ However, now “[t]here is virtually no area of law practice—whether it be securities and finance, child welfare, taxation, international trade, housing, employment, or almost any other practice field—that does not involve administrative regulation.”²⁷ This came from a desire of congress to allow agencies to develop the details of legislation since innovation was causing lawmaking to become more complicated.²⁸ This rise of agency law featured the creation of the Environmental Protection Agency (EPA) to conduct regulation on the environmental issues in the United States.²⁹ The United States’ trend toward greater centralization is shown in regard to how the administrative agencies have affected environmental policymaking. That structure is described in greater detail in section III.

B. China Centralization Structure

Chinese leadership has been open in that they do not employ a federal system of government.³⁰ However, the way their policy is supposed to play out often utilizes some federalist features.³¹ Government officials however have

²² Watts, *supra* note 17 at 773.

²³ *Id.* at 774.

²⁴ *Id.*

²⁵ Richard B. Stewart, *Administrative Law in the Twenty-First Century*, 78 N.Y.U. L. REV. 437 (2003).

²⁶ *Id.* at 438.

²⁷ *Id.*

²⁸ Richard J. McKinney, *Federal Administrative Law: A Brief Overview*, L.

LIBRARIANS’ SOC’Y OF WASHINGTON, DC, <https://www.llsdc.org/federal-administrative-law-a-brief-overview>.

²⁹ *See id.*

³⁰ Michael Bristow, *Chinese Leader Rules Out Democracy*, BBC (Mar. 10, 2011), <https://www.bbc.com/news/world-asia-pacific-12697997>.

³¹ *See* Zhao Lijian, et al., *How China’s New Air Law Aims to Curb Pollution*, CHINA DIALOGUE (Dec. 30, 2015) <https://chinadialogue.net/en/pollution/8512-how-china-s-new-air-law-aims-to-curb-pollution/#:~:text=China's%20new%20Air%20Pollution%20Prevention,air%20quality%20in%202015%20years>.

described the country as being relatively centralized by design with the Chinese Communist Party instructing the government in practically every way.³² Chinese officials are concerned about widespread disorder if the government was to incorporate any level of the separation of powers like the United States uses.³³ China does have different branches of government, but they are all fundamentally controlled by the Chinese Communist Party.³⁴

China does utilize a certain level of subdivision into different regions, provinces and townships.³⁵ However, these subdivisions are mostly rendered meaningless in terms of policymaking because the party operative in any given province actually has more power than the province's governor.³⁶ The party and government structures "sit side by side" in China, "with the party's representative always the more powerful."³⁷ The power flows down from the top level of government "to an intermediate level of counties and cities, and finally to the local-level townships."³⁸ This already shows a distinct difference from the United States in that power does not flow from the top down in the federalist system which reserves some power to the states instead.³⁹ While China appears to employ a system of government with subdivisions, the true entity that reigns supreme is the Chinese Communist Party.⁴⁰ It is the largest political party in the world with over 80 million members.⁴¹ In part due to its size, the Party has developed the power structure necessary to root out nearly any dissent within the government and make all decisions in keeping with the will of the Party over anything else.⁴² This is further shown by the fact that the Party "is unrepresentative of China as a whole."⁴³ The Party requires extensive examination in order to allow an individual to join the party.⁴⁴ Among the requirements is support from somebody already within the Party.⁴⁵ The Party even supposedly elects a central committee of about 200 members and 150 "alternate members" to direct policy but "almost all of these people are approved in advance."⁴⁶ To this end, the Party orchestrates nearly everything it wants to orchestrate in terms of Chinese politics. Any outward looking

³² Bristow, *supra* note 30.

³³ *Id.*

³⁴ *How China is Ruled: Introduction*, BBC (Oct. 8, 2012),

http://news.bbc.co.uk/2/shared/spl/hi/in_depth/china_politics/government/html/1.stm.

³⁵ *How China is ruled: Provinces and Townships*, BBC (Oct. 8, 2012),

<https://www.bbc.com/news/world-asia-pacific-13908276>.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *See* Watts, *supra* note 17 at 769.

⁴⁰ *How China is Ruled: Communist Party*, BBC (Oct. 8, 2012),

<https://www.bbc.com/news/world-asia-pacific-13904437>.

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *How China is Ruled: Communist Party*, BBC (Oct. 8, 2012),

<https://www.bbc.com/news/world-asia-pacific-13904437>.

⁴⁶ *Id.*

structure of a dissemination of powers is purely for optics or organization and does not mean much in terms of regional freedoms. Ultimately, the level of centralization in China can be regarded as highly centralized because the Chinese Communist Party has consolidated so much power.

C. Denmark Centralization Structure

The Danish government presents some features of separation of powers.⁴⁷ Their government is divided into thirds much like the United States' approach to separation of powers.⁴⁸ There is an executive, legislative and judicial branch with the only key difference being that the legislative branch is made up of one parliament rather than two houses of Congress.⁴⁹ Additionally, the party system in Denmark uses a parliamentary system where there is very infrequently a majority government.⁵⁰ This means that minority parties often control the government through coalition agreements.⁵¹ The diversity of voices within the Danish parliament helps prevent dissenting opinions from being rooted out unlike that which is seen in China. Therefore, the party system present in Denmark is much less constricting than the Chinese Communist Party's grip over the policy in China.

However, despite Denmark's decentralization of power, through both structure and party system, they operate as a unitary state.⁵² In fact, their number of municipalities was reduced in 2007 from 271 to 98 showing a trend toward less importance on local governments.⁵³ Their national government with less focus on specific regional measures allows Denmark to create policy goals that are more universal across their country. This is featured prominently in Part III which discusses Denmark's approach to environmental law and policy.

D. A Comparative Analysis of Government Structures

The United States and China both use their own forms of disseminated implementation plans for environmental policy.⁵⁴ Denmark differs by assuming

⁴⁷ See *The Division of Powers*, FOLKETINGET, <https://www.thedanishparliament.dk/en/democracy/the-separation-of-powers> (last visited Oct. 12, 2020).

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Division of Powers*, EUROPEAN COMMITTEE ON THE REGIONS, <https://portal.cor.europa.eu/divisionpowers/Pages/Denmark-Introduction.aspx> (last visited Oct. 10, 2020).

⁵³ *Id.*

⁵⁴ *Basic Information About Air Quality SIPs*, U. S. EN'T PROT. AGENCY, [https://www.epa.gov/sips/basic-information-air-quality-sips#:~:text=A%20State%20Implementation%20Plan%20\(SIP,Air%20Quality%20Standards%2C%20or%20NAAQS](https://www.epa.gov/sips/basic-information-air-quality-sips#:~:text=A%20State%20Implementation%20Plan%20(SIP,Air%20Quality%20Standards%2C%20or%20NAAQS) (last visited Oct. 10, 2020); Zhao Lijian, et al., *supra* note 31.

that the national policy is the plan and then working only to ensure that all regions follow the national plan.⁵⁵ However, China's dissemination differs in that all levels are guided by the head political party which ultimately results in more centralization like Denmark. This would give Denmark a distinct advantage with regard to imposing and enforcing strong environmental regulation that actually takes effect. However, because of China's de facto centralization this is no excuse for their poor performance on the environment. The United States and China must work harder based on their structure to ensure states are following their national directives. However, the United States and China are very large countries which have many different diverse populations, and some areas may require laws to work differently for them than other areas. Though both countries seem to be trending toward increased centralization despite their size. This is the classic tradeoff with a federalist society and a centralized society. Nevertheless, it is still important to point out that Denmark's more centralized government likely aids them in achieving stronger grades in environmental policy. Ultimately, given China's form of centralization, transparency as discussed in Part V is likely to be a stronger contributor.

III. BACKGROUND ON ENVIRONMENTAL POLICY

A. The United States' Environmental Policy Approach

Although there is some debate that the United States has a newfound attention to environmental policy with the National Environmental Policy Act of 1969 (NEPA).⁵⁶ NEPA set the stage for the proliferation of more detailed legislation to address global movements in that domain. NEPA itself focused on broad national goals rather than specific measures to try and achieve more effective environmental policy.⁵⁷ It provided the general guideline of bringing "proper consideration" to environmental issues in any move by the federal government.⁵⁸ Though it did not set specifics and instead created the Environmental Protection Agency (EPA) to administrate more specific guidelines.⁵⁹

In pursuit of the broad goals of NEPA, Congress has enacted laws that determine environmental policy while the executive branch's EPA carries out all

⁵⁵ *OECD Environmental Performance Reviews: Denmark 2019*, ORG. FOR ECON. CO-OPERATION AND DEV., <https://www.oecd-ilibrary.org/docserver/1eeec492-en.pdf?expires=1644532838&id=id&accname=ocid57006404&checksum=57D3B628C1B0F4C5740832FD621B19E9> (last visited Oct. 10, 2020).

⁵⁶ NATIONAL ENVIRONMENTAL POLICY ACT: BACKGROUND, COSTS AND BENEFITS OF NEPA ANALYSES 4 (Sabrina Reynolds ed., 2014).

⁵⁷ *Id.*

⁵⁸ *Laws and Regulations*, U. S. ENV'T PROT. AGENCY, <https://www.epa.gov/laws-regulations/summary-national-environmental-policy-act> (last visited Oct. 20, 2020).

⁵⁹ 42 U.S.C. § 4321.

environmental policies that come from the federal government.⁶⁰ The EPA operates very similarly to how most executive agencies operate. They have been delegated congressional power to formulate environmental policy.⁶¹

Over time, the United States' environmental policy has grown to become rather comprehensive. The policies in place around the country are heavily influenced by the decisions of individual states in their State Implementation Plans (SIPs).⁶² This makes the policies in place across the country significantly varied based on jurisdiction. However, the federal government still sets non-negotiable standards.⁶³ The EPA sets a bare minimum for environmental protections, and "states can go further if they wish."⁶⁴

B. China's Environmental Policy Approach

In China's environmental policy body, their constitution reigns supreme.⁶⁵ The current Chinese Constitution was implemented in 1982,⁶⁶ and it speaks to some goals for environmental policy—but only in general terms.⁶⁷ The real teeth, if any, come from more specific legislation that has developed recently.

It is no secret that over time, China has garnered a negative reputation for its failures to maintain a clean environment, with some writers even describing their history on the environment as a "cause for concern" just a decade ago.⁶⁸ This growing awareness of their shortcomings has driven the country toward at least paying lip service to environmental issues, which they have accomplished by passing extensive legislation over time.⁶⁹

⁶⁰ Robert W. Hahn, *United States Environmental Policy: Past, Present and Future*, 34 NAT. RES. J. 305, 308 (1994).

⁶¹ Robinson Meyer, *How the U.S. Protects the Environment, From Nixon to Trump*, THE ATLANTIC, (March 29, 2017), <https://www.theatlantic.com/science/archive/2017/03/how-the-epa-and-us-environmental-law-works-a-civics-guide-pruitt-trump/521001/>.

⁶² *Basic Information about Air Quality SIPs*, U. S. ENV'T PROT. AGENCY, [https://www.epa.gov/sips/basic-information-air-quality-sips#:~:text=A%20State%20Implementation%20Plan%20\(SIP,Air%20Quality%20Standards%2C%20or%20NAAQS](https://www.epa.gov/sips/basic-information-air-quality-sips#:~:text=A%20State%20Implementation%20Plan%20(SIP,Air%20Quality%20Standards%2C%20or%20NAAQS) (last visited Oct. 20, 2020).

⁶³ Meyer, *supra* note 61.

⁶⁴ *Id.*

⁶⁵ ROUTLEDGE HANDBOOK OF ENVIRONMENTAL POLICY IN CHINA 22–23 (Eva Sternfeld ed., 2017).

⁶⁶ *Id.* at 23.

⁶⁷ *Id.*

⁶⁸ Ma Tianjie, *China and the Environment: A Decade in Review*, CHINA DIALOGUE, (Dec. 30, 2019) <https://chinadialogue.net/en/climate/11743-china-and-the-environment-a-decade-in-review/>.

⁶⁹ ROUTLEDGE HANDBOOK OF ENVIRONMENTAL POLICY IN CHINA 20 (Eva Sternfeld ed., 2017).

China enacted their Renewable Energy Law in 2006 and amended it in 2009 in order to support their renewable energy sector.⁷⁰ The country has also been bolstering their legal approach to the environment by amending their Energy Conservation Law within the past 20 years.⁷¹ In 2013, China amended their Coal Law.⁷² Furthermore, China amended its Electric Power Law in 2015 and enacted a Clean Production Promotion Law in 2003.⁷³ In conjunction with many recent national policy moves, China has enacted “over 50 administrative regulations, more than 660 local and sectoral regulations as well as government rules, and over 800 national standards related to environmental and resource protection.”⁷⁴ Many of these amendments were enacted because of overly general language in the original law. For example, the Renewable Energy Law had to be amended to make it more clearly enforceable through more particular, measurable standards.⁷⁵

China’s body of environmental law and policy is a relatively new and growing enterprise. However, it has become expansive and comprehensive in that it purports to affect many different areas of environmental policy. In many ways it seems responsive to the relatively new global criticism for both their domestic environmental impact and their emissions. The legal background of their policies has grown very extensive through their specific regulations and local rules. The cause for hope lies within this growing body of policy and the relatively new level of attention with which China’s politics seem to approach the issue.

C. Denmark’s Environmental Policy Approach

⁷⁰ *Id.*; Laney Zhang, *China: Renewable Energy Law Amended*, LIBR. OF CONGRESS (Dec. 31, 2009) <https://www.loc.gov/item/global-legal-monitor/2009-12-31/china-renewable-energy-law-amended/> (The amended law instituted a “protective full-amount acquisition system” seeks to set regulations for what portion of energy in China should come from renewable sources. The law seeks to ensure that all renewable energy produced by companies with “administrative permits” or have otherwise “fil[ed] with the government” is purchased by electric grid companies, so that no renewable energy goes unused.)

⁷¹ ROUTLEDGE HANDBOOK OF ENVIRONMENTAL POLICY IN CHINA 20 (Eva Sternfeld ed., 2017); Li Li et al., *Energy Conservation and Emission Reduction Policies for the Electric Power Industry in China*, 39 ENERGY POL’Y 3669, 3671 (2011) (adding teeth and oversight to various entities in China in an effort to establish newfound adherence to the laws rather than them simply staying more symbolic than useful).

⁷² ROUTLEDGE HANDBOOK OF ENVIRONMENTAL POLICY IN CHINA 20 (Eva Sternfeld ed. 2017); Xinhua Economic News, *Top Stories of the Day: China Power and Coal-Feb. 8*, GALE ONEFILE: BUSINESS, (Feb. 7, 2010) https://link.gale.com/apps/doc/A218422664/GPS?u=uarizona_main&sid=GPS&xid=d7991c11 (seeking to add administrative oversight to corporations producing coal so that the laws would have a greater degree of enforceability.).

⁷³ ROUTLEDGE HANDBOOK OF ENVIRONMENTAL POLICY IN CHINA, 20 (Eva Sternfeld ed., 2017).

⁷⁴ *Id.* at 21.

⁷⁵ Zhang, *supra* note 70.

Denmark has been “considered to be a front-runner in environmental policy.”⁷⁶ This is especially apparent by their number one rank in the EPI—with an EPI score of 82.5.⁷⁷ Presumptively, like China and the United States, Danish environmental policy is exhaustive and strong in regard to laws on the books. In recent years, the Danish Climate Plan has only become more aggressive with their mission to reduce emissions both domestically and throughout the world.⁷⁸ Their plan seeks to reduce greenhouse gases by 70% by 2030 and reach net zero emissions by 2050.⁷⁹ One beneficial feature of Denmark’s governance toward environmental policy is that all of their political parties are largely in agreement.⁸⁰ Denmark carries out its environmental policy through acts of the legislature that are then mandated among municipalities.⁸¹ Like the United States and China, these acts include laws that expand upon many different areas of environmental law including the Act of Protection of the Environment, the Act on Soil Protection, and the Acts on Protection of Nature.⁸² Denmark even features a legislative move called the Act on Compensation for Environmental Damages, which shows their willingness to add teeth through legal liability to their environmental directives.⁸³

Denmark differs from the United States and China when it comes to their localities’ responsibility to take environmental policy into their own hands. Denmark is a unitary state rather than a federalist state that is “organi[z]ed on a decentrali[z]ed basis.”⁸⁴ Regional politics are overseen by the “State

⁷⁶ *Denmark*, SUSTAINABLE GOVERNANCE INDICATORS, https://www.sgi-network.org/2018/Denmark/Environmental_Policies#:~:text=There%20is%20broad%20agreement%20on%20targeting%20a%2070%25%20reduction%20in,set%20to%20reach%20this%20goal (last visited Mar. 8, 2022).

⁷⁷ Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile United States*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/usa> (last visited Mar. 8, 2022); Z.A. Wendling et al. *2020 Environmental Performance Index Country Profile Denmark* YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/dnk> (last visited Mar. 8, 2022).

⁷⁸ *Denmark’s Integrated National Energy and Climate Plan*, DANISH MINISTRY OF CLIMATE, ENERGY AND UTILITIES, 5, (Dec. 2019), <https://kefm.dk/media/7095/denmarks-national-energy-and-climate-plan.pdf>.

⁷⁹ *Id.*

⁸⁰ *OECD Environmental Performance Reviews: Denmark 2019*, ORG. FOR ECON. CO-OPERATION AND DEV., <https://www.oecd-ilibrary.org/sites/3a03e006-en/index.html?itemId=/content/component/3a03e006-en#:~:text=The%20Environmental%20Protection%20Act%2C%20last,and%20below%20ground%20and%20noise> (last visited Mar. 8, 2022).

⁸¹ *Id.*

⁸² Moalen Weitmeyer and Bendsten Advokatpartnerselskab, *Denmark: Environmental Law*, MONDAQ, (Apr. 17, 2012), <https://www.mondaq.com/eu-regulatory-law/169684/environmental-law>.

⁸³ *Id.*

⁸⁴ *Division of Powers: Denmark*, EUROPEAN COMMITTEE OF THE REGIONS, <https://portal.cor.europa.eu/divisionpowers/Pages/Denmark-Introduction.aspx#:~:text=The%20country%20is%20a%20unitary,the%20Counties%20and%20the%20Municipalities> (last visited Mar. 8, 2022).

Administration monitored by the Ministry of Social Affairs and the Interior.”⁸⁵ Denmark’s government stems from a national plan with directives that municipalities must follow.⁸⁶ The Danish Constitution provides local governments the ability to “decide their own affairs under state supervision.”⁸⁷ Denmark has their own version of the United States’ EPA that has the same name and is controlled by the Ministry of Environment of Denmark.⁸⁸ This agency manages all industries and operations that relate to or have an impact on environmental protection.⁸⁹ This includes conducting inspections to ensure compliance with regulations and distributing permits to industries.⁹⁰ The Danish EPA operates differently than the United States’ EPA in that the central environmental agency, instead of simply providing directives and allowing localities to create their own plans, must instead provide reports to show the central authority that they are complying with national directives.⁹¹ In fact, in 2007 Denmark reduced the amount of municipalities from 271 to 98 and replaced fourteen counties with five regions.⁹² Denmark has shown a tendency to lean more toward adherence to national directives and reducing the amount of variance across its nation rather than leaving governance choices to smaller segments of the country.

IV. AIR QUALITY

The United States, China, and Denmark have largely comparable substantive policies on the issue of the environment. This section briefly assesses how their policies tend to mirror each other by comparing a fundamental area of environmental policy: air quality. Air quality is an issue that is widely known to impact China more significantly than the United States, given that China has placed so much emphasis on manufacturing and energy consumption, as well as having a

⁸⁵ *Id.*

⁸⁶ *OECD Environmental Performance Reviews: Denmark 2019*, ORG. FOR ECON. CO-OPERATION AND DEV., [https://www.oecd-ilibrary.org/sites/3a03e006-en/index.html?itemId=/content/component/3a03e006-en#:~:text=The%20Environmental%20Protection%20Act%2C%20last,and%20below%20groud\)%20and%20noise](https://www.oecd-ilibrary.org/sites/3a03e006-en/index.html?itemId=/content/component/3a03e006-en#:~:text=The%20Environmental%20Protection%20Act%2C%20last,and%20below%20groud)%20and%20noise) (last visited Mar. 8, 2022).

⁸⁷ *Id.*

⁸⁸ *Danish regulations*, MINISTRY OF ENV’T OF DENMARK, <https://eng.mst.dk/trade/industry/environmental-inspection/danish-regulations/> (last visited Mar. 8, 2022).

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *OECD Environmental Performance Reviews: Denmark 2019*, ORG. FOR ECON. CO-OPERATION AND DEV., [https://www.oecd-ilibrary.org/sites/3a03e006-en/index.html?itemId=/content/component/3a03e006-en#:~:text=The%20Environmental%20Protection%20Act%2C%20last,and%20below%20groud\)%20and%20noise](https://www.oecd-ilibrary.org/sites/3a03e006-en/index.html?itemId=/content/component/3a03e006-en#:~:text=The%20Environmental%20Protection%20Act%2C%20last,and%20below%20groud)%20and%20noise) (last visited Mar. 8, 2022).

⁹² *Id.*

high rate of car use.⁹³ But are the substantive policies of each country different enough to explain such a discrepancy?

A. United States Air Quality

The chief piece of legislation addressing air quality in the United States is the Clean Air Act.⁹⁴ The main goal of the Clean Air Act is to achieve alignment in the country with the National Ambient Air Quality Standards (NAAQS).⁹⁵ The NAAQS are reviewed every five years and go through a complicated process in order to determine what the new standards should be for the United States.⁹⁶ The goal of the NAAQS is to protect the general health and welfare of the citizens of the United States by maintaining quality environmental conditions.⁹⁷ Unfortunately, the Clean Air Act has been amended twice in order to set new dates for achieving the NAAQS goals because “many areas of the country had failed to meet the deadlines.”⁹⁸

The Clean Air Act also places some responsibility on state governments by requiring SIPs.⁹⁹ SIPs are “a collection of regulations and documents used by a state, territory, or local air district to attain and maintain clean air.”¹⁰⁰ The Clean Air Act may also preempt state plans to protect the environment, which happened to Arizona.¹⁰¹ In Arizona, litigation ensued because state officials failed to adhere to the SIP.¹⁰² In the process of that litigation, it became clear that SIPs are to be treated as an extension of federal law that the states could not simply ignore.¹⁰³ SIPs are able to impact industrial endeavors within each state in order to ensure that states are contributing to the national goals of the United States.¹⁰⁴

⁹³ Shuxiao Want & Jiming Hao, *Air Quality Management in China: Issues, Challenges, and Options*, 24 J. ENVTL. SCI. 2, (2012).

⁹⁴ *Summary of Clean Air Act*, U.S. ENV'T PROTECTION AGENCY, <https://www.epa.gov/laws-regulations/summary-clean-air-act>; 42 U.S.C. § 7401.

⁹⁵ *Id.*

⁹⁶ Joseph Padgett & Harvey Richmond, *The Process of Establishing and Revising National Ambient Air Quality Standards*, 33 J. AIR POLLUTION CONTROL ASS'N 13, (1983).

⁹⁷ *Id.*

⁹⁸ *Summary of Clean Air Act*, U.S. ENV'T PROTECTION AGENCY, <https://www.epa.gov/laws-regulations/summary-clean-air-act> (last visited Mar. 8, 2022).

⁹⁹ *Id.*

¹⁰⁰ *How EPA Works With State on SIPs*, U.S. ENV'T PROTECTION AGENCY, <https://www.epa.gov/criteria-air-pollutants/how-epa-works-states-sips#:~:text=A%20State%20Implementation%20Plan%20or,attain%20and%20maintain%20clean%20air> (last visited Mar. 8, 2022).

¹⁰¹ *Clean Air Act Preempts Arizona's Repeal of State Laws Allocating Lottery Funds to Transportation Improvements to Ensure Compliance with State Implementation Plan*, 63 PLANNING & ENVTL. L. 20, (2011).

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Summary of Clean Air Act*, U.S. ENV'T PROTECTION AGENCY, <https://www.epa.gov/laws-regulations/summary-clean-air-act>.

The Clean Air Act also requires adherence to the requirement of “maximum achievable control technology” (MACT).¹⁰⁵ The goal of the MACT standards is to “establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants.”¹⁰⁶ MACT standards are reviewed every eight years by the EPA to assess whether any potential new risk exists.¹⁰⁷

As with all environmental policies passed by Congress, the EPA manages the Clean Air Act.¹⁰⁸ In this context, the EPA works to ensure that the SIPs adhere to the NAAQS.¹⁰⁹ In short, the United States employs measurements that serve as a form of evaluation of air quality that can vary over time. These measurements are used by the federal government to impose regulations and even work with state governments to improve policy that affects air quality. In this way, the states create SIPs and the EPA approves them. Generally, SIPs are carried out by state governments, however, the EPA has been able to take action against violators in the past.¹¹⁰ As previously mentioned, Arizona was forced to begin following its SIP when state officials had been lagging on doing so.¹¹¹

B. China Air Quality

China’s main legislation for air quality is the Air Pollution Prevention and Control Law, which was most recently amended in 2015.¹¹² Their environmental policy is orchestrated by the Ministry of Ecology and Environment.¹¹³ The Ministry provides a multitude of directives.¹¹⁴ Similarly to the SIPs for the United States, China’s recently amended law requires cities to submit plans to show that they are making progress on the goals laid out by the law itself.¹¹⁵ This amended law was the first time that any of China’s laws even recognized the existence of “greenhouse gases.”¹¹⁶

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ JONATHAN DAVIDSON & JOSEPH M. NORBECK, AN INTERACTIVE HISTORY OF THE CLEAN AIR ACT 14 (2012).

¹⁰⁹ *Id.* at 15.

¹¹⁰ *Basic Information about Air Quality SIPs*, U.S. ENV’T PROTECTION AGENCY, <https://www.epa.gov/sips/basic-information-air-quality-sips#epa-role> (last visited Mar. 8, 2022).

¹¹¹ *Clean Air Act Preempts Arizona’s Repeal of State Laws Allocating Lottery Funds to Transportation Improvements to Ensure Compliance with State Implementation Plan*, *supra* note 101.

¹¹² Lijian, *supra* note 31.

¹¹³ *Mission*, MINISTRY OF ECOLOGY AND ENV’T THE PEOPLE’S REPUBLIC OF CHINA, http://english.mee.gov.cn/About_MEE/Mission/ (last visited Mar. 8, 2022).

¹¹⁴ *Mandates*, MINISTRY OF ECOLOGY AND ENV’T THE PEOPLE’S REPUBLIC OF CHINA, http://english.mee.gov.cn/About_MEE/Mandates/ (last visited Mar. 8, 2022).

¹¹⁵ Lijian, et al. *supra* note 31.

¹¹⁶ *Id.*

With the amended legislation China also created the “New Air Law,” which establishes “zones that prohibit burning fuels that emit a large amount of pollutants.”¹¹⁷ The law also sets a strict “coal cap” on various regions.¹¹⁸ A coal cap forces localities to budget their coal consumption across the multiple entities using coal power.¹¹⁹ For example, if one city project is going to start using a greater amount of coal, other projects using coal must scale back coal consumption to make space for the new project.¹²⁰ To address machinery emissions, the law established “low emission zones” for “off-road diesel equipment.”¹²¹ The law also calls on the Chinese public to participate by “protecting the confidentiality” of citizens that report pollution issues.¹²² This amended law was considered to inspire hope toward a more “enforceable regulatory system” for better air quality in China.¹²³ However, many of these policies have been criticized for having no teeth.¹²⁴ One example is that the penalty for completing a new building project without a environmental impact assessment is to provide a make-up environmental impact assessment.¹²⁵ That illustrates how even China’s structure of environmental law is unlikely to be as impactful as other countries at least based on how seriously the various countries take enforcement.

The United States and China both employ federal measures to guide nationwide environmental policy. They also both propagate and delegate their respective policies by forging a relationship between the federal decision makers and localities. This is especially apparent through the United States’ SIPs and China’s required municipal reports. However, this is where Denmark differs to some extent and may give them an advantage it terms of policy.

C. Denmark Air Quality

Air quality is an area Denmark has made remarkable strides in the past two decades.¹²⁶ They have also been notable for their improvement in management of greenhouse gases despite their GDP increasing over the past few years.¹²⁷ This is impressive given the blame that pervasive economic activity often gets for inhibiting the ability of countries to make progress on environmental goals.

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ Lijian, et al. *supra* note 31.

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ See Alex Wang, *Environmental Protection in China: The Role of Law*, CHINA DIALOGUE (Feb. 5, 2007), <https://chinadialogue.net/en/pollution/745-environmental-protection-in-china-the-role-of-law/>.

¹²⁵ *Id.*

¹²⁶ *Denmark*, ORG. FOR ECON. CO-OPERATION AND DEV., <https://www.oecd.org/env/country-reviews/2447500.pdf> (last visited Mar. 8, 2022).

¹²⁷ *Id.*

Like the United States, Denmark has their own EPA.¹²⁸ Their EPA works with the Danish Geodata Agency and the Danish Nature Agency under the umbrella of the Ministry of the Environment for Denmark.¹²⁹ The different segments of the Ministry of the Environment set out the environmental objectives as well as the means by which those objectives are met.¹³⁰ Denmark, also like the United States, uses National Ambient Air Quality Standards.¹³¹ To some extent the use of these measurements are implemented to comport with the European Union Air Quality standards.¹³² Also similarly to the previous two countries, Denmark's air policy has the overall goal of preventing air quality standards from eroding to the extent that it impacts human health and the environment.¹³³ Denmark also employs a system similar to the aforementioned coal caps in that the municipalities are tasked with distributing permits that allow various industries to make emissions when allowed to do so.¹³⁴ When industries do not behave in keeping with their environmental regulations the Danish government uses injunctions to force them to comply.¹³⁵ Overall, the Danish approach to enacting environmental policy looks very similar to the United States and China. However, they are more aggressive with their goals and use stronger, and more consequential enforcement.

V. COMPARATIVE ANALYSIS ON TRANSPARENCY AND OPENNESS

An area where the United States and China obviously differ is with their policies on transparency and openness. The United States preserves the right to free speech and the freedom of the press for its citizens.¹³⁶ The ability to criticize the country, as well as public officials, creates a greater degree of accountability. Legislation like the Freedom of Information Act shows a tendency in the United States to be as open and honest with the citizenry as possible.¹³⁷ In addition, the United States has the Emergency Planning and Right to Know Act.¹³⁸ This legislation employs innovation in communication technology to allow individuals

¹²⁸ Hakun Djurhuus, et al., *Environmental Law and Practice in Denmark: Overview*, PRACTICAL LAW, (Oct. 1, 2013), https://1.next.westlaw.com/0-522-0619?_lrTS=20210209034118550&transitionType=Default&contextData=%28sc.Default%29.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Denmark*, U.N. ENV'T PROGRAMME, <https://wedocs.unep.org/bitstream/handle/20.500.11822/17180/Denmark.pdf?sequence=1&%3BisAllowed=> (last visited Mar. 8, 2022).

¹³² *Id.*

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ U.S. CONST. amend. I.

¹³⁷ 5 U.S.C. § 552. (2016).

¹³⁸ Lei Zhang, Arthur PJ Mol, & Guizhen He, *Transparency and Information Disclosure in China's Environmental Governance*, 18 CURRENT OP. IN ENV'T SUSTAINABILITY 17 (2016).

to have a greater idea for the state of policy in their country and, in turn, have an impact on that policy.¹³⁹ This notion behind the Act has begun to affect the way other countries keep their citizens in the loop, including China.¹⁴⁰ However, that does not mean China is good at maintaining transparency.¹⁴¹ In fact, they have long been known as an “information-poor environment.”¹⁴²

China has been engaged in heavy censorship of internet and other media for a long time.¹⁴³ Watchdog group “Reporters without Borders” ranked China 173 out of 179 countries in its 2013 worldwide index of press freedom.¹⁴⁴ China actually has laws that enumerate their authority over media and speech within their country.¹⁴⁵ Their level of censorship is so significant it has been called “the Great Firewall of China.”¹⁴⁶

On the other hand, Denmark presents an example of the alternative to political secrecy. They have had significant experience in keeping citizens in the loop on policy and execution of policy through digital communication.¹⁴⁷ Denmark is also the leader in environmental policy according to 2020’s EPI with a rating of 82.5.¹⁴⁸ From this it stands to reason that transparency may have a much deeper effect on the policy of a nation than one may assume. The drastic differences in effectiveness between the United States, Denmark, and China, are easily explained by the difference in the countries’ approach to governance and the relationship they have with their citizenry.

The following three sections will explore three distinct ways in which transparency (or a lack thereof) destroys the effectiveness of environmental policy in any given country. The first way is that transparency severely limits the ability of a country to enforce laws that may be on the books. Secondly, a lack of media transparency in conjunction with governmental transparency quashes the ability of citizenry and journalists to offer criticism to a government and thereby apply pressure to change policy, or more accurately, effectively enforce comprehensive policy.

139 *Id.*

140 *Id.*

141 *Id.*

142 *Id.*

143 Xu, Beina, *Media Censorship in China*, COUNCIL ON FOREIGN RELATIONS (Sept. 25, 2014), <https://www.files.ethz.ch/isn/177388/media%20censorship%20in%20china.pdf>.

144 *Id.*

145 Michael Bristow, *China Defends Internet Censorship*, BBC NEWS (June 8, 2010 9:21 GMT), <http://news.bbc.co.uk/2/hi/8727647.stm>

146 *Id.*

147 Lars Torpe & Jeppe Nielsen, *Digital Communication Between Local Authorities and Citizens in Denmark*, 30 *LOC. GOV’T STUD.* 230 (2004).

148 Z.A. Wendling et al., *2020 Environmental Performance Index Country Profile Denmark*, YALE CTR. FOR ENV’T L. & POL’Y, <https://epi.yale.edu/epi-results/2020/country/dnk> (last visited Mar. 8, 2022).

VI. A COMPARISON OF THE EFFECTIVE ENFORCEMENT OF ENVIRONMENTAL LAW BETWEEN THE UNITED STATES AND CHINA

A lack of transparency creates an enforcement problem that has significant effects on whether policies on the environment are effective. Lack of enforcement can render the laws of each country toothless and thus destroy the relevance of the substantive law described previously. Laws on the books are not useful whatsoever if no officials in the country are not serious about carrying them out.

A. How the Degree of Governmental Transparency in China Effects the Enforcement of Policy

China has been known to struggle with enforcement of many of its laws.¹⁴⁹ In fact, statistics speaking to the impact of China's laws are difficult to locate, much less confirm that enforcement is an issue.¹⁵⁰ However, significant evidence clearly suggests that China does not enforce its laws very well.¹⁵¹ Lack of enforcement of environmental policy was, at one point, so endemic that protests against the Chinese government ensued.¹⁵² This development was somewhat surprising considering China's history of mistreating protestors, as evidenced by the tragedy of the Tiananmen Square protests.¹⁵³ Despite this, the protests have actually worked to some extent.¹⁵⁴

China's Renewable Energy Law serves as a strong example of their enforcement issues. The law's language is very unspecific and tends to highlight only policy goals rather than specific measures to achieve them.¹⁵⁵ Without specific measures of policy in mind, laws struggle to see any usefulness at all. Comparing this with the EPA it may seem like a similar approach at first glance. However, the SIPs are where the laws regarding economic policy get more specific.¹⁵⁶ The EPA's directives are often contained in the central government laws of China like the Renewable Energy Law. The breakdown occurs with the localities whereas no such breakdown exists between the EPA and the states through SIPs.

However, underenforcement may also be due to limited capacity to enforce the laws.¹⁵⁷ China has been trying to address this issue with the aforementioned

¹⁴⁹ Erin Ryan, *The Elaborate Paper Tiger: Environmental Enforcement and the Rule of Law in China*, 24 DUKE ENV'T L. & POL'Y F. 183 (2014).

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² Jennifer Duggan, *Kunming Pollution Protest is Tip of Rising Chinese Environmental Activism*, GUARDIAN (May 16, 2013, 11:59 AM), <https://www.theguardian.com/environment/chinas-choice/2013/may/16/kunming-pollution-protest-chinese-environmental-activism>.

¹⁵³ *Tiananmen Square Protests*, *supra* note 13.

¹⁵⁴ Ryan, *supra* note 149 at 195.

¹⁵⁵ Zhang, *supra* note 70.

¹⁵⁶ *Basic Information about Air Quality SIPs*, *supra* note 110.

¹⁵⁷ Ryan, *supra* note 149 at 196.

crowd-sourcing of enforcement.¹⁵⁸ However, it is not prudent to rely heavily on good Samaritans to enforce the country's laws.¹⁵⁹

While China has the substantive framework in place to allow localities to implement laws from the central government, this struggles to happen effectively.¹⁶⁰ Industry leaders in China sometimes do not even put the effort into pursuing enforcement of laws because they simply do not believe the laws would work.¹⁶¹ This enforcement problem can be traced back directly to transparency.¹⁶² Public participation is important to carry out policy, especially considering the way China's apparatus for enforcing their environmental policy is designed.¹⁶³ China actually will go so far as to not only fail to provide pertinent information concerning environmental policy, but actually distort information in order to allow their officials in localities to skirt laws.¹⁶⁴

B. How Transparency in the United States Effects Enforcement of Environmental Policy

Enforcement in the United States is decidedly stronger than in China. One clear showing of the United States' approach to enforcement was on display in the case *United States v. Dexter Corp.*¹⁶⁵ This case eliminated privilege for a corporation's "self-critical" environmental audits.¹⁶⁶ The defendants argued that, because it is in the public interest to be self-critical, self-regulation should be encouraged and key data should be maintained under a privilege against government oversight.¹⁶⁷ The Court determined that the laws specify the scope of the public interest rather than economics actors and denied the privilege.¹⁶⁸ The opinion in *Dexter* shows that the United States responds proactively to industries that try to hide their activity or duck their legal obligations to protect the environment. As opposed to China, the United States pursues policy goals to the extent that the federal government will demand the necessary information to evaluate a corporation on its environmental performance.

¹⁵⁸ MINISTRY OF COMMERCE PEOPLE'S REPUBLIC OF CHINA, <http://english.mofcom.gov.cn/aarticle/lawsdata/chineselaw/200211/20021100050463.html> (last visited Mar. 8, 2022).

¹⁵⁹ See generally Qi & Zhang, *Local Environmental Enforcement Constrained by Central-Local Relations in China*, 24 ENV'T POL. GOV. 204, 216 (2014).

¹⁶⁰ Ryan, *supra* note 149 at 203.

¹⁶¹ *Id.*

¹⁶² See generally Qi & Zhang, *supra* note 159.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ 132 F.R.D. 8 (Conn. 1990).

¹⁶⁶ Terrell E. Hunt & Timothy A. Wilkins, *Environmental Audits and Enforcement Policy*, 16 HARV. ENV'T. L. REV. 365, 389 (1992).

¹⁶⁷ *Id.* at 411.

¹⁶⁸ *Id.* at 376.

Local governments also contribute greatly to enforcement in the United States.¹⁶⁹ However, the United States has avoided affording significant deference to local governments.¹⁷⁰ If each locality possessed substantial autonomy, a “race to the bottom” would ensue, causing policy to reflect the bare minimum to protect the environment and invite more industry for the economic interest of the specific locality.¹⁷¹ Instead, the EPA tends to allow localities to enforce the law with goals and measurements set by the EPA itself.¹⁷² As was stated previously, the federal government preserves some leverage over the states. This happened with Arizona in the previously mentioned litigation.¹⁷³ In that case, the Court established that SIPs (being an arm of federal law) preempted over the wishes or desires of the officials of the state to ignore the rules of the SIP.¹⁷⁴

To conclude, the United States has certainly had a better record on enforcement than China. However, China’s newer endeavors to incorporate its own citizens in an effort to deter violations of environmental policy could begin to mitigate this disparity. However, such mitigation is unlikely because the efforts to do so started long ago and no significant improvement has been clear. Considering their citizens protested such lack of enforcement, one would think there is certainly enough passion in their citizenry to move the needle on environmental policy. Other factors preventing the wishes of the citizenry must be at play for China to continue to not address their environmental crisis.

C. How Transparency in Denmark Effects Enforcement of Environmental Policy

Denmark boasts a high degree of political transparency to their citizens. One study even deemed Denmark to be the least corrupt country in the world.¹⁷⁵ In 2019, U.S. News and World Reports ranked Denmark in third place in the world for “Most Honest Government.”¹⁷⁶ Further, Transparency.org ranked Denmark in first place on their transparency index with a score of 88/100.¹⁷⁷ To that end, significant transparency in government coupled with strong repercussions for

¹⁶⁹ David Switzer, *Citizen Partisanship, Local Government, and Environmental Policy Implementation*, URB. AFFAIRS REV. 675 (2017).

¹⁷⁰ Huiyu Zhao & Robert Percival, *Comparative Environmental Federalism: Subsidiarity and Central Regulation in the United States and China*, 6 TRANSNAT’L ENVTL. L. 531 (2017).

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Clean Air Act Preempts Arizona’s Repeal of State Laws Allocating Lottery Funds to Transportation Improvements to Ensure Compliance with State Implementation Plan*, *supra* note 101.

¹⁷⁴ *Id.*

¹⁷⁵ *Denmark*, *supra* note 16.

¹⁷⁶ *Most Transparent Countries*, US NEWS AND WORLD REPORT, <https://www.usnews.com/news/best-countries/best-transparency> (last visited Mar. 8, 2022).

¹⁷⁷ Transparency International, <https://www.transparency.org/en/countries/denmark> (last visited Mar. 8, 2022).

localities that diverge from national directives makes Denmark a fertile environment for well-enforced policy. Denmark prides themselves on great access to information laws.¹⁷⁸ They have had their “Freedom of Information Act” since 1970.¹⁷⁹ Additionally, Denmark has ratified the Aarhus Convention which includes access to justice in environmental issues.¹⁸⁰ Predictably, there is little literature on how political secrecy damages Denmark’s environmental policy because their openness is so strong and their environmental policy is among the best in the world. They are a shining example of how more openness leads to a greater effectiveness of policy.

VII. MEDIA TRANSPARENCY AND JOURNALISTIC FREEDOM UNDER THE GOVERNMENTS OF THE UNITED STATES, CHINA AND DENMARK

In addition to breakdowns in the chain of enforcement, countries lacking transparency can block off the ability of journalists and citizens to openly criticize the actions of their government. This further hinders the execution of effective policy. It comes as no surprise that a free press is very important to the function of a society. Some have even argued that the United States “owes its existence in part to a free press.”¹⁸¹ The first amendment is undoubtedly a central feature of the United States Constitution. According to the Reporters without Borders World Press Freedom Index, the United States ranks 44th in the world in degree of press freedom.¹⁸² That ranking puts the United States in the upper middle region of the list.¹⁸³ China ranks 177th on the Press Freedom Index, which is fourth from the bottom.¹⁸⁴ While the United States is apparently not among the top tier in terms of affording free journalism to its people, it is still far better than the abysmal ranking China receives. As for our previous comparison, Denmark (which has a remarkably high score on the EPI), ranks number four in the world in freedom of the press.¹⁸⁵ There appears to at least be some sort of correlation between the degree to which a government opens itself up to journalistic coverage, and their ability to address environmental concerns through policy.

The next three sub-sections will provide a detailed overview of how the United States and China approach freedom of the press, which can be seen as

¹⁷⁸ DACIAN C DRAGOS, POLONCA KOVAČ, & ALBERT T MARSEILLE, *THE LAWS OF TRANSPARENCY IN ACTION*, 564 (2018).

¹⁷⁹ *Id.* at 567.

¹⁸⁰ *Id.*

¹⁸¹ D’Arcy, Patrick, *Why Freedom of the Press is More Important Now Than Ever*, TED, (Aug. 11, 2017), <https://ideas.ted.com/why-freedom-of-the-press-is-more-important-now-than-ever/>.

¹⁸² *2020 World Press Freedom Index*, REPORTERS WITHOUT BORDERS, <https://rsf.org/en/ranking>, (last visited Nov. 14, 2020).

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

another arm of transparency. These sections will also touch on how the press constraints may be inhibiting enactment of sound policy.

A. Freedom of the Press in the United States

The United States' main body of law that ensures a freedom of press is the First Amendment of the Constitution. The First Amendment protects multiple freedoms but included in those freedoms are the Free Speech Clause and the Free Press Clause.¹⁸⁶ The First Amendment specifically points out the press as a target of its protection when it says, "Congress shall make no law . . . prohibiting . . . freedom of speech, or of the press . . ."¹⁸⁷

Various court cases have enhanced the understanding of freedom of the press in the United States. For example, *Bartnicki v. Vopper* solidified that if a newspaper rightfully acquires true information, it cannot be punished by any given state for the distribution of that information.¹⁸⁸ Thus, the freedom of the press has been affirmed numerous times in American courts and, in the case of *Bartnicki*, the Supreme Court.¹⁸⁹ Another notable fact about *Bartnicki* was that this was the federal government protecting the press from hostility coming from the state governments.¹⁹⁰ This shows that, in the United States, federal interest in protecting freedom of press is strong.

There are no laws in the United States that limit freedom of the press. In large part, the Constitution seems to go out of its way to protect it. However, the United States is not safe from criticism on free speech issues. For example, *Brandenburg v. Ohio*, established that speech "directed to inciting or producing imminent lawless action" can be censored.¹⁹¹ Additionally, the Supreme Court of the United States has been criticized for failing to provide ample protections for whistleblowers.¹⁹² In one case, the Supreme Court declined to afford whistleblower protections to employees that report unsavory behavior only to company leadership rather than the Securities and Exchange Commission.¹⁹³

Ultimately, the Constitution does afford a serious level of protection on the freedom of speech and the freedom of the press in the United States. Their rating on the Press Freedom Index reflects this. The complaints are related to niche areas of freedom of speech and press that do not tend to affect criticism of the government. The biggest threat to freedom of speech in press may well be the

¹⁸⁶ U.S. CONST. amend. 1.

¹⁸⁷ *Id.*

¹⁸⁸ *See generally* *Bartnicki v. Vopper*, 532 U.S. 514 (2001).

¹⁸⁹ *See generally id.*

¹⁹⁰ *See generally id.*

¹⁹¹ *Brandenburg v. Ohio*, 395 U.S. 444, 447 (1969).

¹⁹² *See generally* *Guardian staff and agencies, Supreme Court Narrows Protections for Whistleblowers*, THE GUARDIAN (Feb. 21, 2018), <https://www.theguardian.com/law/2018/feb/21/whistleblowing-supreme-court-decision-protections>.

¹⁹³ *See generally id.*

debate about the censorship on social media platforms. However, that has yet to become an issue that has taken shape within laws on the books in the United States. Therefore, it is not yet a significant concern and is unlikely to have been a hinderance on the ability of people to criticize the American government's policy up to this point.

B. Freedom of the Press in China

One assessment of the Press Freedom Index rating in China makes it clear that the government is significantly different than the United States on this issue. The media in China is directed to "support" the Chinese Communist Party in all of the news that they report.¹⁹⁴ They are only allowed to disseminate "party-sanctioned information" to the populace of China.¹⁹⁵ This stranglehold on media consumption in the country serves to prevent any journalistic light from being shined on the actions of the government.

In addition to laws that are aggressive toward journalists, China also leads the world "with the highest incarceration rate for journalists, with 47 reporters behind bars as of 2018."¹⁹⁶ China also apparently "maintains a blacklist of journalists who have conducted "illegal reporting," the penalties for which include revoking press credentials and restrictions on future employment."¹⁹⁷

However, the press freedom situation in China has only worsened under the leadership of Xi Jinping, the president of the People's Republic of China.¹⁹⁸ Some of the attacks on the press by Jinping evoke some authors' memories of the era where China was led by Mao Zedong.¹⁹⁹ Jinping has increased the number of banned topics in the media, tightened media adherence to the Chinese Communist Party's message, instituted laws and regulations that render independent news outlets unsustainable from an economic standpoint, increased centralization of the news industry, and developed a greater degree of harassment toward journalists who attempt to report on "sensitive topics."²⁰⁰

Another area Jinping has been very intentional about regulating is internet media in China.²⁰¹ This presented a big threat as internet media is so difficult to control because anyone can typically use that platform to communicate whatever they want, with a limited ability to curtail such behavior. One way China has prevented such media from reaching its populace thus far is by simply preventing

¹⁹⁴ MARINA SVENSSON, ELIN SÆTHER & ZHI'AN ZHANG, CHINESE INVESTIGATIVE JOURNALISTS' DREAMS (2014).

¹⁹⁵ *Id.*

¹⁹⁶ DAVID MOSER, PRESS FREEDOM IN CONTEMPORARY ASIA 68-82 (Tina Burrett & Jeff Kingston eds., 1st ed. 2020).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ Moser, *supra* note 196.

their citizens from having internet access at all.²⁰² Back in 2010, the percentage of the Chinese population that had internet access was only 30%.²⁰³ Xi has since increased his grip over internet media by centralizing all digital media.²⁰⁴ In February 2019, when Xi completed consolidating electronic media within his country, a propaganda video was released that went viral. The video displayed the power of his creation to continue to control the thought patterns of the people in China.²⁰⁵

C. Freedom of Press in Denmark

Like the United States, Denmark also has the freedom of speech and press built into their Constitution.²⁰⁶ Denmark's law goes further by explicitly stating "[c]ensorship and other preventive measures shall never again be introduced."²⁰⁷ Denmark still has limitations on this freedom.²⁰⁸ They limit libel, blasphemous and racist speech in the interest of preventing oppression through the use of free speech.²⁰⁹ Outside of this protection, "Denmark has virtually no limitations on speech."²¹⁰ Denmark has been more likely to get criticism for speech they allowed than for speech they regulated.²¹¹ This comports with their remarkably high grades in freedom of speech, being ranked third in the world by "Free Speech and Free Press Around the World."²¹²

Furthermore, Denmark's friendliness to freedom of speech goes beyond that of the United States.²¹³ The case of Edward Snowden in the United States has resulted in Snowden hiding out in foreign countries to avoid the punishment he would receive for exposing actions of the U.S. government.²¹⁴ In Denmark, the fear of punishment for such expositions, is much less intense.²¹⁵ Overall, Denmark is even more friendly toward free journalism than the United States, and much friendlier than China's aggressive policies in that area

²⁰² Bristow, *supra* note 145.

²⁰³ *Id.*

²⁰⁴ Moser, *supra* note 196.

²⁰⁵ *Id.*

²⁰⁶ Alexandria Reed, *Denmark's Constitution of 1953*, § 77,

CONSTITUTEPROJECT.ORG,

https://www.constituteproject.org/constitution/Denmark_1953.pdf?lang=en (last visited Mar. 8, 2022).

²⁰⁷ *Id.*

²⁰⁸ Alexandria Reed, *Denmark*, FREE SPEECH AND FREE PRESS AROUND THE WORLD,

<https://freespeechfreepress.wordpress.com/denmark/> (last updated last updated on Apr. 30, 2015).

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ *Id.*

²¹² *Id.*

²¹³ Reed, *supra* note 208.

²¹⁴ *Id.*

²¹⁵ *Id.*

VIII. A BRIEF EXPLORATION OF THE POTENTIAL CAUSES OF AND POTENTIAL SOLUTIONS TO LIMITED TRANSPARENCY IN CHINA

The issues arising from lack of transparency and then lack of enforcement seem easily correctible on the surface.²¹⁶ Considering this perspective, it is likely that the government in China is not interested in creating an environment with more open distribution of truthful information. When a party-state is in complete control of national narrative and the government appears relatively unconcerned with enforcing their environmental laws, even if the laws figure to create an effective approach there is limited recourse.

The party-state in China assigns the media a role to play rather than allowing it the freedom to report the news in the way it sees fit.²¹⁷ China already leverages the media in their country to drive the narrative and attempt to stamp out any investigative reporting. Unfortunately, it appears a regime change will be needed in order for China to solve the transparency issues it faces and thus improve their environmental performance. Nothing can be done about a regime with no interest in honesty or protecting the environment. The Chinese Communist Party faces no political pressure due to their control of the media; and therefore, is not required to behave in a way that is in the best interest of the Chinese citizenry. The best courses of action to take as outsiders involve supporting voices of opposition when possible, like the Hong Kong protesters.

Without a solution to this lack of transparency from the political elite in China, a solution to actual environmental policy will be very difficult.

IX. CONCLUSION

The discrepancy in effective environmental policy between China and the United States is a phenomenon worthy of explanation. Both participate strongly in the world economy and as a result both have significant manufacturing operations that make them central culprits in the investigation into why our environmental issues persist.

All indicators point to government and media transparency having a strong correlation with the creation of impactful environmental policy. Countries that shine on the environment also have a tendency to shine in their release of data and allowance of journalistic endeavors. This was evidenced by the case of Denmark. The United States, while not as open and transparent as Denmark, produces strong grades in its efforts on economic policy as well. China's openness and transparency from their government and in their media is notoriously poor, and as such, they have an extremely poor rating on the environment as well. The more centralized structure that Denmark uses cannot explain their success because China also has significant de facto centralization thanks to the dominance of the Chinese Communist Party.

²¹⁶ Qi & Zhang, *supra* note 159.

²¹⁷ Svensson, Sæther, & Zhang, Zhi'an, *supra* note 194.

Unfortunately, the solution to the problems that face China in catching up too much of the rest of the world on environmental issues likely lies in an effort to defeat the unilateral rule and control of Chinese Communist Party. The enthusiasm of Greta Thunberg, the famed climate activist, may be admirable. However, considering the seriousness of China's transgressions against the environment, she may want to pay them a visit sooner rather than later because various countries are performing far better than China. That is, if they do not throw her in jail for daring challenge the supposed perfection of the Chinese Communist Party.

