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Two Popular Democracies' "Energy Independence" Initiatives Through the Lenses of Constitutionalism, Environmentalism, and Judicial Activism Oeuvres--A Comparative Study of the Trump and Modi Administrations

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TWO POPULAR DEMOCRACIES’ “ENERGY INDEPENDENCE” INITIATIVES THROUGH THE LENSES OF CONSTITUTIONALISM, ENVIRONMENTALISM, AND JUDICIAL ACTIVISM OEUUVRES—A COMPARATIVE STUDY OF THE TRUMP AND MODI ADMINISTRATIONS

VIDHYA V. IYER*

ABSTRACT

The energy independence approaches by two popular democracies, the United States and India, have recently been the center of attention. This Article examines whether two Democratic leaders, the President of the United States, Donald Trump, and Prime Minister of India, Narendra Modi, have maintained constitutionalism in light of executive orders and ordinances that focus on energy independence by way of promoting coal-fired power plants rather than focusing on the environment and human health. Based on constitutional underpinnings, this Article concludes that although both leaders and their administrations may not have violated their respective constitutions, they have certainly violated notions of environmentalism. This Article then broadly defines what environmentalism is through different discussions and concludes that the Trump administration and Modi administration have violated environmentalism because both ignored many norms of global and national pollution control mandates and environmental justice concerns related to coal mining. This Article then explains and concludes with whether the judiciary will be able to save the day.

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* This Article is dedicated to the author’s professor and mentor, Robert V. Percival. Thank you, Professor Robert V. Percival. The author would also like to thank Professor Brent Bolea and Professor Davis Ransom.

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INTRODUCTION

President-elect Trump has an opportunity to transcend the political gridlock that has gripped Washington for so long. He can forge new policies that will benefit both businesses and the environment

—Prof. Robert V. Percival¹

[The Paris] Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by: (a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase

¹ Robert V. Percival, *Environmental Law in the Trump Administration*, 4 EMORY CORP. GOVERNANCE & ACCOUNTABILITY REV. 225, 235 (2017), <http://law.emory.edu/ecgar/content/volume-4/issue-special/essays-interviews/environmental-law-trump-administration.html> [<https://perma.cc/QWC4-5YB9>].

to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change

—The Paris Agreement, United Nations²

Recently, regulatory approaches to climate change and air pollution caused by coal mining and coal-fired power plants have been very unsteady due to political forces in what has become a ritual of modern democracies.³ After an election, when new faces emerge in the majority political wing, federal agencies and environmental law either suffer a significant setback or prosper in addressing emerging issues. While Congressional inputs have been the center of attention, these inputs are still secondary at best. In essence, the political changes accompanying a presidential election often bring a wave of changes by either strengthening or weakening the basic environmental jurisprudence. Nevertheless, the United States has become an icon of the application of environmental law through pragmatic implementation of a cost-benefit approach and consideration of the “endangerment finding” to protect human health.⁴

In that sense, the world’s two modern democratic institutions, the United States and India, are the best examples to begin our discussion. Ironically, the Trump administration and the Modi administration are often the centers of attention for their unprecedented commitments to support a wide range of businesses to boost the economy often at the expense of the environment and human health.⁵ When President Trump was officially inaugurated after the election, his first wave of changes involved issuing a series of executive orders to repeal several of the Obama administration’s environmental protection and climate change initiatives,

² *Paris Agreement*, U.N. Framework Convention on Climate Change 3 (2015), https://unfccc.int/sites/default/files/english_paris_agreement.pdf [<https://perma.cc/QD8F-JYRZ>].

³ See discussion *infra* Sections II.B–D.

⁴ *Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act*, EPA, <https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean> [<https://perma.cc/8PVW-GQ3S>] (last updated July 11, 2017).

⁵ See generally AM. BAR ASS’N & ENVTL. L. INST., ENVIRONMENTAL PROTECTION IN THE TRUMP ERA (2018), https://www.eli.org/sites/default/files/docs/epinte_spring2018.pdf [<https://perma.cc/9LT9-CE2L>] [hereinafter ELI] (explaining the Trump administration’s environmental law policy); Ellen Marry & Neha Thirani Bagri, *Narendra Modi, Favoring Growth in India, Pares Back Environmental Rules*, N.Y. TIMES (Dec. 4, 2014), <https://www.nytimes.com/2014/12/05/world/indian-leader-favoring-growth-sweeps-away-environmental-rules.html> [<https://perma.cc/PMD2-9GWP>].

including the Clean Power Plan (“CPP”) under the Clean Air Act.⁶ On the other side of the world, Modi also issued a series of ordinances in India after he took office, including the Coal Mines (Special Provisions) Second Ordinance 2014.⁷ Fortunately, the Parliament of India subsequently ratified the Coal Mines (Special Provisions) Second Ordinance 2014 into the Coal Mines Act of 2015.⁸

Interestingly, President Obama was successful in initiating and encouraging India to reduce its carbon footprint and other greenhouse gas (“GHG”) emissions.⁹ To that end, President Obama and Prime Minister Narendra Modi pledged their “partnership to advance clean energy” initiatives to reduce emissions of GHGs that eventually led to the Paris Accords in 2015.¹⁰ Rather than preserving the environment and the human health regime, President Trump’s deregulation efforts of the CPP present many challenges.¹¹ Like President Trump, the Modi administration has also influenced coal production and coal-fired power plants in India.¹²

The see-saw gameplay between the United States and India started when the Trump administration declared that it would withdraw from the Paris Accords.¹³ The Trump administration argued that as a

⁶ Zack Colman, *Trump Administration Is Repealing Obama’s Clean Power Plan*, E&E NEWS (Oct. 10, 2017), <https://www.scientificamerican.com/article/trump-administration-is-repealing-obamas-clean-power-plan/> [<https://perma.cc/L6TB-W9ES>] (“The Trump administration today will officially announce the end of the Clean Power Plan, a regulation limiting planet-warming carbon dioxide emissions from power plants.”); see Juliet Eilperin & Darla Cameron, *How Trump is rolling back Obama’s legacy*, WASH. POST (Mar. 24, 2017), https://www.washingtonpost.com/graphics/politics/trump-rolling-back-obama-rules/?utm_term=.80fc38d0ec8b [<https://perma.cc/2YWH-NCR7>].

⁷ The Coal Mines (Special Provisions) Second Ordinance, 2014, No. 7 of 2014, INDIA CODE.

⁸ The Coal Mines (Special Provisions) Act, 2015, No. 11 of 2015, INDIA CODE.

⁹ See Press Release, The White House Office of Press Sec’y, Fact Sheet: U.S. and India—Moving Forward Together on Climate Change, Clean Energy, Energy Security, and the Environment (June 17, 2016), <https://obamawhitehouse.archives.gov/the-press-office/2016/06/07/fact-sheet-united-states-and-india-%E2%80%93-moving-forward-together-climate> [<https://perma.cc/8EPR-AUG6>] (“In September 2014, President Obama and Prime Minister Modi pledged to strengthen and expand the highly successful U.S.-India Partnership to Advance Clean Energy (PACE). Since then, the two countries have made important progress and have launched important new activities to advance both countries’ ambitious clean energy objectives and Nationally Determined Contributions.”).

¹⁰ *Id.*; see *Obama gets warm welcome from Narendra Modi in India*, THE GUARDIAN (Jan. 25, 2015), <https://www.theguardian.com/world/2015/jan/25/obama-warm-welcome-india-narendra-modi> [<https://perma.cc/K3Y3-M2H9>] (stating that both leaders talked about climate change).

¹¹ See discussion *infra* Parts I–III.

¹² See discussion *infra* Section I.C.

¹³ See Jonathan Easley et al., *How Trump left the Paris climate deal*, THE HILL (June 1, 2017), <http://thehill.com/policy/energy-environment/336015-how-trump-left-the-paris-cli>

developing nation, India must cut its emissions first, while the Modi administration claimed that the United States, as the biggest historical carbon emitter, must step up first.¹⁴ While both the Trump and Modi administrations’ *business-minded* approaches became important subjects of debate and critique, neither administration’s environmental protection actions are adequate in addressing rising global concerns about climate change and domestic air pollution.¹⁵

Although economic development and energy independence can be advantageous to the United States and India, Trump and Modi have largely disregarded the major environmental concerns of the two countries, especially the effects that coal mining, coal-fired power plants, and greenhouse emissions have on social and economic inequalities.¹⁶

mate-deal [<https://perma.cc/7L9P-T27R>] (stating that “Trump met with Environmental Protection Agency Administrator Scott Pruitt, who has been among the administration’s most vocal advocates of pulling out of Paris.”).

¹⁴ See Julie McCarthy, *India To U.S.: Cut Back On Your Consumption!*, NPR (Dec. 8, 2015), <https://www.npr.org/sections/goatsandsoda/2015/12/08/458917881/india-to-u-s-cut-back-on-your-consumption> [<https://perma.cc/S37V-EVGM>]; *President Trump to Pull U.S. Out of Paris Climate Accord*, N.Y. TIMES VIDEO (June 1, 2017), <https://www.nytimes.com/video/us/politics/100000005139531/trump-us-paris-climate-accord.html> [<https://perma.cc/TK3P-66Z5>].

¹⁵ See Jonas J. Monast & Sarah K. Adair, *A Triple Bottom Line for Electric Utility Regulation: Aligning State-Level Energy, Environmental, and Consumer Protection Goals*, 38 COLUM. J. ENVTL. L. 1, 7 (2013) (discussing environmental impacts of energy generation); Jennifer A. Dlouhy, *Trump Gives Businesses Deregulation Whether They Want It or Not*, WASH. POST (Sept. 1, 2019), https://www.washingtonpost.com/business/on-small-business/trump-gives-businesses-deregulation-whether-they-want-it-or-not/2019/08/30/b0df31ba-cb04-11e9-9615-8f1a32962e04_story.html [<https://perma.cc/LKY3-PVWR>]; Heather Timmons, *Modi’s approach to the environment is “grow now, pay later,”* QUARTZ INDIA (July 13, 2015), <https://qz.com/india/451631/modis-approach-to-the-environment-is-grow-now-pay-later/> [<https://perma.cc/CB3X-9PM4>]. *But see* ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 521 (8th ed. 2018) (citing ROBERT V. PERCIVAL, AGAINST ALL ODDS: HOW AMERICA’S CENTURY-OLD QUEST FOR CLEAN AIR MAY SPUR NEW ERA OF GLOBAL ENVIRONMENTAL COOPERATION (2016)) (asserting that it is possible to achieve “both clean air and a healthy economy” and that “[c]lean air has now become a global imperative, and [the Clean Air Act] has made the United States the envy of the world”); *India Has Set Example by Harmonizing Development, Environment*, THE ECON. TIMES (Feb. 19, 2018), <https://economictimes.indiatimes.com/news/politics-and-nation/india-has-set-example-by-harmonising-development-environment-unep-chief/articleshow/62984516.cms> [<https://perma.cc/G8DA-4YHC>] (asserting that the UNEP Chief states that India’s effort in curbing pollution is remarkable).

¹⁶ See *India country profile*, BBC NEWS (Feb. 18, 2019), <https://www.bbc.com/news/world-south-asia-12557384> [<https://perma.cc/D2PR-54G5>]; Robert J. Walker, *Trump v. Science*, U.S. NEWS & WORLD REP. (Nov. 17, 2017), <https://www.usnews.com/opinion/world-report>

This Article examines how both administrations' approaches may affect the global environment through the lenses of constitutionalism, environmentalism, and judicial activism. In Part I, this Article discusses the established principle of constitutionalism. Then this Article focuses on Trump's Executive Order 13,783 and examines whether this Executive Order is consistent with constitutional norms. Next, this Article discusses how Modi's executive ordinance is consistent with constitutionalism.¹⁷ This Article concludes that although both democratic leaders' approaches are not favorable for the environment, their approaches, theoretically, are not unconstitutional. In Part II, this Article discusses environmentalism. First, this Article explains briefly what environmentalism is. Particular emphasis is placed on issues concerning global, national, and environmental justice. In Part III, different judicial approaches are discussed, compared, and contrasted to determine how the courts might approach or could have approached curtailing the executive and legislative neglect. This Article analyzes and concludes with whether the courts of the United States and India will be able to save the day.

I. THE THRESHOLD OF CONSTITUTIONALISM IN THE UNITED STATES AND INDIA: IN LIGHT OF EXECUTIVE ORDERS AND ORDINANCES

A. *An Overview of Constitutionalism*

The United States is commonly known as the world's oldest democracy, while India is known as the world's largest democracy.¹⁸ What does democracy have to do with constitutionalism,¹⁹ environmentalism, and judicial activism? Constitutionalism, which establishes self-government

/articles/2017-11-17/trumps-america-ignores-scientists-on-climate-change-and-the-environment [https://perma.cc/P8K8-BXNS].

¹⁷ See generally Gyanant Singh, *Ordinance row: Modi government should remember what Ambedkar said*, DAILY O (Jan. 20, 2015), https://www.dailyo.in/politics/lawmakers-favour-ordinances-even-at-the-cost-of-misuse-parliament-constitution-modi/story/1/1578.html [https://perma.cc/D2PR-54G5].

¹⁸ Victor Davis Hanson, *Can a divided America survive?*, WASH. TIMES (June 14, 2017), https://m.washingtontimes.com/news/2017/jun/14/america-now-the-worlds-oldest-democracy/ [https://perma.cc/AU2Z-4TYT]; BBC NEWS, *supra* note 16.

¹⁹ Jorge M. Farinacci-Fernos, *Post Liberal Constitutionalism*, 54 TULSAL. REV. 2, 4 (2018) ("The concept of constitutionalism is lauded yet stubbornly elusive. On the one hand, scholars and political leaders use constitutionalism as a yardstick to measure the legitimacy of different legal and political regimes around the world, making value judgments along the way. We all want to be constitutionalists.").

as the core of a democracy, is at the heart of all modern democracies.²⁰ Additionally, all modern democracies develop a series of regulatory principles at the heart of democratic idealism.²¹ All other laws established by democratic governments help support that government’s philosophy. The United States and India are no exception.

In the United States, it is a general norm that the branches of government—legislative, executive, and judicial—coordinate with each other without stepping on one another’s toes.²² Executive orders fall within the realm of executive action.²³ Therefore, all executive orders must pass constitutional muster.²⁴ Almost all past presidents have issued executive orders, including President Obama.²⁵ “The practice of Presidents modifying and revoking executive orders” is conducted to “assert control over and influence agenc[ies]’ rulemaking process[es].”²⁶ Unlike statutes, executive orders often lack stability.²⁷ Nevertheless, the President is the chief of federal agencies, and federal agencies are bound to follow the executive orders and adjust their regulations accordingly.²⁸

To that end, the United States Constitution has set forth the structure of the government, enumerated the duties of each branch of the government, established the qualifications for holding office, and provided rights for citizens.²⁹ One of the ideologies of constitutionalism is a limited government, which is also known as separation of powers, generally checked by the judiciary.³⁰ For the most part, environmental protection

²⁰ See Richard Bellamy & Dario Castiglione, *Constitutionalism and Democracy—Political Theory and the American Constitution*, 27 BRITISH J. POL. SCI. 595, 598 (1997).

²¹ See, e.g., Robert V. Percival, *Separation of Powers, the Presidency and the Environment*, 21 J. LAND RESOURCES & ENVTL. L. 25, 25 (2001) [hereinafter Percival, *Separation of Powers*] (explaining that the separation of powers “has proven remarkably successful at adapting to vast economic and social changes while preserving democratic values”).

²² See *Branches of the U.S. Government*, USA.GOV, <https://www.usa.gov/branches-of-government> [<https://perma.cc/NFJ2-B274>] (last updated Oct. 18, 2019).

²³ VIVIAN S. CHU & TODD GARVEY, CONG. RESEARCH SERV., RS20846, EXECUTIVE ORDERS: ISSUANCE, MODIFICATION, AND REVOCATION 1 (2014).

²⁴ *Id.*

²⁵ Dhrumil Mehta, *Every President’s Executive Orders In One Chart*, FIVETHIRTYEIGHT, <https://fivethirtyeight.com/features/every-presidents-executive-actions-in-one-chart/> [<https://perma.cc/6Q84-8AQY>] (last visited Nov. 12, 2019).

²⁶ CHU & GARVEY, *supra* note 23, at 7.

²⁷ *Id.*

²⁸ U.S. CONST. art. II, § 1, cl. 1 (stating that the executive power is vested in a President of the United States); see *Executive Orders*, HERITAGE FOUND., <https://www.heritage.org/political-process/heritage-explains/executive-orders> [<https://perma.cc/QM5V-YNGW>] (last visited Nov. 12, 2019).

²⁹ See Percival, *Separation of Powers*, *supra* note 21, at 25.

³⁰ See *Nat’l Ass’n of Mfrs. v. Dep’t of Defense*, 138 S. Ct. 617, 632 (2018) (quoting Reiter

laws are the work of Congress.³¹ Once Congress enacts laws, the executive branch enforces these laws through its federal regulatory agencies, such as the Environmental Protection Agency (“EPA”).³² Therefore, a change in presidential administrations may bring either positive or negative changes on enforcement of environmental laws through agency regulation. In sum, the EPA is like the child of divorced parents, with Congress on one side and the President on the other.

To avoid any conflicts as discussed above, the Supreme Court of the United States held, in its landmark case *Marbury v. Madison*, that the Court has the ultimate power to interpret the Constitution.³³ Justice John Marshall, writing on behalf of the majority, said that “it is emphatically the province and the duty of the judicial department to say what the law is.”³⁴ The *Marbury* decision has widely established the power of the judiciary to invalidate acts of Congress (and acts of the executive).³⁵ Similarly, the *Marbury* case established that the appropriate federal court can issue a writ of mandamus ordering a federal executive branch official to perform a duty that the official has a legal duty to perform.³⁶

In essence, *Marbury* explained the mechanism by which the federal judiciary has reviewing power under the Constitution over the actions of other branches of the federal government, including executive orders.³⁷ In the United States, the Constitution has granted legislative

v. Sonotone Corp., 442 U.S. 330, 339 (1979)) (“[T]he Court is ‘obliged to give effect, if possible, to every word Congress used.’”); *Franklin v. Massachusetts*, 505 U.S. 788, 801 (1992) (“[T]he President’s actions may still be reviewed for constitutionality. . . [even if] they are not reviewable for abuse of discretion under the APA.”); *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 587 (1952) (“[T]he President’s power to see that the laws are faithfully executed refutes the idea that he is to be a lawmaker.”).

³¹ Robert V. Percival, *President’s Power to Address Climate Change in an Era of Legislative Gridlock*, 32 VA. ENVTL. L.J. 134, 138 (2014) [hereinafter Percival, *Presidential Power to Address Climate Change*] (“Congress [has] created comprehensive national regulatory programs to protect the environment.”).

³² See Robert V. Percival, *Who’s in Charge? Does the President Have Directive Authority Over Agency Regulatory Decisions?*, 79 FORDHAM L. REV. 2487, 2538 (2011) (explaining “mixed agency-President delegations”); see also Reorganization Plan No. 3 of 1970, 35 Fed. Reg. 15,623 (Oct. 6, 1970) (describing the establishment of the EPA).

³³ See *Marbury v. Madison*, 5 U.S. 137, 177 (1803).

³⁴ *Id.*

³⁵ *Id.* at 178 (“The judicial power of the United States is extended to all cases arising under the constitution.”).

³⁶ See *id.* at 148.

³⁷ *Id.* at 177; Percival, *Presidential Power to Address Climate Change*, *supra* note 31, at 135 (“[T]he Supreme Court [has] returned to its historic role of intervening when the political branches of government fail to address critical environmental problems.”); see U.S. CONST. art VI.

power to Congress, which shall consist of a Senate and a House of Representatives.³⁸ Both chambers of Congress must pass a bill, and the president must sign or veto the bill within ten days before it can become a law.³⁹

Although the notion of constitutionalism arises from the rule of law of a country itself, the fundamental paradigm of constitutionalism remains the same both in the United States and India. For example, India has a parliamentary system of government akin to the United States’ Congress.⁴⁰ India’s Constitution says that India’s legislative power is vested in the Parliament of India—a supreme legislative body.⁴¹ The Indian Parliament consists of the Council of States (the Rajya Sabha), which consists of state representatives chosen primarily by the state assemblies along with twelve members nominated by the president,⁴² and the House of the People (the Lok Sabha), which consists of members elected directly by the people of India.⁴³ Thus, both houses have legislative power.⁴⁴ The president is not a member of either house of the Parliament.⁴⁵ Parliament creates a cabinet, and the members of the cabinet are responsible to the House of the People.⁴⁶ Nevertheless, the *de facto* executive is the Prime Minister, who is elected by Parliamentary members of the majority party.⁴⁷ Any bill must

³⁸ William N. Eskridge, Jr. & Neomi Rao, *Article 1, Section 1: General Principles*, NAT’L CONST. CTR., <https://constitutioncenter.org/interactive-constitution/interpretation/article-i/clauses/749> [<https://perma.cc/V34E-5X59>] (last visited Nov. 12, 2019).

³⁹ Nicholas Bagley & Thomas A. Smith, *Article I, Section 7*, NAT’L CONST. CTR., <https://constitutioncenter.org/interactive-constitution/interpretation/article-i/clauses/766> [<https://perma.cc/6F8B-T3KT>] (last visited Nov. 12, 2019).

⁴⁰ INDIA CONST. art. 79; *id.* art. 80; *id.* art. 81.

⁴¹ *Id.* art. 253 (“Parliament has power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body.”).

⁴² *Id.* art. 80.

⁴³ *Id.* art. 81.

⁴⁴ See INDIA CONST. art. 79; *Samsher Singh & ANR v. State of Punjab*, (1974) 2 SCR 831 (India) (“The executive is to act subject to control by the Legislature. The President acts on the aid and advice of the Council of Ministers with the Prime Minister at the head. The Cabinet enjoying as it does a majority in the Legislature concentrates in itself the virtual control of both legislative and executive functions.”); *Rai Sahib Ram Jawaya Kapur v. State of Punjab*, (1955) 2 SCR 225 (India) (“Our Constitution . . . is modelled on the British Parliamentary system. . . . The president has thus been made a formal or constitutional head of the executive and the real executive powers are vested in the Ministers or the Cabinet.”); BRIJ KISHORE SHARMA, *INTRODUCTION TO THE CONSTITUTION OF INDIA* 171–73 (6th ed. 2011).

⁴⁵ See INDIA CONST. art. 79; SHARMA, *supra* note 44, at 145.

⁴⁶ SHARMA, *supra* note 44, at 145–47.

⁴⁷ *Id.* at 146; *see id.* at 163.

be passed through both houses of Parliament, and the President must sign the bill to become a law.⁴⁸

However, in comparison to the U.S. President's enumerated powers under the U.S. Constitution, the Indian Constitution is vague when it comes to the executive power of the Prime Minister of India. However, the Supreme Court of India has provided some insights on India's executive's role through a series of cases. For example, in *Ram Jawaya Kapur v. State of Punjab*,⁴⁹ the Supreme Court recognized that neither Article 73⁵⁰ nor Article 162⁵¹ of the Constitution defines what an executive function is nor gives an exhaustive enumeration of the activities which would legitimately come within its scope.⁵² In a later case, the Supreme Court has acknowledged that India's Prime Minister has the power to make policy determinations.⁵³

The President of the United States can act only if the power to act is granted either by Congress or the Constitution.⁵⁴ Interestingly, the Constitution of the United States does not define the President's executive orders, and there is no specific provision in the Constitution authorizing the President to issue executive orders.⁵⁵ Nevertheless, nearly all former presidents have issued executive orders since the inception of the United

⁴⁸ See INDIA CONST. art. 107; *id.* art. 111.

⁴⁹ *Kapur*, 2 SCR 225.

⁵⁰ “[T]he executive power of the Union shall extend (a) to the matters with respect to which Parliament has power to make laws; and (b) to the exercise of such rights, authority and jurisdiction as are exercisable by the Government of India by virtue of any treaty or agreement.” INDIA CONST. art. 73.

⁵¹ INDIA CONST. art. 162 (describing the executive powers of a state); see *Karnati Ravi v. Comm’r of Survey Settlements & Land Records*, Civ. App. No. 897/2010 (2017) (India) (“[I]n the absence of the Rules, it is well within the powers of the Executive under Article 162 of the Constitution to provide for the required instructions with regard to the procedure for selection, so long as they do not come in conflict with the Rules.”).

⁵² See *Kapur*, 2 SCR 225.

⁵³ See generally *State of Tamil Nadu v. State of Kerala*, (2014) 12 SCC 696 (India) (discussing the demarcation of power between the judiciary and the executive); *BALCO Employees Union (Regd.) v. Union of India*, (2002) 2 SCC 333 (holding that the Supreme Court “does not sit over the policy of the Parliament in enacting the law[; s]imilarly, it is not for [the Supreme Court of India] to examine whether the policy of [] disinvestment is desirable or not”); *Narmada Bachao Andolan v. Union of India*, AIR 2000 SC 3751 (holding that the decision taken by the executive department to construct a dam to a particular height could not be said to be vitiated in any manner, but the Supreme Court has jurisdiction when the rights of the people are violated without violating demarcation of powers).

⁵⁴ See generally *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579 (1952).

⁵⁵ *CHU & GARVEY*, *supra* note 23, at 2.

States as a sovereign country.⁵⁶ According to ELI, the president’s executive orders must be (1) “directives to the executive branch,” (2) “in accordance with the law,” and (3) “subject to modification or reversal by a successor president” in limited circumstances.⁵⁷

The Constitution does not, however, authorize “the President to enact, to amend, or to repeal statutes;” rather, these powers are reserved for Congress.⁵⁸ Within the norms of constitutionalism, executive orders can be revoked or modified in three ways: “(1) by the president who issued it or a successor president; (2) by an act of Congress, if the president was acting on authority granted by Congress; or (3) by a court ruling that the order was illegal or unconstitutional.”⁵⁹

Like the President of the United States, the President of India may theoretically issue ordinances, on a recommendation by the government, invoking Article 123 of the Constitution.⁶⁰ Article 123 says that the President can only promulgate an ordinance (1) when either of the two houses of Parliament is not in session; (2) certain circumstances existed that require immediate attention; and (3) the ordinance requires immediate approval by Parliament within six weeks of reassembling.⁶¹ Additionally, if the ordinance is not approved within six weeks of reassembling, it would lapse or become void.⁶²

However, the Constitution of India does not say that the Prime Minister can issue an ordinance on behalf of the President.⁶³ Article 74 of the Constitution explains that there shall be a Council of Ministers, with the Prime Minister as its head, who are to advise the President.⁶⁴ Many past Prime Ministers of India (and not Presidents of India) have issued ordinances.⁶⁵ Although it is unclear who issues an ordinance in

⁵⁶ See Mehta, *supra* note 25.

⁵⁷ ELI, *supra* note 5, at ch. 1.

⁵⁸ See *Clinton v. City of New York*, 524 U.S. 417, 438 (1998).

⁵⁹ ELI, *supra* note 5, at ch. 1.

⁶⁰ INDIA CONST. art. 123 (describing the power of the President to promulgate ordinances during recess of Parliament).

⁶¹ *Id.*

⁶² *Id.*

⁶³ See *id.*

⁶⁴ INDIA CONST. art. 74.

⁶⁵ B. Muralidhar Reddy, *Modi govt. passes 22nd Ordinance, still short of UPA number*, HINDU (Aug. 29, 2016), <https://www.thehindu.com/seenews/national/Modi-govt.-passes-22nd-Ordinance-still-short-of-UPA-number/article14596574.ece> [<https://perma.cc/TD26-JYNZ>] (“456 were issued in about 50 years of rule and by six Prime Ministers of the Congress. Record books show that India’s first Prime Minister Jawaharlal Nehru of the Congress

India, the Supreme Court recently clarified that the executive power to issue an ordinance under Article 123 is a limited power granted by the Constitution of India.⁶⁶

The Constitution has also set forth the structure of the government, enumerated the duties of each branch of government (and the states), established qualifications for holding office, and provided certain rights to citizens.⁶⁷ Additionally, once Parliament enacts the laws, it is up to the Ministry of Environment and Forests (“MoEF”) to retain “appellate power against rejection of any proposal” by the states under the National Environmental Appellate Authority Act, 1977 (22 of 1977).⁶⁸ In the Union government’s agency context, the Union government does not have any expert agency like the EPA. However, MoEF does have jurisdiction to control the states’ environmental actions.⁶⁹

The Constitution of India confers on Parliament the power to replace existing provisions or to supplement them through legislation.⁷⁰ Like the United States’ federalist approach, the Constitution of India refers to this approach as “demarcation of powers,” which guards against encroachment between the Union and the States.⁷¹ The demarcation of powers generally means (1) establishing a list of things showing concurrent jurisdiction; (2) providing that Parliament may change some provisions while the States may not; (3) giving effects to particular international agreements and how these agreements should be governed; and (4) providing that Parliament may legislate state action under certain circumstances.⁷²

cleared about 70 ordinances during the period from 1952 to 1964. Indira Gandhi issued 77 Ordinances during 1971–77, at the rate of almost three ordinances every two months.”).

⁶⁶ Krishna Kumar Singh v. State of Bihar, (2017) 9 SCC 1, 49–51 (India) (discussing the ordinance-making power of the president and the governor under Chapter IV of the Constitution of India stating that “if and so far as an ordinance under this article makes any provision which would not be valid if enacted in an act of the legislature of the state assented to by the Governor shall be void.”).

⁶⁷ JUSTICE T.S. DOABIA, ENVIRONMENTAL LAW, POLICY, AND POLLUTION LAWS 63 (3d ed. 2017).

⁶⁸ M.C. Mehta v. Union of India, (2004)12 SCC 118; see, e.g., V.S. GANESAMURTHY, ENVIRONMENTAL STATUS AND POLICY IN INDIA 19, 23–24 (2011) (stating that the state pollution control boards are not able to enforce the law well without proper guidance from MoEF).

⁶⁹ See DOABIA, *supra* note 67, at 652 (citing M.C. Mehta v. Union of India (2004) 12 SCC 118, 175 (the union government must provide short-term and long-term action plans for restoration of environmental quality to the state pollution control boards)).

⁷⁰ See discussion *infra* Section I.C; see also State of West Bengal v. Subodh Gopal Bose, (1953) 1954 SCR 587 (India) (holding that when interpreting the Constitution, all phrases must be construed using their plain meaning).

⁷¹ See State of Tamil Nadu v. State of Kerala, (2014) 12 SCC 696 (India).

⁷² See generally SHARMA, *supra* note 44.

Although the above study involves a limited number of cases involving constitutionalism, it is clear that neither the courts in the United States nor the courts in India have interpreted their cases in substantially different ways. The comparative analysis above also suggests that neither the Constitution of the United States nor the Constitution of India contains any explicit provision to preserve the boundaries of the three branches of government. It seldom, nevertheless, creates a cooperative relationship between the three branches in these democracies.

Generally, any country’s environmentalism and judicial activism depend upon how the government interprets and maintains constitutionalism.⁷³ Section B examines one such interpretation—whether the Trump and Modi administrations’ ideologies are consistent with the notion of constitutionalism.

B. The Trump Administration’s Ideologies of Energy Independence and Economic Growth Through the Lens of Constitutionalism

Although coal mining and coal-fired power plants in the United States and India are part of a historical tradition that has led to the modern-day industrial revolution, they also have a dark side.⁷⁴ Historically, the United States relied on coal to meet the massive demand for energy and economic growth.⁷⁵ However, coal-fired power plants generate a high volume of GHGs, including methane, sulfur dioxide (“SO₂”), mercury, particulate matter, nitrogen oxide (“NO₂”), and carbon dioxide (“CO₂”), which nations agreed to avoid for many decades.⁷⁶

⁷³ See, e.g., Deepa Badrinarayana, *The “Right” Right to Environmental Protection: What We Can Discern From the American and Indian Constitutional Experience*, 43 BROOK. J. INT’L L. 75, 86 (2017) (“The relationship between constitutional law and environmental protection in the United States was initially limited to the question of whether Congress had authority, under the Constitution, to legislate on environmental matters.”); see discussion *infra* Sections I.B–C.

⁷⁴ See generally BRUCE A. ACKERMAN & WILLIAM T. HASSLER, CLEAN COAL/DIRTY AIR (1981) (discussing deal reform and use of coal during the early years of the American industrial revolution); NORA MORAG-LEVINE, CHASING THE WIND: REGULATING AIR POLLUTION IN THE COMMON LAW STATE (2003) (discussing an early history of air pollution in the United States); Rahul Tongia & Samantha Gross, *Coal in India: Adjusting to Transition*, BROOKINGS (Mar. 2019), https://www.brookings.edu/wp-content/uploads/2019/03/Tongia_and_Gross_2019_Coal_In_India_Adjusting_To_Transition.pdf [<https://perma.cc/4UQY-J5HX>].

⁷⁵ JOEL B. EISEN ET AL., ENERGY, ECONOMICS AND THE ENVIRONMENT 95 (4th ed. 2015).

⁷⁶ See generally U.S. EPA, OUR NATION’S AIR: STATUS AND TRENDS THROUGH 2010 (Feb. 2012), https://www.epa.gov/sites/production/files/2017-11/documents/trends_brochure_2010.pdf [<https://perma.cc/R7UH-Y97L>].

Climate change and air pollution are inextricably linked in the United States and India, and the reduction of carbon dioxide cannot be done without more stringent regulation of the energy sector.⁷⁷ Currently, the U.S. energy sector relies heavily on coal—about 15 percent of energy comes from coal.⁷⁸ According to the Energy Information Administration (“EIA”), the United States burned about 687 million short tons (MMst) of coal in 2018.⁷⁹ For the sake of environmental and health concerns, coal mining and coal-fired power plants must be abandoned from our energy portfolio.⁸⁰ Coal-fired power plants have often come at substantial costs—specifically to the environment and to low-income minority households who are often involved in this industry to earn their bread.⁸¹

To address air pollution, the U.S. Congress enacted the Clean Air Act (“CAA”) in the 1960s to guide states in controlling sources of air pollution.⁸² Under the CAA, Congress has given the EPA⁸³ general rule-making authority, but the other provisions of the CAA require the EPA to promulgate rules that are necessary to protect the public health and general welfare.⁸⁴

⁷⁷ See PERCIVAL ET AL., *supra* note 15, at 553–56 (stating that the coal-fired power plants are not covered under the CAA because the statute itself was not designed to address the unique problems of GHGs).

⁷⁸ *U.S. energy facts explained*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/energyexplained/us-energy-facts/> [<https://perma.cc/YYV8-X4TR>] (last updated Aug. 28, 2019).

⁷⁹ *Coal explained*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/energyexplained/coal/use-of-coal.php> [<https://perma.cc/HVP5-TJT6>] (last updated May 9, 2019).

⁸⁰ See *Coal and Water Pollution*, UNION CONCERNED SCIENTISTS (Dec. 6, 2017), <https://www.ucsusa.org/resources/coal-and-water-pollution> [<https://perma.cc/4ACE-EUAE>] (“Mining operations . . . involve[] contamination of nearby rivers, lakes, and aquifers [because of] what comes out of a coal mine—usually highly acidic water containing heavy metals like arsenic, copper, and lead.”).

⁸¹ See Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994); Brian Bienkowski, *Toxic Coal Ash Hits Poor and Minority Communities Hardest*, SCI. AM. (Jan. 14, 2016), <https://www.scientificamerican.com/article/toxic-coal-ash-hits-poor-and-minority-communities-hardest/> [<https://perma.cc/VNM5-PY6L>].

⁸² PERCIVAL ET AL., *supra* note 15, at 528 (stating that the CAA was enacted in 1963 and amended in 1967 and 1970).

⁸³ See *EPA History*, EPA, <https://www.epa.gov/history> [<https://perma.cc/9RLF-QDD3>] (last updated Oct. 17, 2019) (“Born in the wake of elevated concern about environmental pollution, EPA was established on December 2, 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection.”).

⁸⁴ See *Summary of the Clean Air Act*, EPA, <https://www.epa.gov/laws-regulations/summary-clean-air-act> [<https://perma.cc/3K6C-WX8F>] (last updated Aug. 15, 2019); see also 42 U.S.C. § 7601(a)(1) (2012) (“The Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this chapter[,] . . . except the

President Obama noted that according to EIA projections, U.S. energy-related CO₂ emissions would grow 3.5 percent from 2012 to 2020—without taking into account the new guidelines for CO₂ reductions from existing power plants.⁸⁵ Concerned with coal-fired power plants’ inevitable contribution to climate change and environmental harm generally, President Obama ordered the EPA to issue new source performance standards (“NSPS”) to control CO₂ emissions from new, modified, and reconstructed energy generating utilities.⁸⁶ President Obama asked former EPA Administrator Gina McCarthy to propose standards for CO₂ from existing power plants by June 2014 and to finalize them by June 2015.⁸⁷ Under this order, the EPA proposed the CPP, which set an emission reduction target of 30 percent below 2005 levels by 2030.⁸⁸ Additionally, the EPA found that under this plan, significant reductions in CO₂ and other air pollution could be achieved, which would eventually result in net climate and health benefits of \$25–45 billion.⁸⁹ This proposed plan received an unprecedented amount of public comments within the 165-day comment period.⁹⁰

Accordingly, the EPA promulgated a final rule indicating NSPSs for new, modified, and reconstructed utilities in 2015.⁹¹ CAA section 111(d) requires that states impose a “standard of performance” on existing sources.⁹²

making of regulations subject to section 7607(d) of this title, as he may deem necessary or expedient.”).

⁸⁵ JANE A. LEGGETT, CONG. RESEARCH SERV., R43120, PRESIDENT OBAMA’S CLIMATE ACTION PLAN 2 (2014).

⁸⁶ Memorandum on Power Sector Carbon Pollution Standards, 2013 DAILY COMP. PRES. DOC. (June 25, 2013); *see* Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,829, 34,844 (proposed June 18, 2014) (to be codified in 40 C.F.R. pt. 60) [hereinafter EPA’s Proposed Rule].

⁸⁷ Press Release, The White House Office of the Press Sec’y, Exec. Office of the President, Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants (Aug. 3, 2015), <https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards> [<https://perma.cc/C2S2-QDBH>]; *see* EPA’s Proposed Rule, *supra* note 86, at 34,833.

⁸⁸ EPA’s Proposed Rule, *supra* note 86, at 34,832.

⁸⁹ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662, 64,665 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60) [hereinafter Obama EPA’s CPP].

⁹⁰ PERCIVAL ET AL., *supra* note 15, at 553–54 (“EPA adopted the Clean Power Plan only after considering 4.3 million comments, the most the agency has ever received in any rulemaking action during its 45-year history.”).

⁹¹ Obama EPA’s CPP, *supra* note 89, at 64,664.

⁹² 42 U.S.C. § 7411(d) (2018) (“[S]tandard of performance’ means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction”); *see* ROBERT V. PERCIVAL

Accordingly, the EPA's final rule establishes CO₂ emission standards for "each of two subcategories of fossil fuel-fired EGUs—fossil fuel-fired electric steam generating units and stationary combustion turbines—that expresses the 'best system of emissions reduction . . . adequately demonstrated.'"⁹³ EPA believed that under this rule, a 32 percent reduction in CO₂ is achievable from 2005 to 2030.⁹⁴ In seeking to justify issuance of the CPP, the EPA prepared a more than one hundred page memorandum stating that a drafting error during the legislative process created ambiguity as to how section 111(d) should be interpreted.⁹⁵

Under the CPP, states must prepare "state plans" to achieve state-specific rates—or mass-based goals for CO₂ emissions from fossil fuel-fired power plants—and submit these plans to the EPA.⁹⁶ Each state must consider three measures in reducing CO₂ emissions: (1) heat rate reductions at coal-fired power plants, (2) shifting generation from coal-fired power plants to natural gas combined cycle power plants, and (3) shifting generation from coal-fired power plants to renewable energy sources.⁹⁷ The rule also created an incentive program that allowed states to award allowances through a cap-and-trade mechanism and emission-rate-based credit program for those who made early investments in renewable energy or implemented demand-side energy efficiency programs in disadvantaged communities.⁹⁸

Under the CPP, states must (1) develop their emission rates from existing power plants, (2) achieve interim CO₂ emission rates between 2022 to 2029, and (3) achieve final emission rates by 2030.⁹⁹ However,

& CHRISTOPHER H. SCHROEDER, ENVIRONMENTAL LAW: STATUTORY AND CASE SUPPLEMENT 600 (2018).

⁹³ Obama EPA's CPP, *supra* note 89, at 64,663.

⁹⁴ *Id.* at 64,665.

⁹⁵ PERCIVAL ET AL., *supra* note 15, at 555–56 (explaining that Congress passed two different versions of 111(d) when the CAA was amended in 1990); *Legal Memorandum Accompanying Clean Power Plan for Certain Issues*, EPA, <https://www.epa.gov/sites/production/files/2015-11/documents/cpp-legal-memo.pdf> [<https://perma.cc/ERG6-MV6Z>] (last visited Nov. 12, 2019).

⁹⁶ Obama EPA's CPP, *supra* note 89, at 64,664.

⁹⁷ *Id.* at 64,667; *id.* n.6 (stating that "in quantifying the emission reductions that are achievable through application of the BSER," EPA established three building blocks: (a) "building block 1 will apply to affected coal-fired steam EGUs," (b) "building block 2 will apply to all affected steam EGUs (both coal-fired and oil/gas-fired)," and (c) "building block 3 will apply to all affected EGUs.").

⁹⁸ *Id.* at 64,670.

⁹⁹ *Id.* at 64,664; *see id.* at 64,668 ("The final rule requires that the state plan submittal include a timeline with all of the programmatic plan milestone steps the state will take

each state has discretion in determining how best to achieve this targeted goal.¹⁰⁰ The CPP also guided the states to use a variety of tools to achieve this goal, including source-by-source command-and-control measures, interstate cap-and-trade mechanisms, renewable portfolio standards, and energy efficiency programs.¹⁰¹ The states must submit the plan to the EPA for its approval under the CPP.¹⁰²

On October 23, 2015, the Obama administration’s EPA published its final rule intended to curb GHG emissions from existing coal- and natural gas-fired power plants.¹⁰³ Many states challenged the final rule in the D.C. Circuit Court alleging that the CPP is an illegal attempt by the EPA to reorganize the nation’s energy grid.¹⁰⁴ Although the CPP was designed to provide much flexibility to states to promulgate and manage their own GHG emissions subject to the EPA’s consultation, President Obama noted that the states had failed to perceive the threat caused by power plants even though “among stationary sources in the United States and among fossil fuel-fired EGUs, coal-fired units are by far the largest emitters of GHGs.”¹⁰⁵ Nevertheless, after a series of procedural turmoil, in 2016, the D.C. Circuit decided to hear the case *en banc*.¹⁰⁶

In 2017, President Trump signed Executive Order 13,783 in which he repealed President Obama’s CPP¹⁰⁷ and directed EPA administrator Scott Pruitt to propose a new rule that stated in part that the new rule-making proceeding should begin “as soon as practicable . . . and consistent with law.”¹⁰⁸ President Trump’s Executive Order presents many

between the time of the state plan submittal and the year 2022 to ensure that the plan is effective as of 2022.”).

¹⁰⁰ Obama EPA’s CPP, *supra* note 89, at 64,666.

¹⁰¹ *See generally id.*

¹⁰² *Id.* at 64,667 (describing state plans).

¹⁰³ Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,510 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

¹⁰⁴ *See* PERCIVAL ET AL., *supra* note 15, at 553–54.

¹⁰⁵ Obama EPA’s CPP, *supra* note 89, at 64,677.

¹⁰⁶ *See* PERCIVAL ET AL., *supra* note 15, at 553–54.

¹⁰⁷ Exec. Order No. 13,783, Promoting Energy Independence and Economic Growth, 82 Fed. Reg. 16,093 (Mar. 28, 2017) [hereinafter Trump’s Exec. Order] (“It is in the national interest to promote clean and safe development of our Nation’s vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation.”).

¹⁰⁸ *Id.* at 16,095; *see* Robert Percival, *Scott Pruitt’s approach to pollution control will make the air dirtier and Americans less healthy*, THE CONVERSATION (May 18, 2018), <http://theconversation.com/scott-pruitts-approach-to-pollution-control-will-make-the-air-dirtier-and-americans-less-healthy-96501> [<https://perma.cc/26HE-RAZP>] (“Pruitt helped persuade

constitutional and environmental challenges. For example, the Order said that “[i]t is in the national interest to promote clean and safe development of our Nation’s vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation.”¹⁰⁹ President Trump also ordered the Department of Justice to “review existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources.”¹¹⁰ Furthermore, the Order also defined burden as anything that “unnecessarily obstruct[s], delay[s], curtail[s], or otherwise impose[s] significant costs on the siting, permitting, production, utilization, transmission, or delivery of energy resources.”¹¹¹

On the other hand, the United States Supreme Court in *Youngstown Sheet & Tube Co. v. Sawyer* established a framework determining the constitutionality of executive orders.¹¹² In *Youngstown*, the Court explained that the president’s issuance of an executive order is a valid presidential action if it rests on the Constitution or on congressional inputs.¹¹³

One scholar postulated that the executive order rises in the executive department and dies in the executive department itself. The question is why should we be worried about this executive order? Consistent with the scholar’s comment, it is clear that President Trump’s Executive Order 13,783 does not fall within any of the established legal frameworks, i.e., either under a constitutional framework or under the *Youngstown* holding. On the other hand, the practice of issuing executive orders by former U.S. presidents suggests that the Trump administration’s Executive Order is a part of the executive function. In that sense, it is less likely that President Trump’s Executive Order may violate the Constitution.

It is a well-established notion in the United States that any act of Congress must be grounded in a specific provision of the Constitution.¹¹⁴ Nevertheless, Representative Gary Palmer (R-Alabama) introduced a bill,

President Donald Trump to withdraw from the Paris climate accord, making the United States the only country in the world to reject the pact. At Trump’s urging, Pruitt has moved to repeal the Obama administration’s Clean Power Plan . . .”).

¹⁰⁹ PERCIVAL & SCHROEDER, *supra* note 92, at 829–31; *see* Trump’s Exec. Order, *supra* note 107, at 16,093.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *See* *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 588–89 (1952).

¹¹³ *Id.* at 587.

¹¹⁴ *See* *Marbury v. Madison*, 5 U.S. 137, 173–78 (1803).

“Stopping EPA Overreach Act of 2017” (“House Bill 637”) on behalf of Congress.¹¹⁵ The bill states that the “term ‘air pollutant’ does not include carbon dioxide, water vapor, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, or sulfur hexafluoride.”¹¹⁶ House Bill 637 has been currently referred to the subcommittee on water resources and environment.¹¹⁷ If this bill is passed, the EPA’s authority will be severely compromised.¹¹⁸ President Trump’s Executive Order and congressional interference raised several constitutional challenges.¹¹⁹ Furthermore, House Bill 637 states that

(1) the Environmental Protection Agency has exceeded its statutory authority by promulgating regulations that were not contemplated by Congress in the authorizing language of the statutes enacted by Congress; (2) the Environmental Protection Agency was correct not to classify greenhouse gases as pollutants prior to 2009; (3) no Federal agency has the authority to regulate greenhouse gases under current law; and (4) no attempt to regulate greenhouse gases should be undertaken without further Congressional action.¹²⁰

Although President Trump’s Executive Order might not have violated the constitution by repealing President Obama’s Executive Order on the CPP, it has undoubtedly violated the Supreme Court’s ruling in *Massachusetts v. EPA* in which the Court held that under the CAA, the EPA has authority to regulate CO₂ emissions because CO₂ is considered an air pollutant.¹²¹ In *Massachusetts v. EPA*, several states and environmental groups filed a petition against the EPA alleging that the EPA has the authority to regulate GHG emissions from new motor vehicles under section 202(a)(1) of the CAA.¹²²

¹¹⁵ Stopping EPA Overreach Act of 2017, H.R. 637, 115th Cong. (2017), <https://www.congress.gov/bill/115th-congress/house-bill/637/text> [<https://perma.cc/2VZ2-GCLJ>] [hereinafter H.R. 637].

¹¹⁶ *Id.*

¹¹⁷ *See id.*

¹¹⁸ *Id.*; Lloyd Alter, *The “Stopping EPA Overreach Act” redefines what a pollutant is and stops regulation of greenhouse gases*, TREEHUGGER (Feb. 15, 2017), <https://www.treehugger.com/environmental-policy/stopping-epa-overreach-act-redefines-what-pollutant-and-stops-regulation-greenhouse-gases.html> [<https://perma.cc/H3CW-XQR9>].

¹¹⁹ *See* Alter, *supra* note 118.

¹²⁰ H.R. 637, *supra* note 115.

¹²¹ *Massachusetts v. EPA*, 549 U.S. 497, 505 (2007).

¹²² *Id.* The Court observed that 42 U.S.C. § 7521(a)(1) (2012) reads as follows:

Contrary to House Bill 637, in *Massachusetts v. EPA*, the Court held that GHG emissions fit well within the CAA's definition of "air pollutant" and that they could be regulated if the EPA determines that any air pollutant causes or contributes a threat to human health or the environment.¹²³ This shows that the Court did not say that the EPA must regulate GHG emissions, but left it on the EPA to make that determination based on its scientific studies and expertise.¹²⁴ Additionally, the Court also explicitly acknowledged that global warming is real and is caused by the GHG emissions as covered under the CAA.¹²⁵ Although the Court in *Marbury v. Madison* and subsequent cases made it clear that the Court has authority under the Supremacy Clause to determine what the law is, it is possible that we may have a different outcome in future cases since the Supreme Court now has more Republican-appointed justices.¹²⁶

The above discussion suggests that President Trump's Executive Order might not have violated the Constitution. In 2018, the EPA issued a proposed rule replacing the CPP with the Affordable Clean Energy ("ACE") rule.¹²⁷ The EPA asked the D.C. Circuit Court to withdraw the

The [EPA] Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.

Id. at 506.

¹²³ *Id.*; see also *Utility Air Regulatory Grp. v. EPA*, 573 U.S. 302, 333 (2014) ("Specifically, the Agency may not treat greenhouse gases as a pollutant for purposes of defining a major emitting facility (or a modification thereof) in the PSD context or a major source in the Title V context."); *Am. Electric Power Co. v. Connecticut*, 564 U.S. 410, 423 (2011) (holding that federal public nuisance suits are displaced by the CAA and that EPA has been delegated the authority to regulate greenhouse gases under CAA).

¹²⁴ See, e.g., *Massachusetts v. EPA*, 549 U.S. at 533; *Ethyl Corp. v. EPA*, 541 F.2d 1, 12 (D.C. Cir. 1976) (en banc) (upholding EPA's decision to regulate lead emissions from motor vehicles that "will endanger the public health or welfare") (quoting U.S.C. § 7545(c)(1)).

¹²⁵ *Massachusetts v. EPA*, 549 U.S. at 507–08 ("In 1978, Congress enacted the National Climate Program Act . . . which required the President to establish a program to 'assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.'").

¹²⁶ See *Kisor v. Shulkin*, 869 F.3d 1360 (Fed. Cir. 2018) (upheld the agency's interpretation of its own regulation under the *Auer* deference standard); *Kisor v. Wilkie*, No. 18-15, 2018 WL 6439837 (Dec. 10, 2018) (cert. granted). *But see infra discussion* Part III.

¹²⁷ *Proposal: Affordable Clean Energy (ACE) Rule*, EPA, <https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule> [<https://perma.cc/3ZKV-2MAT>] (last updated June 19, 2019) ("the Affordable Clean Energy (ACE) rule [w]ould establish emission guidelines for states to develop plans to address greenhouse gas emissions

proceedings.¹²⁸ Since the EPA repealed its own previous rule, for constitutional concerns, President Trump may argue that there is no violation of the Constitution if the ACE rule is challenged. However, if Trump-led Congress limits the EPA’s authority, constitutional and environmental concerns may be raised in the future. By doing so, Trump-led Congress will be wiping out the CAA entirely along with many other laws and will push us back into the dinosaur era, which would be an unimaginable scenario for the United States and the world.

C. *The Modi Administration’s Ideologies of Energy Independence and Economic Growth Through the Lens of Constitutionalism*

Interestingly, the Modi administration adopted a somewhat different approach but with the same results—increasing coal production and consumption through the congressional shield.¹²⁹ However, the Supreme Court recently held that, if an ordinance is promulgated under Article 123, it has the same force and effect as a law enacted by the legislature and is subject to the conditions discussed earlier.¹³⁰

Days after the Supreme Court cancelled the allocation of 214 coal mining blocks, the Modi administration issued an ordinance to end the public sector’s monopoly on coal production, stating that a company or joint venture “may carry on coal mining operations, in any form either for its own consumption, sale or for any other purpose.”¹³¹

from existing coal-fired power plants. ACE would replace the 2015 Clean Power Plan, . . . because it exceeded EPA’s authority. The Clean Power Plan was stayed by the U.S. Supreme Court and has never gone into effect.”). *But see* PERCIVAL ET AL., *supra* note 15, at 554 (stating that the CPP was passed by the Senate on Nov. 17, 2015 by a vote of 52–46 and the resolution passed the House by a vote of 242–180 on Dec. 1, 2015. However, President Obama vetoed both CPP joint resolutions. Therefore, the EPA regulations remained in effect).

¹²⁸ Ellen M. Gilner, *DC Circuit Scraps Clean Power Plan Litigation*, BLOOMBERG ENV’T (Sept. 17, 2019), <https://news.bloombergenvironment.com/environment-and-energy/d-c-circuit-scraps-clean-power-plan-litigation> [<https://perma.cc/D4A6-BNYF>].

¹²⁹ See Krishna Kumar Singh v. Union of India, (2017) 3 SCC 1, 83 (“An Ordinance which is promulgated under Article 123 or Article 213 has the same force and effect as a law enacted by the legislature, but it must (i) be laid before the legislature; and (ii) it will cease to operate six weeks after the legislature has reassembled or, even earlier if a resolution disapproving it is passed. Moreover, an Ordinance may also be withdrawn.”).

¹³⁰ *Id.*

¹³¹ See Coal Mines (Special Provisions) Second Ordinance, *supra* note 7 (“No suit, prosecution or other legal proceedings shall lie against the Central Government, nominated authority, commissioner of payment or designated custodian or any person acting on their behalf, in respect of anything which is done or intended to be done in good faith under this Act.”).

To understand the details and motive behind the ordinance, it is worthwhile to take a look at India's coal mining history. It seems that since 1973, India's central government has had control of coal mining, and Coal India Limited ("CIL") is the sole authority which can develop, reserve, and sell coal to private parties and companies.¹³² Two statutes generally cover coal mining in India. First, the Mines and Minerals (Development & Regulation) Act ("MMDR") states that "mines and development of minerals should in the public interest be under the control of the [central government]."¹³³ Second, the Coal Mines (Nationalisation) Act ("CMNA") provides that "regulation and development of mines to the extent provided in [sections 3(3), 3(4), and 30(2)] should, in the public interest, be under the control of the [central government], [and] the state government and that state's undertaking rights have been preempted."¹³⁴

However, as the CIL could not meet the growing demand for coal, the central government decided to privatize the coal mining blocks.¹³⁵ In 1996, the central government published a notification stating that cement companies would be exempted under the CMNA.¹³⁶ Slowly, the central government exempted private entities, including iron and steel companies, cement companies, power generating companies, and coal washing companies.¹³⁷ However, the state remained responsible for granting licenses followed by consultation with the central government and subsequent authorization.¹³⁸

¹³² *About Us*, COALINDIA LIMITED, <https://www.coalindia.in/en-us/company/aboutus.aspx> [<https://perma.cc/V2F7-YEAF>] (last visited Nov. 12, 2019) ("(CIL) the state-owned coal mining corporate came into being in November 1975. With a modest production of 79 Million Tonnes (MTs) at the year of its inception CIL today is the single largest coal producer in the world. Operating through 82 mining areas CIL is an apex body with 7 wholly owned coal producing subsidiaries and 1 mine planning and consultancy company spread over 8 provincial states of India.") (alteration in original); *India Supreme Court Declares Coal Licenses Illegal*, BBC NEWS (Aug. 25, 2014), <https://www.bbc.com/news/world-asia-india-28924592> [<https://perma.cc/76TM-QET9>]; Alam Srinivas, *Q&A: Five Things About India's Coal Scandal*, BBC NEWS (Sept. 4, 2012), <https://www.bbc.com/news/world-asia-india-19463728> [<https://perma.cc/F3D8-34XB>] (discussing India's coal mining scam and whether the government's method is flawed).

¹³³ *See* *Manohar Lal Sharma v. The Principal Sec'y & Others*, (2015) 9 SCC 516, 521 (India) (citing Mines & Minerals (Development & Regulation) Act, No. 67 of 1957, INDIA CODE).

¹³⁴ *Id.* 540–41; *see also* Coal Mines (Nationalisation) Act, No. 26 of 1973, INDIA CODE [hereinafter CMNA].

¹³⁵ *Manohar Lal Sharma*, 9 SCC at 571.

¹³⁶ *Id.* at 554.

¹³⁷ *Id.* at 525.

¹³⁸ *Id.* at 612.

The constitutionality of the Modi government’s actions was challenged in 2014 in *Manohar Lal Sharma v. The Principle Secretary & Others*.¹³⁹ In that case, two states filed a petition to the Supreme Court alleging that the coal allocation process by the central government from 1993 to 2010 was arbitrary and capricious under the MMDR and section 3(3)(a) of the CMNA.¹⁴⁰ The plaintiffs alleged that under section 3(3)(a) of the CMNA, either the central government, or its undertakings/corporations, or a company having end-use plants in iron, steel, power, washing of coal, or cement could not carry out coal mining operations.¹⁴¹ The plaintiffs

¹³⁹ *Id.* at 516.

Later, other interested parties intervened. The case does not indicate who the plaintiff, Manohar Lal Sharma, is and his relevance with the present case. However, an early history of the filing shows that the State of Maharashtra and another state initiated the claim. It seems that the first scam of coal block was started in 2005. Only about seven states have major coal-blocks authority while other states do not. The governments of Odisha and Maharashtra argued that they have “virtually non-existent” roles because the Screening Committee allocated coal blocks without considering states’ recommendations and that was against the Acts. Initially, the states told the Court that they do not have any objections with the Center in allocating coal blocks. Then the Court established a committee to determine what the states have to say about allocations. The Court found that states want the resources under their control rather than under the control of the Union government. These States argue that such allocation methods contravene provisions of the Mines and Minerals Development and Regulation (MMDR) Act of 1957 and the Coal Mines Nationalization Act. These States argue that under these Acts, the Center has the power only to regulate and develop mines and that the leasing process mostly stays with the state government. Instead, “the allocation letter by the Central government leaves practically nothing for the state government to decide, except to carry out the formality of processing the application and for execution of the lease deed with the beneficiary selected by the Center.” *See generally id.*

Furthermore, the Constitution of India, schedule VII, includes List I (54 blocks, under sole control of the union government); List II (55 blocks, also under the control of the union government); and List III (20–23 blocks, under the states’ control). Many scam cases against the Union government, state governments, and Central Board of Investigation (CBI) have been reported since 2010. INDIA CONST. art. 246.

¹⁴⁰ *Manohar Lal Sharma*, 9 SCC at 612.

¹⁴¹ *Id.* at 559. The Supreme Court noted that

The State Governments as the owners of coal blocks within their territories participated in the Screening Committee meetings. At no stage, did anybody object to the allocation of coal blocks by the Central Government through the Screening Committee route. The learned Attorney General in this regard referred to the affidavits filed on behalf of Maharashtra, Madhya Pradesh, Odisha, Chhattisgarh, West Bengal, Jharkhand and Andhra Pradesh. The process of allocation was participatory. The coal blocks were allocated to private companies only from the approved list of blocks to be offered for captive mining and the interests of CIL, being paramount, were duly protected and preserved.

Id.

claimed that the state utilities and state-owned companies were not allowed for commercial mining, but as many as thirty-eight coal blocks were allocated to state public sector undertakings for commercial mining that was inconsistent with the CMNA's purpose.¹⁴² The Supreme Court observed that almost all state-owned utilities then signed agreements with private companies to sublease the right to mine coal either at the market price or at the CIL price.¹⁴³ The Supreme Court cancelled 204 coal mines/blocks allocated to the various governments and private companies since 1993 under the provisions of the CMNA.¹⁴⁴

Subsequently, Prime Minister Modi promulgated an ordinance to bring so-called "transparency and accountability."¹⁴⁵ As per constitutional norms, the Coal Mines (Special Provisions) Bill 2015 was passed by the Parliament, which amended certain provisions of the CMNA ("CMNA of 2015") authorizing the central government for allocation of coal mines by way of auction and allotment for the sale of coal.¹⁴⁶ The Coal Mines (Special Provisions) Ordinance of 2014 was repealed (or merged) with the subsequent enactment of the Coal Mines (Special Provisions) Act of 2015.¹⁴⁷ Therefore, it is less likely to present any constitutional concerns even though it may present environmental concerns as discussed in Part III.¹⁴⁸

¹⁴² The Supreme Court said that allocation of mines by states must be in compliance with the requirements of twin constitutional tests under art. 14: the distribution of natural resources should (1) subserve the common good, and (2) be in the public interest. They concluded that the allocation, therefore, should not violate art. 14. *Id.* at 613.

¹⁴³ *Id.* at 611.

¹⁴⁴ *Manohar Lal Sharma*, 9 SCC at 612. The Supreme Court noted that it has not been transparent; there is no proper application of mind; it has acted on no material in many cases; relevant factors have seldom been its guiding factors; there was no transparency and guidelines have seldom guided it. On many occasions, guidelines have been honored more in their breach. There were no objective criteria, nay, no criteria for evaluation of comparative merits. The approach had been ad hoc and casual. There was no fair and transparent procedure, all resulting in unfair distribution of the national wealth. Common good and public interest have, thus, suffered heavily. Hence, the allocation of coal blocks based on the recommendations made in all the 36 meetings of the Screening Committee is illegal.

Id.

¹⁴⁵ Coal Mines (Special Provisions) Second Ordinance, *supra* note 7.

¹⁴⁶ *Id.*

¹⁴⁷ The Coal Mines (Special Provisions) Act, No. 11 of 2015, INDIA CODE, <https://indiacode.nic.in/bitstream/123456789/2146/1/201511.pdf> [<https://perma.cc/B86V-L2FU>].

¹⁴⁸ See discussion *infra* Part III.

Under the amended law, the government has privatized 10–20 percent of coal mining rights to private sectors and state governments as they were before.¹⁴⁹ Under this new law, the states and private sectors can compete with each other for better markets without any restriction of the quantitative mining. However, it seems that the union government still holds 80–90 percent of coal leasing rights.¹⁵⁰ The Modi administration says that due to this new rule of “coal block auctions,” coal imports have shrunk by around 9 percent in 2017 and that its decision to conduct a fair and transparent bidding for coal mines has benefitted from feeding coal-fired power plants.¹⁵¹ In sum, more coal production will be likely due to a more competitive price of raw coal for energy production.¹⁵²

More recently, the Supreme Court realized that the executive ordinance may pose a threat to public resources.¹⁵³ The Supreme Court also observed that the state and central governments may team up and misappropriate public natural resources.¹⁵⁴ These observations by the Supreme Court are mirrored in *Krishna Kumar Singh v. State of Bihar*.¹⁵⁵ In that case, the State of Bihar’s governor promulgated an ordinance in 1989 providing control and management of the state’s Sanskrit schools.¹⁵⁶ However, the ordinance lapsed in 1992, but the state promulgated the same ordinance several times, nevertheless.¹⁵⁷ The Supreme Court held that the satisfaction of the governor would not be immune from judicial review and the court in this exercise would not have to determine the sufficiency or adequacy of the material.¹⁵⁸ The Supreme Court noted that

¹⁴⁹ *Manohar Lal Sharma*, 9 SCC at 612.

¹⁵⁰ See INDIA CONST. art. 246.

¹⁵¹ Laura Wood, *Coal in India 2017—A Comprehensive Analysis on Trends & Outlook of Coal Sector—Research and Markets*, BUS. WIRE (June 20, 2017), <https://www.businesswire.com/news/home/20170620005810/en/Coal-India-2017-Comprehensive-Analysis-Trends> [<https://perma.cc/ED89-CN6G>].

¹⁵² *Id.* But see *India’s FY18 thermal coal imports up 8 percent: Government*, THE ECON. TIMES (July 27, 2018), <https://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/indias-fy18-thermal-coal-imports-up-8-government/articleshow/65168145.cms> [<https://perma.cc/B7AV-QGWQ>].

¹⁵³ See Raksha Kumar, *Why is Modi’s ‘clean energy’ India bankrolling dirty coal?*, SOUTH CHINA MORNING POST (July 27, 2018), <https://www.scmp.com/week-asia/business/article/2156742/why-modis-clean-energy-india-bankrolling-dirty-coal> [<https://perma.cc/HE55-P8M9>].

¹⁵⁴ See *infra* notes 156–61 and accompanying text.

¹⁵⁵ *Krishna Kumar Singh v. State of Bihar*, (2017) 3 SCC 1 (India) (per curiam) (decided under art. 123 (applicable to the President of India) and art. 213 (applicable to the State Governors)).

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* at 37–40 (discussing the facts of the case).

¹⁵⁸ *Id.* at 84.

ordinances should not be promulgated repeatedly without being first placed before the legislature.¹⁵⁹ The Supreme Court suggested that unless there was an emergency, the ordinance's power should not be executed under Article 123 of the Constitution.¹⁶⁰

Moreover, while previous Congresses thought about taking private property for mining and other acts, the government enacted the Land Acquisition Act of 2013 ("LAA"), which required "mandatory consent" of the landowners.¹⁶¹ Previously, any prospective land buyer must have acquired consent from 70–80 percent of other landowners in their state.¹⁶² This clause provided protection to private landowners' property in the balkanization approach to "takings" in certain situations, including building new power plants.¹⁶³ The Modi administration, however, viewed this as a hinderance to infrastructure projects, including coal-fired power plant projects and perceived it to cause damages of about \$313 billion dollars.¹⁶⁴ However, the Modi administration did not present this ordinance to Parliament to satisfy its existence of circumstances rendering it necessary to take immediate action.¹⁶⁵ The Supreme Court has interpreted that "necessity" must be coupled with "immediate action" conveying the sense that it is imperative to promulgate an ordinance.¹⁶⁶ The Supreme

¹⁵⁹ *Id.* (holding that "[r]e-promulgation of Ordinances is a fraud on the Constitution and subversion of democratic legislative processes, as laid down in the judgment of the Constitution Bench in D.C. Wadhwa.").

¹⁶⁰ *Id.* at 83 (stating that "ordinance-making power does not constitute the President or the Governor into a parallel source of law making or an independent legislative authority").

¹⁶¹ The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement Act, No. 30 of 2013, INDIA CODE [hereinafter Land Act]. This act was passed at the last moment when the previous administration was about to end its term. The Modi administration took office in January 2014 and immediately passed an ordinance to repeal certain causes that the Modi administration viewed as hinderances. Jairam Ramesh, *A five-year review of Land Acquisition Act, 2013: How the law is empowering millions despite Centre's unwillingness*, DAILY O (Oct. 15, 2018), <https://www.dailyo.in/politics/a-five-year-review-of-land-acquisition-act-2013-how-the-law-is-empowering-millions-despite-centre-s-unwillingness/story/1/27218.html> [<https://perma.cc/8M7X-PVZK>].

¹⁶² See Land Act, *supra* note 161; see also G. Seetharaman, *Five years on, has land acquisition act fulfilled its aim?*, THE ECON. TIMES (Sept. 1, 2018), <https://economictimes.india.com/news/economy/policy/five-years-on-has-land-acquisition-act-fulfilled-its-aim/articleshow/65639336.cms> [<https://perma.cc/7FEM-G82C>].

¹⁶³ See Land Act, *supra* note 161.

¹⁶⁴ In 2014, the Modi administration passed an ordinance to amend some of the provisions of the Act of 2013. Ramesh, *supra* note 161.

¹⁶⁵ *Id.*

¹⁶⁶ Krishna Kumar Singh & Anr v. State of Bihar & Ors, (2017) 2 SCJ 136 (India) (discussing the ordinance-making power of the president and the governor under Chapter IV of the Constitution of India stating that "if and so far as an ordinance under this

Court held in *Krishna Kumar Singh* that the Modi administration did not consult with Parliament and promulgated this ordinance in the middle of the night without any emergency presented.¹⁶⁷ Therefore, under the holding of *Krishna Kumar Singh*, the Modi administration may have violated the Constitution.

Interestingly, on the climate front, India has been ranked third overall in its emissions of GHGs, out of which the energy sector contributes approximately 67–80 percent of India’s GHG emissions.¹⁶⁸ Since 1973, coal mining is under control of the union government through the CMNA.¹⁶⁹ Within these four decades, the coal consumption in the commercial sector has increased 700 percent and thus, “coal continues to occupy a center-stage of India’s energy scenario.”¹⁷⁰

In recent years, India’s coal generation capacity has increased 300 percent and coal consumption has increased 200–300 percent.¹⁷¹ Nevertheless, across the country, regular electricity cuts are a known phenomenon in India.¹⁷² It is hard to believe that more than 300–400 million people lack access to utilities.¹⁷³ One study found that air emissions in

article makes any provision which would not be valid if enacted in an act of the legislature of the state assented to by the Governor shall be void.”).

¹⁶⁷ *Id.*

¹⁶⁸ GOV’T OF INDIA, MINISTRY OF ENV’T., FORESTS AND CLIMATE CHANGE (MOEF), FIRST BIENNIAL UPDATE REPORT TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 16–17 (Dec. 2015); Rajesh Nath & Ajmal Fawad, *Coal Industry In India: Geology & Reserves of Indian Coal*, NBM & CW, <https://www.nbmcw.com/report/construction-in-fra-industry/34782-coal-industry-in-india.html> [<https://perma.cc/LKE8-F6HM>] (last visited Nov. 12, 2019) (stating that in 1947, coal production was nearly 30 million tons per year and coal mining was a privatized industry. The coal industry was nationalized in 1972–73 by investing in massive infrastructure projects); *India*, WORLD RES. INST., <http://www.wri.org/our-work/topics/india> [<https://perma.cc/Q6F5-4FJ7>] (last visited Nov. 12, 2019).

¹⁶⁹ See CMNA, *supra* note 134.

¹⁷⁰ *Coal Indian Energy Choice*, GOV’T OF INDIA, MINISTRY OF COAL (Sept. 23, 2013), <https://coal.nic.in/content/coal-indian-energy-choice> [<https://perma.cc/SQX3-VNNY>] (“Considering the limited reserve potentiality of petroleum & natural gas, eco-conservation restriction on hydel project and geo-political perception of nuclear power, coal will continue to occupy center-stage of India’s energy scenario.”).

¹⁷¹ See generally CONSERVATION ACTION TRUST & URBAN EMISSIONS, COAL KILLS: HEALTH IMPACTS OF AIR POLLUTION FROM INDIA’S COAL POWER EXPANSION 1, <http://www.indiaairquality.info/wp-content/uploads/docs/Air%20Pollution%20from%20India%20Coal%20TPPs%20-%20LowRes.pdf> [<https://perma.cc/R72J-SHLC>] [hereinafter INDIA, COAL KILLS].

¹⁷² Annie Gowen, *India’s huge need for electricity is a problem for the planet*, WASH. POST (Nov. 6, 2015), https://www.washingtonpost.com/world/asia_pacific/indias-huge-need-for-electricity-is-a-problem-for-the-planet/2015/11/06/a9e004e6-622d-11e5-8475-781cc9851652_story.html [<https://perma.cc/V5MS-N98Z>].

¹⁷³ INDIA, COAL KILLS, *supra* note 171, at 1.

India will increase, at least, 200 percent through 2030 because total consumption of coal will likely increase two to three times from 660 million tons to 1800 million tons per year.¹⁷⁴ Accordingly, CO₂ emissions will likely increase from 1590 million tons to 4320 million tons per year.¹⁷⁵

The history of corruption, poverty, and coal mining have caused profound neglects that remain in India's environmental portfolio.¹⁷⁶ The analysis in Sections B and C showed that President Trump and Prime Minister Modi's governments have many similarities. Nevertheless, every constitution is different in the sense that it has a complex and distinctive provenance. Each constitution is the product of specific practices, opportunities, and socio-economic contexts. These imperatives are embedded in the narratives of the constitution itself or guided through the narratives of the highest court's interpretation of the law as discussed in Parts II and III.

II. THE RISE OF ENVIRONMENTALISM AND ENVIRONMENTAL JUSTICE CONCERNS IN THE UNITED STATES AND INDIA

A. *Introduction to Environmentalism*

There is no precise formula defining environmentalism.¹⁷⁷ In a broad stroke, environmentalism is public exasperation because of environmental desertions stemming from political competitiveness, constitutional ambiguity, and weak environmental laws that result in harm to low-income communities, public health, and environmental degradation.¹⁷⁸ Scholars generally have explained that environmentalism is a combination of efforts by "regulatory states" and "social welfare" groups to preserve and protect the environment and human health.¹⁷⁹

¹⁷⁴ *Id.* at 16.

¹⁷⁵ *Id.*

¹⁷⁶ Keith Schneider, *Mismanagement of Abundance: Constellation of Coal Mines Across India Not Enough to Prevent Blackouts*, CIRCLE BLUE (June 28, 2013), <https://www.circleofblue.org/2013/world/mismanagement-of-abundance-constellation-of-coal-mines-across-india-not-enough-to-prevent-blackouts/> [<https://perma.cc/L4EY-TRH6>].

¹⁷⁷ PERCIVAL ET AL., *supra* note 15, at 44 (citing ROBERT PAEHLKE, ENVIRONMENTALISM AND THE FUTURE OF PROGRESSIVE POLITICS 117–19, 137–45 (1989) (Robert Paehlke argues that "Environmentalism involves, in effect, a scientific revolution, a paradigm shift . . . Science can never again be an activity solely devoted to removing humanity from nature, lifting us out of natural limits—for centuries, if not millennia, its implicit goal. . . . But environmentalism fundamentally shifts the purpose of science.")).

¹⁷⁸ See Sidney A. Shapiro & Robert R.M. Verchick, *Inequality, Social Resilience, and the Green Economy*, 86 UMKC L. REV. 963, 975 (2018).

¹⁷⁹ See, e.g., Robert V. Percival, *Environmental Federalism: Historical Roots & Contemporary Models*, 54 MD. L. REV. 1141, 1141 (1995) ("how responsibilities for environmental protection

Unlike constitutionalism, environmentalism may not rest on the constitution itself. However, environmentalism often springs from the government’s activity and inactivity in promulgating, implementing, and enforcing environmental laws and regulations. In that sense, environmentalism may arise from the government’s lack of constitutionalism, but it is not necessary that the government must have violated the constitution to pollute the air, water, and soil. As explained earlier, there are still many loopholes that politicians often use to justify their acts.

It is well-known that coal-fired power plants emit toxic pollutants that further contaminate ground and surface water with toxins like carbon dioxide, sulfur dioxide, mercury, cadmium, lead, and arsenic through four primary pathways.¹⁸⁰ First, the coal-fired power plant emits toxic substances into the air that then accumulate into water bodies.¹⁸¹ Second, coal-fired power plants discharge toxic effluents directly into water bodies.¹⁸² Third, coal ash contains heavy metals and toxic substances which can seep into an underground aquifer.¹⁸³ Lastly, coal mining causes pollution in various ways.

Additionally, the regulation of coal-fired power plants plays a fundamental role in promoting environmentalism. On the one hand, coal-fired power plants can have a direct impact on GHG emissions, which can be regulated by enacting statutes or regulations. However, an “invisible

policy have been, and should be, allocated between federal, state, and local governments”); see also Joshua Ulan Galperin, *Trust Me, I’m a Pragmatist: A Partially Pragmatic Critique of Pragmatic Activism*, 42 COLUM. J. ENVTL. L. 425, 491 (2018) (“Environmentalism exists because there is public interest at stake in protecting the environment, whether it is economic, aesthetic, or otherwise.”); Shapiro & Verchick, *supra* note 178, at 993 (“environmentalism—as expressed in regulation and advocacy—must look for ways for the regulatory state and the social welfare state to work in concert”).

¹⁸⁰ See *Utilities Admit Coal Plants in 22 States are Violating Federal and State Pollution Standards by Leaking Toxic Chemicals into Ground*, EARTHJUSTICE (Dec. 19, 2018), <https://earthjustice.org/news/press/2018/utilities-admit-coal-plants-in-22-states-are-violating-federal-and-state-pollution-standards-by-leaking-toxic-chemicals-into-groundwater> [<https://perma.cc/NK6U-SEGT>] (“Numerous utilities have just disclosed that toxic waste from 67 coal-fired power plants have led to harmful amounts of chemicals in nearby groundwater in excess of state and/or federal standards in Alabama, . . . Michigan, New Mexico, North Carolina, Pennsylvania, South Carolina, Utah, Virginia, West Virginia, and Wyoming.”).

¹⁸¹ See PERCIVAL ET AL., *supra* note 15, at 27–28 (discussing mercury contamination from power plants); see also *M.C. Mehta v. Union of India*, (2004) 12 SCC 118, 170 (stating that mining activities close to a township has the tendency to degrade the environment and is likely to affect air, water, and soil and impair the quality of life of inhabitants of the area); EARTHJUSTICE, *supra* note 180.

¹⁸² EARTHJUSTICE, *supra* note 180.

¹⁸³ *Coal Ash Contaminates Our Lives*, EARTHJUSTICE, <https://earthjustice.org/advocacy-campaigns/coal-ash> [<https://perma.cc/3JPL-QHD9>] (last visited Nov. 12, 2019).

emission of GHG” occurs while mining the raw coal, which is often ignored by GHG emission regulations.¹⁸⁴ Additionally, coal mining causes many health-related problems to minority and low-income communities living in the area.¹⁸⁵ In that sense, environmentalism can be local, national, or global, as discussed below.

B. *Environmentalism Through the Global Climate Conventions*

Although environmental law is local by nature, it has a profound impact on the global scale. On the global level, environmentalism is

¹⁸⁴ See EISEN ET AL., *supra* note 75, at 96 (“Methane is also a potent greenhouse gas. However, MSHA standards do not focus on preventing methane emissions. To the contrary, the statute permits ventilating methane from underground mines to the surface and then it can be regulated under MSHA.”).

[P]articulate matter transported by the wind as a result of excavations, blasting, and transportation of materials; wind erosion fugitive dust from tailings facilities; stockpiles; waste dumps; and haul roads. Exhaust emissions from mobile sources (cars, trucks, heavy equipment) also raise these particulate levels. In the roads, it was observed that the movement of heavy vehicles, which had tons of coal meant for transportation to other places, was seen creating air pollution. It was also noticed that during transportation, the coal-loaded vehicles were normally uncovered. Even the trains which transport coal from the source point to the designated place pose serious threats as the loads are literally uncovered. Mahanadi Coalfields Limited authorities are not at all concerned to monitor the uncovered vehicles. In a discussion, MCL officials blamed the State authorities for not monitoring these issues. They claimed that around 85% of coal is being transported through train, and only 15% coal is transported by truck to local industries.

On air pollution and mining operations: Niharranjan Mishra & Nabanita Das, *Coal Mining and Local Environment: A Study in Talcher Coalfield of India*, 10 AIR, SOIL & WATER RESOURCES 1, 4 (2017).

¹⁸⁵ See *infra* Section II.D; see also EPA, MEMORANDUM FROM LISA P. JACKSON, ADMINISTRATOR TO ALL EPA EMPLOYEES (Jan. 2, 2010), https://archive.epa.gov/epapages/newsroom_archive/newsreleases/bb39e443097b5df5852576a9006a5a86.html (encouraging EPA employees to “expand[] the conversation on environmentalism and work[] for environmental justice”); Obama EPA’s CPP, *supra* note 89, at 64,670. In this rule, EPA also included an environmental justice component, stating that:

Climate change is an environmental justice issue. Low-income communities and communities of color already overburdened by pollution are disproportionately affected by climate change and are less resilient than others to adapt to or recover from climate-change impacts. While this rule will provide broad benefits to communities across the nation by reducing GHG emissions, it will be particularly beneficial to populations that are disproportionately vulnerable to the impacts of climate change and air pollution.

Id. See generally PERCIVAL ET AL., *supra* note 15, at 20, 22–23, 25 (discussing environmental justice).

developed through a series of political conferences establishing a new mechanism to facilitate and promote environmental compliance.¹⁸⁶ Globalization of environmental concerns can be seen as early as 1972 when many nations collectively agreed under the leadership of the U.N. that humans can do harm to the environment.¹⁸⁷ In 1972, about 133 countries approved the U.N.’s First Conference on the Human Environment in Stockholm.¹⁸⁸ This was the centerpiece of the international climate regime and global concerns of environmental problems.¹⁸⁹ On behalf of India, Prime Minister Indira Gandhi attended the conference and said that “the inherent conflict is not between conservation and development, but between environment and reckless exploitation of man and earth in the name of efficiency.”¹⁹⁰ Inspired by this Conference, India also updated and enacted many of its environmental laws and continues to follow the Conference’s principle in many public interest litigation cases as of today.¹⁹¹

In 1982, the U.N. Conference on Environment and Development (“UNCED”) was the culmination of two decades of persistent and restless efforts to protect the environment and to foster international environmentalism.¹⁹² In 1992, 178 nations attended UNCED in Rio de Janeiro, which is often known as the “Rio Earth Summit.”¹⁹³ The U.N. Secretary-General Boutros Ghali in his opening statement said that it “marked an important milestone in awakening the world to the need for a development process that does not jeopardize future generations.”¹⁹⁴ The Rio Summit

¹⁸⁶ See generally PERCIVAL ET AL., *supra* note 15, at 1205, 1209–10; Robert V. Percival, *The Greening of the Global Judiciary*, 32 J. LAND USE & ENVTL. L. 333 (2017).

¹⁸⁷ United Nations, *Report of the United Nations on the Human Environment*, U.N. Doc. A/Conf.48/14/Rev.1 at 3 (1973) (“Through ignorance or indifference, we can do massive and irreversible harm to the earthly environment on which our life and well-being depend”).

¹⁸⁸ *Id.*

¹⁸⁹ *United Nations Conference on the Human Environment (Stockholm Conference)*, UNITED NATIONS, <https://sustainabledevelopment.un.org/milestones/humanenvironment> [<https://perma.cc/VWX3-TRCS>] (last visited Nov. 12, 2019).

¹⁹⁰ *Indira Gandhi’s Speech at the Stockholm Conference in 1972*, LASU—LAWS ENVTL. BLOG (July 28, 2012), <http://lasulawsenvironmental.blogspot.com/2012/07/indira-gandhis-speech-at-stockholm.html> [<https://perma.cc/A7JT-9EM3>]; see DOABIA, *supra* note 67, at 577.

¹⁹¹ See *Indian Council for Envi-Legal Action v. Union of India*, (1996) 3 SCC 212 (describing the provision of the Stockholm Declaration of 1972 that has been incorporated in the Indian Constitution by amendment in 1976); DOABIA, *supra* note 67, at 577 (stating that “the Stockholm Declaration of 1972 has been [seen] as the ‘Magna-Carta of our environment’”).

¹⁹² PERCIVAL ET AL., *supra* note 15, at 1210.

¹⁹³ Stephanie Meakin, *The Rio Earth Summit: Summary of the United Nations Conference on Environment and Development*, U.N. Doc. BP-317E (Nov. 1992), <http://publications.gc.ca/site/eng/301977/publication.html> [<https://perma.cc/6EY3-NARQ>].

¹⁹⁴ ACKMEZMUDHOO & ROMEELA MOHEE, *BIOREMEDIATION AND SUSTAINABILITY: RESEARCH AND APPLICATIONS 2* (1st ed. 2012).

marshalled political commitment by different nations' governments, NGOs, and other interested entities who were committed to improving the human environment.¹⁹⁵ The hallmark of the Rio Earth Summit was that it raised an enormous amount of public awareness.¹⁹⁶

Despite many contrary notations, President George H.W. Bush attended the Rio Summit along with William K. Reilly, the Administrator of the EPA.¹⁹⁷ More importantly, President Bush signed the Framework Convention on Climate Change on behalf of the United States, and it was ratified by Congress in 1992 and entered into force in March 1994.¹⁹⁸ The United States was consequently among the original parties to this agreement to which 154 nations were parties (and now there are 194 member nations).¹⁹⁹ During the UNCED, the countries agreed to set out a framework for action aimed at stabilizing atmospheric concentrations of GHGs to avoid "dangerous anthropogenic interference" with the global climate system.²⁰⁰

In 1997, many developed nations, including the United States and many European countries, met in Japan and adopted the Kyoto Protocol.²⁰¹ Under this Protocol, industrialized nations and some European nations agreed to reduce GHG emissions on an average of 6 to 8 percent below 1990 levels by 2008–2012.²⁰² On behalf of the United States, President Clinton attended this Conference and signed the Protocol, but Congress took no further action for ratification.²⁰³ In 2001, when George W. Bush

¹⁹⁵ Meakin, *supra* note 193.

¹⁹⁶ See PERCIVAL ET AL., *supra* note 15, at 1234.

¹⁹⁷ William K. Reilly Fund for Environmental Governance & Leadership, AM. U., <https://www.american.edu/spa/cep/reilly-fund/> [<https://perma.cc/PP3V-D5GR>] (last visited Nov. 12, 2019) ("He served as captain in the U.S. Army and as a senior staff member in the White House Council on Environmental Quality. He headed the U.S. delegation to the United Nations Earth Summit at Rio in 1992.").

¹⁹⁸ See PERCIVAL ET AL., *supra* note 15, at 1234.

¹⁹⁹ *Id.*

²⁰⁰ DOABIA, *supra* note 67, at 341 ("[T]he United Nations Conference on Environment and Development which was held in June 1992 marked the culmination of two decades of persistent and restless efforts to protect environment and to foster international environmentalism."); Meakin, *supra* note 193.

²⁰¹ See PERCIVAL ET AL., *supra* note 15, at 1235. Under the Kyoto Protocol, parties adopted a regime based on pledges that were entirely different from the previous targets and timings. *Id.*

²⁰² See *id.*

²⁰³ Darren Samuelsohn, *Clinton memos show climate tactics*, POLITICO (June 6, 2014), <https://www.politico.com/story/2014/06/clinton-library-memos-kyoto-protocol-china-india-107545> [<https://perma.cc/7YCX-5M72>].

took office, he explicitly repudiated the Protocol as he promised he would during his presidential campaign.²⁰⁴

Again in 2009, the delegates of many nations met in Copenhagen, Denmark.²⁰⁵ The goal of UNCED was to establish an ambitious global climate agreement.²⁰⁶ Besides leaders, diplomats, and officials, a large number of civil society organizations also participated in the accord.²⁰⁷ In that accord, both developed and developing nations volunteered and pledged to reduce the emission of GHGs.²⁰⁸ The accord was not legally binding; rather, it was a voluntarily entered framework for emission reduction targets for industrialized nations and emission mitigation actions by developing nations.²⁰⁹

Concerned with coal-fired power plants, President Obama attended the Paris Agreement on behalf of the United States and Prime Minister Modi attended on behalf of India.²¹⁰ President Obama used his Clean Power Plan to regulate CO₂ from power plants as evidence that the United States was serious about regulating CO₂ and was taking the climate change battle seriously.²¹¹ The Paris Agreement was developed to deal with GHG emissions, reduction, mitigation, and other issues.²¹² Notably, the Paris Agreement was designed to ensure that the global temperature should not increase more than 2 degrees Celsius by the end of the century.²¹³ On Earth Day, April 22, 2016, 174 countries signed the agreement in New York.²¹⁴ The countries were free to show their environmental enthusiasm to curtail their GHG emissions within their existing legal systems.²¹⁵

²⁰⁴ PERCIVAL ET AL., *supra* note 15, at 1235.

²⁰⁵ Robert V. Percival, *Global Law & the Environment*, 86 WASH. L. REV. 579, 587 (2011) [hereinafter Percival, *Global Law & Env't*].

²⁰⁶ See PERCIVAL ET AL., *supra* note 15, at 1237–39. See generally Percival, *Global Law & Env't*, *supra* note 205, at 229 (“President Obama announced that the United States would promise to reduce its GHG emissions by seventeen percent below 2005 levels by 2020. He also promised to attend part of the Copenhagen Conference while on his way to Sweden to accept the Nobel Peace Prize.”).

²⁰⁷ Percival, *Global Law & Env't*, *supra* note 205, at 590.

²⁰⁸ PERCIVAL ET AL., *supra* note 15, at 1238–39.

²⁰⁹ *Id.* at 1239.

²¹⁰ *Id.*; see *supra* note 10 and accompanying text.

²¹¹ PERCIVAL ET AL., *supra* note 15, at 1239.

²¹² *Id.*

²¹³ See *id.*

²¹⁴ See *Paris Agreement*, *supra* note 2.

²¹⁵ *Nationally Determined Contributions (NDCs)*, UNITED NATIONS, <https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs> [https://perma.cc/LRQ5-75RR] (last visited Nov. 12, 2019).

The purpose of the Paris Agreement clearly indicates that voluntarily stepping forward is an option to handle pollution. Environmentalism, thus, can be seen at the global level. However, how far these two democracies' leaders are implementing their international commitment at the domestic level is questionable.

C. *Environmentalism in the United States and India: Air Pollution Due to Coal-Fired Power Plants and Coal Mining*

It is apparent from the earliest stages of the U.N. conferences that, one way or another, global leaders were interested in taking action on climate change.²¹⁶ The parallel efforts concerning GHGs from power plants at the domestic level were also necessary.²¹⁷

In the United States, however, environmentalism at the domestic level reached its zenith in the early 1960s when coal-fired power plants and smelters were operating in full throttle.²¹⁸ Smog was viewed as economic independence and modernization by the public and politicians.²¹⁹ In the United States, coal had been produced as early as the 1930s and remained a major source of energy.²²⁰ However, air pollution caused by coal-fired power plants sparked a new level of environmental activism in the United States during the 1960s and 1970s, which propelled the gradual federal regulatory regime.²²¹ Pennsylvania's deadly air pollution

²¹⁶ Percival, *Global Law & Env't*, *supra* note 205, at 586.

²¹⁷ *Id.* at 587; *see supra* Sections II.A–B.

²¹⁸ *See, e.g.*, PERCIVAL ET AL., *supra* note 15, at 523 (discussing Donora fog); Sean D. Hamill, *Unveiling a Museum, A Pennsylvania Town Remembers the Smog that Killed 20*, N.Y. TIMES (Nov. 1, 2008), <https://www.nytimes.com/2008/11/02/us/02smog.html> [<https://perma.cc/PDY4-UMHB>] (stating that the Donora incident was a big part of the environmental movement); *The 1948 Donora Smog Historical Marker*, EXPLOREPAHISTORY.COM, <http://explorepahistory.com/hmarker.php?markerId=1-A-14D> [<https://perma.cc/FZT5-G5SX>] (last visited Nov. 12, 2019) (“A pollution disaster unprecedented in American history, the ‘Donora Death Fog,’ made air pollution a national concern. The next year, President Harry Truman called for the first national air pollution conference. In 1955 Congress finally passed the nation’s first Clean Air Act.”).

²¹⁹ EXPLOREPAHISTORY.COM, *supra* note 218.

²²⁰ *Unity Real Estate Co. v. Hudson*, 178 F.3d 649, 680 (3d Cir. 1999) (Aldisert, J., concurring) (discussing coal miners’ revolutionary approach towards mine owners in the 1930s).

²²¹ EISEN ET AL., *supra* note 75, at 95 (stating that “public attention focused on the hazards of the coal mining in the 1960s. Congress passed the Federal Coal Mine Health and Safety Act of 1969, 30 U.S.C. § 801, and the Black Lung Benefits Act of 1972, 30 U.S.C. § 900.”). In 1970, President Nixon signed the National Environmental Policy Act (NEPA) and in the same year the Clean Air Act was amended. Gaylord Nelson, *Earth Day ’70: What It Meant*, EPA (Apr. 1980), <https://archive.epa.gov/epa/aboutepa/earth-day-70-what-it-meant.html> [<https://perma.cc/C698-Y9NN>].

(Donora Smog) and Southern California’s acute air pollution drew national attention.²²²

Although underground mining was the primary method of coal production both east and west of the Mississippi River, in the 1970s the surface-mining approach became more prevalent, and the popularity of underground mining gradually decreased over time.²²³ This could be due to health and environmental consequences that underground mining has created.²²⁴ Since the 1980s, coal consumption also increased substantially, and from 1994 to 2012 the United States produced more than one billion tons of coal.²²⁵ President Jimmy Carter, a Democrat, began promoting the development of coal-fired power plants to alleviate oil dependency and to emphasize domestic energy independence.²²⁶ President Jimmy Carter also deregulated the railroads to allow the transportation of coal from the western states to the eastern states because western coal had less sulfur content and less heat content than eastern coal, which meant that more coal had to be mined and shipped through the railroads to meet supply and demand.²²⁷ Not to mention, many health hazards also surfaced during that era.²²⁸

²²² See *supra* note 218 and accompanying text; *History*, CAL. AIR RESOURCE BOARD, <https://ww2.arb.ca.gov/about/history> [<https://perma.cc/J9WX-JK6L>] (last visited Nov. 12, 2019) (“On August 30, 1967, a diverse group of California leaders came together to unify statewide efforts to address severe air pollution. Governor Ronald Reagan approved the Mulford-Carrell Air Resources Act to create the State Air Resources Board, committing California to a unified, statewide approach to aggressively address the serious issue of air pollution in the state.”).

²²³ NAT’L RES. COUNCIL, *COAL: RESEARCH AND DEVELOPMENT TO SUPPORT NATIONAL ENERGY POLICIES* 57–62 (2007). *But see* Craig B. Griffin, *West Virginia’s Seemingly Eternal Struggle from a Fiscally and Environmentally Adequate Coal Mining Reclamation and Bonding Program*, 107 W. VA. L. REV. 105, 110 (2004) (“Between 1968 and 1971, many West Virginia residents became part of a nationwide movement which called for environmental reform. One of the goals of this movement was to abolish surface coal mining in its entirety.”).

²²⁴ See EISEN ET AL., *supra* note 75, at 95–97.

²²⁵ *Coal Production, 1949–2017*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/coal/annual/pdf/table_es1.pdf [<https://perma.cc/GJH4-97T6>] (last visited Nov. 12, 2019).

²²⁶ See MARY H. COOPER, *ECONOMIC DEREGULATION: EDITORIAL RESEARCH REPORTS* (1987), <https://library.cqpress.com/cqresearcher/document.php?id=cqresrre1987072400> [<https://perma.cc/26LE-U75H>] (“Shortly after he captured the presidency in 1976, Democrat Jimmy Carter promised to ‘free the American people from the burden of overregulation.’ He added: ‘We must look, industry by industry at what effect regulation has. . . Whenever it seems likely that the free market would better serve the public, we will eliminate government regulation.’”).

²²⁷ *Id.* (“Congress passed the Staggers Rail Act to deregulate the railroad industry.”).

²²⁸ See generally EISEN ET AL., *supra* note 75.

The EIA projects that U.S. coal production will gradually increase through 2030 and then will eventually stabilize.²²⁹ According to the EIA, U.S. coal consumption decreased 1.9 percent from the 2016 level to 716.9 MMst out of which “the electric power sector accounted for about 92.8 percent of the total U.S. coal consumed in 2017.”²³⁰ The EIA report reveals that

[s]ince the beginning of the recession, CO₂ emissions from coal have generally declined. Although total coal CO₂ emissions in 2017 were lower than those from petroleum and other liquids, . . . [t]he decline in coal CO₂ emissions has contributed to a lower overall carbon intensity of U.S. energy consumption and kept emissions below pre-recession levels.²³¹

In 2017, “the electric power sector accounted for about 38 percent of U.S. primary energy consumption and produced 34 percent of total U.S. energy-related CO₂ emissions,” in which coal accounted for 69 percent of CO₂ emissions.²³²

Coal production and consumption, therefore, is shockingly alarming. One source said that for every pound of coal used in the production of energy, coal-fired power plants emit four pounds of CO₂.²³³ Studies show that

²²⁹ U.S. ENERGY INFO. ADMIN., ANNUAL OUTLOOK 2014 (2014), [https://www.eia.gov/outlooks/aeo/pdf/0383\(2014\).pdf](https://www.eia.gov/outlooks/aeo/pdf/0383(2014).pdf) [<https://perma.cc/29CK-V4JP>]; see Bingham Daniels, *Come Hell and High Water: Climate Change Policy in the Age of Trump*, 13 FIU L. REV. 65, 73 (2018) (“Coal had been declining since the 1980s, and over the past ten years there have been steep declines in coal, mainly due to new gas that has been produced. It is hard to imagine that President Trump’s policies, which basically aid natural gas development, are going to do anything but make gas cheaper[.]”).

²³⁰ *Annual Coal Report*, U.S. ENERGY INFO. ADMIN., <https://web.archive.org/web/20181220051936/https://www.eia.gov/coal/annual/> [<https://perma.cc/YY2W-WKLE>] (last visited Nov. 12, 2019); see also U.S. ENERGY INFO. ADMIN., U.S. ENERGY-RELATED CARBON DIOXIDE EMISSIONS, 2017 4 (Sept. 2018), https://www.eia.gov/environment/emissions/carbon/pdf/2017_co2analysis.pdf [<https://perma.cc/MP4V-R8C4>] (stating that “U.S. energy-related carbon dioxide emissions decreased 0.9% in 2017”) [hereinafter EIA CARBON DIOXIDE DATA].

²³¹ EIA CARBON DIOXIDE DATA, *supra* note 230.

²³² *Where Greenhouse Gases Come From*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/energyexplained/index.php?page=environment_where_ghg_come_from [<https://perma.cc/M5C6-AAUG>] (last visited Nov. 12, 2019).

²³³ See INDIA, COAL KILLS, *supra* note 171, at 15, 18. Tables 3 & 4 show that in 2014, coal mined was 660 million tons and CO₂ emitted was about 1,584 million tons. In 2030, if coal mined is 1,799 million tons, then CO₂ emissions will be 4,318 million tons. *Id.* at 15. This study states that PM_{2.5} will increase substantially and that a majority of India will be under the blanket of PM_{2.5}. *Id.* at 18.

even “state-of-the-art technology” can reduce only 40–70 percent of overall emissions.²³⁴ A study revealed that, in the United States, coal-fired power plants produce 130 million tons of coal ash, 41.2 tons of lead, 45,676 pounds of mercury, 3.1 million tons of SO₂, 1.5 million tons of NO_x, 576,185 million tons of CO₂, and 22,124 tons of volatile organic compounds per year.²³⁵ It is clear that the CAA was helpful in alleviating the overall air pollution, and legislating emissions from existing and new power plants under the CAA continues.²³⁶ Despite the EPA’s effort to regulate since the 1970s, the EPA has been so far unsuccessful due to significant influence and interference by the political branches of the government.²³⁷ The domestic environmental law addresses the emissions of GHG based on three regulatory models: (1) harm-based, (2) health-based, and (3) cost-based regulations.²³⁸

As discussed earlier, neither the Bush Jr. administration nor the Clinton administration made serious efforts to regulate GHG emissions.²³⁹ Rather, it was President Obama who viewed coal as a dirty fuel, which meant more money must be spent on pollution control equipment.²⁴⁰ The externalities caused by existing sources as well as new sources may be quite significant. Under section 111(d), the EPA requires states to regulate pollutants for which it has not established a NSPS and are not regulated as a NAAQS or a NESHAP.²⁴¹

²³⁴ ‘Clean Coal’ Technologies, Carbon Capture, and Sequestration, WORLD NUCLEAR ASS’N, <https://www.world-nuclear.org/information-library/energy-and-the-environment/clean-coal-technologies.aspx> [<https://perma.cc/5MVS-3FL3>] (last visited Nov. 12, 2019).

²³⁵ See *Cleaning up Coal Ash*, APPALACHIAN VOICES, <http://appvoices.org/coalash/> [<https://perma.cc/4SPG-L4C7>] (last visited Nov. 12, 2019) (“Every year, U.S. power plants produce 130 million tons of coal ash, which is the second largest waste stream in the country.”); *Coal and Air Pollution*, UNION CONCERNED SCIENTISTS, <https://www.ucsusa.org/clean-energy/coal-and-other-fossil-fuels/coal-air-pollution#.XDQwNy2ZMk8> [<https://perma.cc/Z2JA-MUNY>] (last visited Nov. 12, 2019) (describing pollution caused by coal-fired power plants in the United States).

²³⁶ See *Progress Cleaning the Air and Improving People’s Health*, EPA, <https://www.epa.gov/clean-air-act-overview/progress-cleaning-air-and-improving-peoples-health> [<https://perma.cc/A66K-EZHF>] (last updated Aug. 14, 2019); see also *Tennessee Clean Water Works v. TVA*, 905 F.3d 436, 440 (6th Cir. 2018) (stating that “significant amounts of pollutants [were leaked] into the river. Between 1970 and 1978, approximately 27 billion gallons of coal ash wastewater flowed directly from the Complex into the karst aquifer and then into the Cumberland River.”).

²³⁷ See generally PHILIPS REED & GREGORY WETSTONE, AIR AND WATER POLLUTION CONTROL LAW (1982).

²³⁸ See generally PERCIVAL ET AL., *supra* note 15; see *infra* discussion Part III.

²³⁹ See *supra* discussion Section II.B.

²⁴⁰ See *supra* discussion Section I.C.

²⁴¹ See PERCIVAL ET AL., *supra* note 15, at 553.

The Stockholm Convention likely led India to realize that a framework of laws was necessary to deal with the environment.²⁴² Globalization and global conventions have profoundly influenced India's environmental laws as well.²⁴³ India's legislative branch has enacted many well-established environmental laws, including the MMDR, the CMNA (amended in 2015), the Environmental Protection Act of 1986, the Water (Prevention and Control of Pollution) Act of 1974, and the Air (Prevention and Control of Pollution) Act of 1981.²⁴⁴ Under the Air Act, India only regulated emissions of particulate matter, which was set to 150 mg/nm³.²⁴⁵ When Parliament amended the Air Act in 2013, the particulate matter threshold shifted to 50 mg/nm³.²⁴⁶ New coal-fired power plants, however, do not have any emission standard for SO₂ and NO_x, but they are covered under the national ambient air quality standards.²⁴⁷

A 2014 study revealed India's 111 coal-fired power plants consumed 660 million tons of coal in total and emitted 695 kilotons of particulates with a diameter of less than 2.5 micrometers (PM_{2.5}), 3,147 kilotons of SO₂, 3,774 kilotons of NO_x, 2,402 kilotons of CO, and 1,584 million tons of CO₂.²⁴⁸ This study also points out that the impact of these emissions regarding social losses was estimated to be 80,000–115,000 premature deaths and “more than 20 million asthma cases from exposure to air pollution.”²⁴⁹ India estimates that coal production will increase to more than 1.7 billion tons by the year 2030.²⁵⁰

Interestingly, an important principle of air pollution caused by the use of coal (or coke) has been introduced by the Supreme Court in *M.C. Mehta v. Union of India*.²⁵¹ In that case, plaintiff M.C. Mehta, an

²⁴² See generally PERCIVAL ET AL., *supra* note 15, at 1209–10.

²⁴³ See generally Robert V. Percival, *The Globalization of Environmental Law*, 26 PACE ENVTL. L.J. 455 (2009).

²⁴⁴ See generally DOABIA, *supra* note 67 (explaining in detail existing environmental regulations in India).

²⁴⁵ INDIA, COAL KILLS, *supra* note 171, at 7.

²⁴⁶ *Id.*

²⁴⁷ *Id.* at 1, 7 (“For SO₂ and NO_x, there are no mandatory requirements to operate emission control equipment, except for specifications for stack heights, assuming that the emissions will be dispersed to farther distances and thus diluting the ambient concentrations. . . . Some of the new installations and extensions are equipped with low-NO_x burners, with little details on their operational performance.”).

²⁴⁸ *Id.* at 15.

²⁴⁹ *Id.* at 5, 9.

²⁵⁰ *Id.* at 15.

²⁵¹ *M.C. Mehta v. Union of India*, (1997) 2 SCC 343. This petition was filed in 1986, and the Court delivered the opinion in Dec. 1996. The final opinion was published in 1997.

environmentalist, filed public interest litigation alleging that the foundries, industries, and the refinery at Mathura were using coal for an industrial purpose that was damaging one of the world’s seven wonders, Agra’s Taj Mahal.²⁵² Plaintiff argued that the sulfur dioxide emitted by these industries was causing acid rain and was polluting the ambient air around the Taj Trapezium Zone (“TTZ”) and damaging the monument.²⁵³ After lengthy discovery, the Supreme Court said that the use of coal/coke must be stopped to prevent air pollution in the TTZ, stating that the principle of sustainable development requires a cost-benefit analysis between economic development and environmental protection.²⁵⁴ The Supreme Court also held that relocation of the industries from the TTZ was to be resorted to only if natural gas was not acceptable/available by/to the industries as a substitute for coal/coke.²⁵⁵

On the positive side, many utilities and environmentalists, including the International Energy Agency (“IEA”) are urging India to put more efforts to develop green energy solutions, including wind and solar power, to meet growing demands.²⁵⁶ The Natural Resources Defense Council (“NRDC”) India states that Prime Minister Modi recently made a “landmark announcement” to bring down “air pollution by 50 [percent] over the next five years in 100 non-attainment cities,” including “expanding monitoring networks, conducting health impact studies, and [increasing] public involvement.”²⁵⁷

Although environmentalism is a broad spectrum, which brings within its sweep regulatory mandates by the government, the government’s fabrication, in turn, cannot be sustained without powerful enforcement of environmental law. Based on the above analysis, it is hard to argue that both the Trump and Modi administrations carry any environmental spirit.

²⁵² *Id.* at 355–58.

²⁵³ *Id.*

²⁵⁴ *Id.* at 382–84.

²⁵⁵ *Id.* at 381–86. However, as of today, this case seems to be an ongoing affair and in December 2018, the Court held the government in contempt for not following the Supreme Court’s order.

²⁵⁶ See Stephen Leahy, *India Launches Massive Plan for Clean Power, Lighting, and Cars*, NAT’L GEOGRAPHIC (May 22, 2017), <https://news.nationalgeographic.com/2017/05/india-solar-wind-renewable-power-electric-cars-leds/> [<https://perma.cc/4GXU-GRDK>] (stating that while President Trump wants to revive America’s coal industry, India is embracing renewables).

²⁵⁷ Anjali Jaiswal & Sayantan Sarkar, *Air Pollution: Indian Cities Start to Fight Back*, NRDC (Feb. 22, 2018), <https://www.nrdc.org/experts/anjali-jaiswal/air-pollution-indian-cities-start-fight-back> [<https://perma.cc/HP9T-DBQD>].

The courts, however, have played an instrumental role in filling the gap that politics have created in these two democracies.²⁵⁸

D. Environmentalism: Coal-Related Environmental Justice Problems—an Often-Ignored Regime

It is undeniable that air pollution caused by coal mines and coal-fired power plants impose substantial costs to society concerning human health.²⁵⁹ In 1967, the Surgeon General of the United States, Dr. William Stewart, testified before the Subcommittee on Air and Water Pollution of the Committee on Public Works that coal is “unquestionably a factor in the development of not one, but many, diseases affecting literally millions of our people.”²⁶⁰ It is clear that since 1967, we are aware that coal mines can cause severe health and socio-economic imbalances.²⁶¹ Coal-fired power plants often cause air pollution, acid rain, global warming, and health problems, including asthma, cancer, heart and lung ailments, neurological problems, and other severe environmental and public health consequences.²⁶²

Although in the United States there are many stringent environmental laws addressing coal miners,²⁶³ coal mines employ more than

²⁵⁸ *Calvert Cliffs Coordinating Comm. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1111 (D.C. Cir. 1971) (holding that the court must “assess claims that one of the agencies charged with its administration has failed to live up to the congressional mandate. Our duty, in short, is to see that important legislative purposes, heralded in the halls of Congress, are not lost or misdirected in the vast hallways of the federal bureaucracy.”); see *Satish Kumar v. Union of India*, (Dec. 3, 2018) Nat'l Green Tribunal No. 47/2018 (explaining that “Di-(2-ethylehexyl) phthalate (DEHP), one of the compounds among the plasticizers used in plastic manufacturing, has been described by the US Environmental Protection Agency (USEPA) as a probable human carcinogen, a potential endocrine disruptor and is believed to be harmful by inhalation, generating possible health risks and irreversible effects.”).

²⁵⁹ Rachel Sapire, *Engulfed in a Toxic Cloud: The Effects of Coal Mining On Human Health*, HARV. C. GLOBAL HEALTH REV. (Feb. 1, 2012), <https://www.hcs.harvard.edu/hghr/print/spring-2011/coal-mining/> [<https://perma.cc/6V4H-J4V5>].

²⁶⁰ Paul H. Gerhardt, *Incentives to Air Pollution Control*, 33 L. & CONTEMP. PROBS. 358, 358 (1968).

²⁶¹ *Id.* at 358–59, 368.

²⁶² *See id.*

²⁶³ *See, e.g.*, Federal Coal Mine Health and Safety Act of 1969 (FCMSHA), 30 U.S.C. §§ 801, 901 (establishing health and safety standards for underground mining by delegating enforcement responsibility to the Federal Mine Safety and Health Administration (“MSHA”) and also prescribing permissible exposure limits for indoor air pollutants in mines); Black Lung Benefits Act of 1972, 30 U.S.C. § 900; *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1, 4, 39 (1976) (the Court upheld provisions of the Black Lung Benefits Act that required coal operators to compensate miners and their survivors for death

53,000 people in the United States.²⁶⁴ Lisa Evans, an attorney from Earthjustice says that an additional “1.5 million people of color live in the . . . areas of coal ash surface impoundments at 277 [coal-fired] power plants” in the United States.²⁶⁵ Many scholars have noted that low-income communities surround most mining areas.²⁶⁶ Furthermore, coal miners are prone to contract irreversible and progressive lung disease and chronic obstructive pulmonary disease, which includes chronic bronchitis and emphysema.²⁶⁷ These diseases are collectively known as “black lung.”²⁶⁸ Although numerous efforts have been made to eliminate and control black lung diseases, neither India nor the United States has accomplished the goal of ending black lung.²⁶⁹

A broad range of studies, which show that the people who reside in these areas are largely African Americans, followed by Hispanics, Whites, and Asians, respectively, have demonstrated the widespread environmental impacts of emissions from fossil fuel-fired electric power plants.²⁷⁰ A study shows that most people in the states where major coal-mining

or disability due to mining-related black lung disease); MSHA, Pattern of Violations Rule, 78 Fed. Reg. 5056 (2013).

²⁶⁴ *Table 18. Average Number of Employees by State and Mine Type, 2018 and 2017*, U.S. ENERGY INFO. ADMIN. (2018), <https://www.eia.gov/coal/annual/pdf/table18.pdf> [<https://perma.cc/9C3V-Y5CK>] (last visited Nov. 12, 2019) (describing the number of employees employed in coal mines in the United States).

²⁶⁵ Brian Bienkowski, *Toxic Coal Ash Hits Poor and Minority Communities Hardest*, SCI. AM. (Jan. 14, 2016), <https://www.scientificamerican.com/article/toxic-coal-ash-hits-poor-and-minority-communities-hardest/> [<https://perma.cc/5FAK-JB5R>] (“The EPA estimates at least 1.5 million people of color live in the catchment areas of coal ash surface impoundments at 277 power plants throughout the country, says Earthjustice attorney Lisa Evans in her planned testimony.”).

²⁶⁶ *See, e.g.*, Wendy Davis, *Out of the Black Hole: Reclaiming The Crown Of King Coal*, 51 AM. U. L. REV. 905, 906, 945–46 (2005) (stating that “1.5 million miners were injured . . . 15,196 people were killed in 717 mining disasters . . . twenty-four men died . . . in an underground mine fire and explosion . . . one hundred and eleven men burned to death in an explosion in Centralia, Illinois.”); Scott Matherson, Jr., *The State of Utah’s Role in Coal Mine Safety: Federalism Considerations*, 29 LAND RESOURCES & ENVTL. L. 143, 144–46 (2009) (discussing a tragedy in Utah coal mines).

²⁶⁷ *Nat’l. Mining Ass’n v. Dep’t of Labor*, 292 F.3d 849, 854 (D.C. Cir. 2002) (Black lung disease affects “a significant percentage of the nation’s coal miners with ‘severe, and frequently crippling, chronic respiratory impairment.’ It is caused by the ‘long-term inhalation of coal dust.’ A rare and serious form of the disease, known as ‘complicated pneumoconiosis,’ results in pulmonary impairment and respiratory disability.”).

²⁶⁸ *Id.* (black lung disease and other coal mine work-related illness may arise long after a miner quits working in the mine industry); 30 C.F.R. §§ 70–71, 75, 90.

²⁶⁹ *See infra* notes 272–86 and accompanying text.

²⁷⁰ *Id.*

activities are carried out are within depressed areas.²⁷¹ The Department of Labor (“DOL”) expressed concerns that “cases of black lung are increasing among the nation’s coal miners. Even younger miners are showing evidence of advanced and debilitating lung disease from excessive dust exposure.”²⁷² The federal government has paid “over \$44 billion in compensation for miners disabled by black lung since 1970.”²⁷³ A recent study conducted in the Appalachian regions shows that mountain-top-coal mining is linked with increased community risk of cancer where many people are living in “low-income communities.”²⁷⁴

²⁷¹ See Liz Newton et al., *Does West Virginia have the nation’s fourth-worst poverty rate?*, POLITIFACT (Dec. 10, 2018), <https://www.politifact.com/west-virginia/statements/2018/dec/10/mike-romano/does-west-virginia-have-nations-fourth-worst-pover/> [<https://perma.cc/D9ZF-4WCV>] (In 2017, West Virginia had the fourth highest poverty rate in the United States); Appalachian Regional Commission, *County Economic Status in Appalachia, Fiscal Year 2017 (2017)*, https://www.arc.gov/assets/maps/related/County-Economic-Status_FY2017_Map.pdf [<https://perma.cc/T8EH-P2ZQ>] (last visited Nov. 12, 2019) (In 2017, 47 percent of counties in the Appalachian region were “distressed” or “at-risk” while only 3 percent were “competitive” or “attainment.”); *Table 21: Coal Productivity By State and Mine Type 2017 and 2016*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/coal/annual/pdf/table21.pdf> [<https://perma.cc/LJR3-3XG3>] (last visited Nov. 12, 2019) (the numbers of mining employees in 2018 in various regions were as follows: 13,962 in West Virginia; 30,620 in Appalachia; and 53,583 in the United States as a whole).

²⁷² U.S. DEP’T OF LABOR, MINE SAFETY AND HEALTH ADMINISTRATION, MSHA’S PROPOSED RULE ON LOWERING MINERS’ EXPOSURE TO RESPIRABLE COAL MINE, INCLUDING CONTINUOUS PERSONAL DUST MONITOR 1 (Oct. 1, 2010), <https://arlweb.msha.gov/S&HINFO/BlackLung/FactSheetCoalMineDust2010.pdf> [<https://perma.cc/47R7-KX77>].

²⁷³ *Id.*

²⁷⁴ See, e.g., Michael Hendryx, *Personal, Family Health in Rural Areas of Kentucky with or without Mountaintop Coal Mining*, 29 J. RURAL HEALTH 79 (2013), <https://www.healthandenvironment.org/docs/Hendryxchecallmay2013.pdf> [<https://perma.cc/MJ37-KSM5>] (explaining the details of mountaintop mining and health and environmental consequences in the mountaintop areas);

Mountaintop coal mining in the Appalachian region in the United States causes significant environmental damage to air and water. Serious health disparities exist for people who live in coal mining portions of Appalachian, but little previous research has examined disparities specifically in mountaintop mining communities. A community-based participatory research study was designed and implemented to collect information on cancer rates in a rural mountaintop mining area compared to a rural non-mining area of West Virginia. A door–door health interview collected data from 773 adults. Self-reported cancer rates were significantly higher in the mining versus the non-mining area after control for respondent age, sex, smoking, occupational history, and family cancer history (odds ratio = 2.03, 95% confidence interval = 1.32–3.13). Mountaintop mining is linked to increased community cancer risk. Efforts to reduce cancer and other health disparities in Appalachia must focus on mountaintop mining portions of the region.

Unlike in the United States, in India, the per capita availability of land presents a new threat.²⁷⁵ In India, “[p]er capita availability of land (or land-man ratio) declined [severely] from 0.92 hectare in 1951 to 0.48 hectare in 1981 and to 0.33 hectare in the year 2000.”²⁷⁶ For example, in the year 1951, the available geographical area was 329 million hectares for 361 million Indians while in 2007, the geographic area remained the same for 1,096 million Indians.²⁷⁷ For comparison, in the United States, the available geographical area is 984 million hectares for a population of about 325 million.²⁷⁸ This is noteworthy because most of the power plants are located in densely populated areas in India.²⁷⁹ Therefore, the slightest change in air pollution would cause harm to a dense mass of people in India.

Most of the people residing in coal mining areas are those who struggle to make money to buy food.²⁸⁰ Throughout the world, disadvantaged communities typically suffer the highest burdens of environmental degradation.²⁸¹ One group that is often threatened by environmental hazards in developed and developing countries alike are mine workers, who often suffer from the “black lung disease.”²⁸² These mine workers experience excessive exposure to methane, and other toxic chemicals, and lack access to health and education services.²⁸³ This shows that the state

Michael Hendryx et al., *Self-Reported Cancer Rates in Two Rural Areas of West Virginia with and Without Mountaintop Coal Mining*, *J. Comm. Health*, 37 *J. COMMUNITY HEALTH* 320, 320 (2012), https://motherjones.com/wp-content/uploads/final_jch_cancer_2011.pdf [<https://perma.cc/NV5J-LNGB>]; Patrick C. McGinley, *From Pick and Shovel to Mountaintop Removal: Environmental Justice in the Appalachian Coalfields*, 34 *ENVTL. L.* 21, 56 (2004) (“The coal industry’s competition-driven movement to new mining methods in central Appalachia adversely impacted coalfield communities both above and below the earth’s surface.”).

²⁷⁵ See *infra* text accompanying notes 276–78.

²⁷⁶ GANESAMURTHY, *supra* note 68, at 42.

²⁷⁷ *Id.* at 43.

²⁷⁸ See *The World Factbook North America: United States*, CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html> [<https://perma.cc/C2WY-CG7Z>] (last updated Sept. 10, 2019).

²⁷⁹ See INDIA, COAL KILLS, *supra* note 171, at 9–10.

²⁸⁰ See Axel Harmeit-Sivers, *India: Rich in Coal but Poor in Energy*, HEINRICH BOLL STIFTUNG EUROPEAN UNION (Nov. 18, 2015), <https://eu.boell.org/en/2015/11/18/india-rich-coal-poor-energy> [<https://perma.cc/WJR9-RTLJ>].

²⁸¹ See, e.g., PERCIVAL ET AL., *supra* note 15, at 292 (stating that “the Flint tragedy dramatically highlights an environmental justice problem—environmental risks continue to be disproportionately concentrated on poor and minority community”).

²⁸² EISEN ET AL., *supra* note 75.

²⁸³ C.Ö. Karacan et al., *Coal mine methane: A review of capture and utilization practices with benefits to mining safety and to greenhouse gas reduction*, 86 *INT’L J. COAL GEOLOGY* 121, 124 (2011) (“A strong relationship exists between gas emissions rates and geological

and central governments are not adequately considering health impacts to miners. Instead, they do a “cost-benefit” analysis of coal production against the harm to human health.

In 2014, 355,904 people worked in 588 coal mines.²⁸⁴ A study shows that between 2001 to 2014, 564 miners lost their lives due to mining activities in India.²⁸⁵ Although India has well-developed child labor laws, recently the New York Times reported that many children are still found working in significant numbers of coal mines.²⁸⁶

In 1985, the Supreme Court, for the first time, considered the imbalance that mining activities present in *Rural Litigation and Entitlement*

factors, such as stratigraphy, and the gas contents and strengths of the overlying and underlying strata. There is not a simple solid mathematical expression to uncover this relation. Geomechanical models coupled with fluid-flow models are usually used to investigate this relationship.”).

²⁸⁴ MINISTRY OF LABOR & EMPLOYMENT, STATISTICS OF MINES IN INDIA VOL.1 (COAL) 6 (2014), [https://www.dgms.gov.in/writereaddata/UploadFile/VOLUME-I-\(COAL\)%202014636129985100886136.pdf](https://www.dgms.gov.in/writereaddata/UploadFile/VOLUME-I-(COAL)%202014636129985100886136.pdf) [<https://perma.cc/C7GD-AN8V>] (last visited Nov. 12, 2019).

²⁸⁵ Debi Tripathi & Charan Ala, *Identification of safety hazards in Indian underground coal mines*, 17 J. SUSTAINABLE MINING 175, 175–76 (2018), <https://www.sciencedirect.com/science/article/pii/S2300396018300211?via%3Dihub> [<https://perma.cc/F9JS-RTNZ>] (explaining the type and details of hazard elements and risks); see also *Occupational Health & Safety Ass'n v. Union of India*, (2014) 4 SCR 10, 11 (“The report produced by the petitioner indicates that half of the workers had lung function abnormalities, pulmonary function test abnormalities, sensor neuro loss, skin diseases, asthma, and so on.”).

²⁸⁶ See Gardiner Harris, *Children Toil in India's Mines, Despite Legal Ban*, N.Y. TIMES (Feb. 25, 2013), <https://www.nytimes.com/2013/02/26/world/asia/in-india-missing-school-to-work-in-the-mine.html> [<https://perma.cc/HTG2-T77S>] (stating that at least 28 million children are exploited as child labors); see also Anil Sasi, *Inside India's mines: Between Jan and June 2016, a death every third day*, INDIAN EXPRESS (Nov. 9, 2016), <https://indianexpress.com/article/india/india-news-india/inside-indias-mines-between-jan-and-june-2016-a-death-every-third-day-4365075/> [<https://perma.cc/BRW6-RQ2T>].

Even more worrying is the fact that states are willing to sidestep safety rules. As recent as June 24 this year, the Meghalaya cabinet petitioned the central government to exempt the state from the purview of the Coal Mines (Nationalization) Act, 1973, following a May 2014 ban by the National Green Tribunal on what is called “rat-hole coal mining”—a dangerous practice that involves digging pits ranging from five to 100 cubic meters into the ground to reach the coal seam and then making tunnels into the seam sideways to extract the coal. Despite the risk to workers, Meghalaya’s cabinet mandated the state’s mining and geology department to take up with the central government to exempt coal mining in the state from the purview of the Coal Mines (Nationalization) Act, 1973. Section 3 of the Coal Mines (Nationalization) Act, 1973, states that the right, title, interest of the owners in relation to the coal mines shall vest absolutely with the central government.

Id.

Kendra Dehradun v. State of Uttar Pradesh.²⁸⁷ In that case, the Supreme Court found that the question presented was “of grave moment and significance” because the question had significant “implications to the welfare of the generality of the people living in the country.”²⁸⁸ Although the Supreme Court did not address issues of environmental justice, social justice, or violation of fundamental rights, they acknowledged that conservation and development must be balanced in the best interest of the county.²⁸⁹

More recently, in *Conservation Action Trust v. Ministry of Coal*,²⁹⁰ the plaintiffs wanted to shut down mining operations claiming that, due to spontaneous coal fires, some of the mines were burning, and the Modi government failed to take any action.²⁹¹ The plaintiffs brought this case against twenty defendants, including the union government, its agencies, and mining companies.²⁹² The plaintiffs also alleged that seven of the defendants had failed to obtain environmental clearance.²⁹³ Furthermore, the plaintiffs asserted that the defendants should set up committees establishing more transparency in the management and operation of coal mines.²⁹⁴ The National Green Tribunal (“NGT”) noted that the plaintiffs “assertively contended that there is an urgent need to address the persisting incidents of fire in coal mines.”²⁹⁵ The NGT also found that “[t]he uncontrolled burning of coal in the coal mines in various states has become a source of serious health hazards to the people and destroys their habitation, pollutes the air and results in wastage of precious natural

²⁸⁷ Rural Litig. & Entitlement *Kendra Dehradun v. State of Uttar Pradesh*, (1985) 2 SCC 431, 438–41 (India). In this case, the Court was concerned with limestone quarries. The Court, based on the expert committee report, categorizes three groups based on their operating conditions. The Supreme Court found that category C quarries presented many hazardous conditions. Therefore, the Supreme Court ordered the closure of category C quarries. However, the Supreme Court was unable to determine whether Category B and C should be closed or not because the Supreme Court was sympathetic toward the mine workers who would be out of their jobs and would not be able to secure other jobs within a reasonable time. *Id.*

²⁸⁸ *Id.* at 435.

²⁸⁹ *Id.*

²⁹⁰ *Conservation Action Trust v. Ministry of Coal*, (July 24, 2017) National Green Tribunal, Ori. App. No. 670 of 2016 (India), <http://www.indiaenvironmentportal.org.in/files/coal%20fires%20NGT%20Judgement.pdf> [<https://perma.cc/3UFH-WUU6>].

²⁹¹ *Id.* § 1.a (arguing under Section 14 of the National Green Tribunal Act).

²⁹² *Id.* § 1.b (arguing that defendant numbers 13 to 20 must provide their EIS or EA).

²⁹³ *Id.* § 1.c–d (asking the court that the defendants (No. 13 to 20) should provide a detailed report regarding coal fires that are persistently occurring).

²⁹⁴ *Id.* § 2.

²⁹⁵ *Id.*

resources.”²⁹⁶ However, the NGT denied the plaintiffs’ application on the ground that the Supreme Court has been presented with similar issues, and the NGT does not want to create “parallel proceedings.”²⁹⁷

In another case, the Supreme Court held that the “compelling economic necessity to work in an industry exposed to health hazards due to indigence to bread-winning [for] himself and his dependents, should not be at the cost of health and vigo[ur] of the workman.”²⁹⁸ However, it seems that the government has not learned the lesson the Supreme Court has been teaching.

III. JUDICIAL ACTIVISM, JUDICIAL CONSERVATISM, OR JUDICIAL INTERPRETIVISM: WHETHER THE HIGHEST COURT OF THE NATION WILL SAVE THE DAY

Although the Modi administration may not have complied with the notion of environmentalism, the courts are there to save the day. It is clear that in both these democracies, environmental law is not solely the art of the legislative (or executive) branch alone.²⁹⁹ The Supreme Court, in cases like *Marbury*, tells us that the nation’s highest court has the authority to interpret laws.³⁰⁰ The United States courts’ decisions certainly could have affected the EPA’s approach in two ways: (1) by reducing the discretion of the EPA by maintaining a “conservatism” approach or (2) by reading the statutory language and agencies’ interpretation of that language creating an “interpretivism” approach.³⁰¹ Despite these different approaches, the Court has played a significant role in developing and shaping federal environmental law since the 1970s.³⁰² For example, in *Union*

²⁹⁶ Conservation Action Trust v. Ministry of Coal, Ori. App. No. 670 of 2016, § 2.

²⁹⁷ See *id.* § 22 (“the Hon’ble Supreme Court is dealing with larger issues and has been passing effective order and implementing the directions, it will not be proper to proceed with parallel proceeding in this case.”).

²⁹⁸ See Consumer Educ. & Research Centre v. Union of India, (1995) 3 SCC 42, 63.

²⁹⁹ Percival, *Presidential Power to Address Climate Change*, *supra* note 31, at 156 (stating that the president can overstep his constitutional authority in the absence of legislation to address climate change).

³⁰⁰ See, e.g., *Marbury v. Madison*, 5 U.S. 137, 177 (1803).

³⁰¹ See Robert V. Percival, *Judge Kavanaugh’s Activist Vision of Administrative Law*, REGULATORY REV. (Sept. 4, 2018), <https://www.theregreview.org/2018/09/04/percival-judge-kavanaugh-activist-vision-administrative-law/> [<https://perma.cc/3CES-C5H2>] [hereinafter Percival, REGULATORY REV.] (discussing Justice Kavanaugh’s inconsistent judicial determinations against EPA’s action while he was presiding in the District of Columbia Circuit Court of Appeals).

³⁰² See, e.g., *Ethyl Corp. v. EPA*, 541 F.2d 1, 14 (D.C. Cir. 1976) (en banc) (holding the

Electric Co. v. EPA,³⁰³ the Court held that the plants that were economically unable to be in compliance with the 1970 CAA must be shut down.³⁰⁴

The D.C. Circuit Court has established an important precedent of judicial review of EPA standard setting under CAA section 111 in *Sierra Club v. Costle*.³⁰⁵ The D.C. Circuit upheld the EPA’s 1979 standard for coal-fired power plants, reinforcing the high degree of judicial deference afforded to the EPA’s judgment in balancing factors in determining NSPS standard setting.³⁰⁶ The court upheld the EPA’s scrubbing technology as long as the EPA considers: (1) innovative technologies; (2) non-air health and environmental impacts; (3) criteria based on the content of the sulfur used rather than setting up a uniform standard; and (4) risk assessment, energy, economic, and other factors that EPA studied before making a decision.³⁰⁷ Of course, the court’s holding is significant because it did not preclude the EPA from stating that “reading section 111 to permit a variable standard based on the sulfur content of coal comports with common sense which suggests that the amount of sulfur in coal is the most relevant factor in designing standards to reduce emissions of sulfur.”³⁰⁸

Later in *Chevron U.S.A. Inc. v. NRDC*, the Court held that the EPA is authorized to interpret legislative language or statutes so long as Congress has not directly spoken to the precise language.³⁰⁹ The Court stated that when there is a gap in the statute, the EPA has discretion and can fill the gap by promulgating rules, as long as the EPA acts reasonably.³¹⁰ However, the Court still has the ability to exercise judicial

CAA authorizes EPA to regulate gasoline additives if their emissions will “endanger[] the public health or welfare.”); *Reserve Mining Co. v. EPA*, 514 F.2d 492, 500 (8th Cir. 1975) (upholding phase-down of toxic substance gradually because the substance in question, in the court’s opinion, did not show any imminent harm).

³⁰³ *Union Elec. Co. v. EPA*, 426 U.S. 246, 265 (1976).

³⁰⁴ *Id.* at 256; PERCIVAL ET AL., *supra* note 15, at 598 (“Justice Rehnquist [] expressed the view that the Act is a ‘harsh and draconian statute.’ Chief Justice Burger expressed the view that ‘the problems in this case are a consequence of letting a lot of little boys on Congressional staffs write legislation in noble prose that often takes little account of realities.’”).

³⁰⁵ *Sierra Club v. Costle*, 657 F.2d 298, 410 (D.C. Cir. 1981).

³⁰⁶ *Id.* at 347.

³⁰⁷ *Id.* at 346.

³⁰⁸ *Id.* at 319.

³⁰⁹ *See Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984) (establishing the two-part test).

³¹⁰ *Id.*; *City of Arlington v. FCC*, 569 U.S. 290, 297 (2013) (holding that an agency’s interpretation of the “jurisdictional” reach of its governing statute merits *Chevron* deference); *see also* Robert Percival, *In blocking EPA Clean Power Plan, is the Supreme Court wading deeper into politics?*, CONVERSATION (Feb. 12, 2016), <https://theconversation.com/in-blocking-epa-clean-power-plan-is-the-supreme-court-wading-deeper-into-politics-54513>

review.³¹¹ Historically, the Court wisely chose not to interfere in the agency decision-making processes due to the highly technical, scientific, economic, and social nature of environmental regulations that only agencies have the resources to study and analyze deeply before making any decision.³¹² The courts, on the other hand, do not have any such resources.³¹³

In *Whitman v. American Trucking Ass'ns, Inc.*,³¹⁴ the Court overturned the D.C. Circuit Court and upheld the constitutionality of the NAAQS rule-making process.³¹⁵ The Court addressed a provision of the CAA requiring the EPA to set ambient air quality standards “to protect the public health” with an “adequate margin of safety.”³¹⁶ The Court held that the discrete criterion set in the statutory language of section 7409(b) does not encompass cost, but it encompasses health and safety.³¹⁷ The Court held that the CAA precluded the EPA from taking cost consideration into account, stating that it was the tired old tactic against picking the economy over the environment.³¹⁸ *American Trucking* establishes that where the CAA expressly directs the EPA to regulate, cost is not factored into fostering new pollution control technology when needed to protect public health.³¹⁹

Moreover, in *EPA v. EME Homer City Generation, L.P.*,³²⁰ the Court held that “the CAA does not command that States be given a second opportunity to file a SIP after EPA has quantified the State’s interstate pollution obligations.”³²¹ The Court also held that the “E.P.A.’s cost-effective allocation of emission reductions [in] upwind States is a permissible, workable, and equitable interpretation of the Good Neighbor Provision.”³²²

[<https://perma.cc/KVK7-XB3C>] (“Whenever the court splits 5–4 along ideological lines, such suspicions may arise. But the truly extraordinary nature of the court’s 5–4 stay of the CPP strongly suggests that the court’s five conservatives are embracing politicians’ anti-EPA rhetoric before carefully considering the law.”).

³¹¹ See *Ethyl Corp. v. EPA*, 541 F.2d 1, 29 (D.C. Cir. 1976) (en banc) (stating that Congress did not leave “the Administrator free to set policy on his own terms.” This case helped EPA to phase out lead in gasoline additives).

³¹² *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 426, 428 (2011) (appreciating the federal agencies’ expertise in environmental cases).

³¹³ *Id.* at 428.

³¹⁴ *Whitman v. Am. Trucking Ass’ns, Inc.*, 531 U.S. 457 (2001).

³¹⁵ *Id.* at 486.

³¹⁶ *Id.* at 472 (citing 42 U.S.C. § 7409 (b)).

³¹⁷ *Id.* at 465.

³¹⁸ *Id.* at 486.

³¹⁹ *Id.* at 467–68, 485–86.

³²⁰ *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489 (2014).

³²¹ *Id.* at 524.

³²² *Id.*

Since most of the Court’s judgments are “precedent-laden,” the Court relies on doctrinal interpretive choices in making judgments that have a significant impact on the existing legal jurisprudence.³²³ For example, in *American Electric Power Co. v. Connecticut*,³²⁴ the Court unanimously held that the EPA has the authority to regulate under the CAA, and the CAA displaces any common law right to seek abatement of CO₂ emissions from coal-fired power plants.³²⁵ Relying on *Chevron* deference, the Court held that for the determination of displacement issue, the test for whether Congressional legislation excludes the declaration of federal common law is whether the statute speaks directly to the question at issue.³²⁶ The Court reasoned that the CAA directly speaks to emissions of CO₂ from the defendant’s power plants because, under the CAA, the EPA is authorized to regulate stationary sources that cause or contribute to air pollution.³²⁷ The courts in a series of cases clarified that GHGs are air pollutants and subject to regulation under the CAA.³²⁸

³²³ BRANDON J. MURRILL, CONG. RESEARCH SERV., R45319, THE SUPREME COURT’S OVERRULING OF CONSTITUTIONAL PRECEDENT 1 (2018).

³²⁴ *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 410 (2011).

³²⁵ *Id.* at 424.

[T]he Clean Air Act and the EPA actions it authorizes displace any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired powerplants. *Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the Act. And we think it equally plain that the Act “speaks directly” to emissions of carbon dioxide from the defendants’ plants.

Id.

³²⁶ *Id.*; *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 842 (1984).

³²⁷ *Am. Elec. Power Co.*, 564 U.S. at 424. The Court relied on § 7411(b), (d), and said that: Section 111 of the Act directs the EPA Administrator to list “categories of stationary sources” that “in [her] judgment . . . caus[e], or contribut[e] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.” § 7411(b)(1)(A). Once EPA lists a category, the Agency must establish standards of performance for emission of pollutants from new or modified sources within that category. § 7411(b)(1)(B); see also § 7411(a)(2). And, most relevant here, § 7411(d) then requires regulation of existing sources within the same category. For existing sources, EPA issues emissions guidelines, see 40 C.F.R. §§ 60.22, .23 (2009); in compliance with those guidelines and subject to federal oversight, the States then issue performance standards for stationary sources within their jurisdiction, § 7411(d)(1).

Id.

³²⁸ *Util. Air Reg. Group v. EPA*, 573 U.S. 302, 333–34 (2014); *Coal for Responsible Regulation v. EPA*, 684 F.3d 102, 118 (D.C. Cir. 2012) (upholding the validity of EPA’s light duty vehicle emissions rule and the endangerment findings and dismissing the challenges to

When the EPA was planning to propose the CPP, the Supreme Court decided *Utility Air Regulatory Group v. EPA* (“*UARG*”).³²⁹ Contrary to the Court’s holding in *Massachusetts v. EPA*, in *UARG*, the Court held that the “EPA exceeded its statutory authority when it interpreted the Clean Air Act to require PSD and Title V permitting for stationary sources based on their [GHG] emissions.”³³⁰ The Court held that the EPA “may not treat [GHGs] as a pollutant for purposes of defining a ‘major emitting facility’ (or a ‘modification’ thereof) in the PSD context or a ‘major source’ in the Title V context.”³³¹ The Court concluded that the EPA may “continue to treat [GHGs] as a ‘pollutant subject to regulation . . .’ for purposes of requiring BACT for ‘anyway’ sources.”³³² However, the Court said that the EPA’s attempt to rewrite “the statutory thresholds was impermissible and therefore could not validate the [EPA’s] interpretation of the triggering provisions.”³³³ The Court concluded that GHGs and CO₂ do not trigger the PSD program’s applicability, but if the PSD program applicability is triggered by other pollutants and projects, then the EPA may regulate GHGs.³³⁴ As noted, the Court’s decision did not limit the EPA’s authority in regulating GHG emissions from new or existing sources under section 111 of the CAA.³³⁵ It is also clear in the wake of *UARG* decision that the Court is not attempting to curtail the EPA’s authority to regulate emissions from major stationary sources such as coal-fired power plants.³³⁶

However, in the context of judicial activism, Indian courts are quite to the contrary.³³⁷ For example, unlike Justice Kavanaugh³³⁸ or late Justice Scalia,³³⁹ Indian courts do not invalidate the government’s action; rather, Indian Justices act more like environmentalists and promote environmental philosophy to decide whether government actions or inactions are

the tailoring rule); *Massachusetts v. EPA*, 549 U.S. 497, 534–35 (2007) (holding that the CAA authorizes EPA to regulate GHGs).

³²⁹ *Util. Air Reg. Group*, 573 U.S. at 302.

³³⁰ *Id.* at 333.

³³¹ *Id.*

³³² *Id.* at 333–34.

³³³ *Id.* at 325.

³³⁴ *Id.* at 320, 332–33.

³³⁵ *Cf.* TRUMP EXEC. ORDER, *supra* note 107.

³³⁶ *See Util. Air Reg. Group*, 573 U.S. at 304, 333–34.

³³⁷ *See* Nimala Ganapathy, *The National Green Tribunal, a court for the environment in India*, STRAITS TIMES (Dec. 8, 2017), <https://www.straitstimes.com/asia/south-asia/the-national-green-tribunal-a-court-for-the-environment-in-india> [<https://perma.cc/7KDN-Q2VB>].

³³⁸ *See generally* *Union Elec. Co. v. EPA*, 426 U.S. 246, 246 (1976); Percival, REGULATORY REV., *supra* note 301.

³³⁹ *See Util. Air Reg. Group*, 573 U.S. at 302.

inadequate to address environmental harm.³⁴⁰ The Indian Supreme Court relies on principles adopted in global conventions, statutory law, and common law.³⁴¹

Scholars often recognize the Supreme Court Justices’ approaches as “judicial activism.”³⁴² Professor Mante says that the Supreme Court has embarked on a path of judicial activism in three ways: (1) expanding the scope of the fundamental right of the environment; (2) expanding the scope of judicial review; and (3) developing public interest litigation.³⁴³ However, in the coal mining and coal-fired power plant context, it is unclear whether the Supreme Court is following any of the three stated approaches.³⁴⁴

For the first time, in *A.K. Gopalan v. State of Madras*,³⁴⁵ the Supreme Court held that Article 21 of the Constitution has a broad meaning.³⁴⁶ The Supreme Court interpreted that the right to life includes both procedural rights and substantive due process rights.³⁴⁷ Later in *Subhash Kumar v. State of Bihar*,³⁴⁸ the Supreme Court expanded a rights-based theory holding that fundamental rights include the right of enjoyment of pollution-free air and water.³⁴⁹ In numerous cases, the Supreme Court has stretched its horizon while interpreting the rights-based theory.

Second, the Supreme Court engaged in judicial activism through its daily dealings. For example, in the United States, statutes often provide citizen suit provisions.³⁵⁰ If not, an aggrieved person can always sue the

³⁴⁰ See, e.g., Kabir Jaiswal, *Right to constitutional remedies—Analysis of Article 32 of the Indian Constitution*, IPLEADERS (Sept. 18, 2019), <https://blog.ipleaders.in/right-to-constitutional-remedies/> [<https://perma.cc/DAL9-5NXG>].

³⁴¹ See Krishan Nehra, *The Impact of Foreign Law on Domestic Judgments: India*, LIBR. CONGRESS, <https://www.loc.gov/law/help/domestic-judgment/india.php> [<https://perma.cc/N42X-G228>] (last updated June 9, 2015).

³⁴² See generally Manoj Mante, *The Rise of Judicial Governance in the Supreme Court of India*, 33 B.U. INT’L L.J. 169, 170 (2015); Robert Moog, *Judicial Activism in the Cause of Judicial Dependence: The Indian Supreme Court in the 1990s*, 85 JUDICATURE 268 (2002) (discussing how the Supreme Court attempted to gain greater control over the administration of the judiciary).

³⁴³ See Mante, *supra* note 342, at 176.

³⁴⁴ *Id.* at 182, 197–98.

³⁴⁵ *A.K. Gopalan v. State of Madras*, (1950) 1950 SCR 88 (India).

³⁴⁶ *Id.* at 106 (“[N]ow Article 21 affords protection not only against the executive action but also against the legislation which deprives a person of his life and personal liberty unless the law for deprivation is reasonable, just and fair.”), overruled in *Bachan Singh v. State of Punjab*, (1980) 2 SCC 684, 693 (India).

³⁴⁷ See *id.*

³⁴⁸ *Subhash Kumar v. State of Bihar*, (1991) 1991 SCR 5 (India).

³⁴⁹ *Id.* at 13.

³⁵⁰ James R. May, *The Availability of State Environmental Citizen Suits*, NAT. RESOURCES & ENV’T 53, 55 (2004).

violator in the courts.³⁵¹ This is the main reason that the Supreme Court of the United States takes only 70 cases per year while the Supreme Court of India takes up to 700 cases per day because India's administrative proceedings are comparatively very weak and public interest litigation seems to be the better way to get it done.³⁵² In 2010, to alleviate the problem, the legislature enacted the National Green Tribunal Act.³⁵³ The NGT relies on expert committees for scientific studies and other expert knowledge.³⁵⁴

Third, in a series of cases the Supreme Court has developed and supported public interest litigation, but not in coal-fired power plants and coal mining cases.³⁵⁵ For example, in *M.C. Mehta v. Union of India*,³⁵⁶ the Supreme Court ordered 292 polluting industries to abandon using coal immediately.³⁵⁷ The Supreme Court held that the industries that are not in a position to obtain gas connections—for any reason—should stop functioning and ordered these industries to relocate somewhere else as set forth in the order.³⁵⁸ The Supreme Court held that emissions generated by these industries were the main polluters of the ambient air.³⁵⁹ The Supreme Court rested its decision on sustainable development, polluter pays principle, and the precautionary principle.³⁶⁰ Thus, the Supreme Court's philosophy rests against the polluting industry.

Although in numerous cases, the Supreme Court has stepped up with its activist hat,³⁶¹ in coal mining and coal-fired power plant cases,

³⁵¹ 5 U.S.C.S. § 702.

³⁵² See generally DOABIA, *supra* note 67, at 357–62; Jeffery Gettleman et al., *Hundreds of Cases a Day and a Flair for Drama: India's Crusading Supreme Court*, N.Y. TIMES (Sept. 27, 2018), <https://www.nytimes.com/2018/09/27/world/asia/india-supreme-court-modi.html> [<https://perma.cc/HM48-XL84>] (describing the number of cases the Supreme Court of India decides within a day).

³⁵³ See generally The National Green Tribunal Act of 2010, No. 19 of 2010, INDIA CODE, <https://indiacode.nic.in/bitstream/123456789/2025/1/A2010-19/pdf> [<https://perma.cc/5GNG-J5WS>].

³⁵⁴ *Id.* § 5 (stating qualification for appointment of chairperson, judicial member, and expert member).

³⁵⁵ *Sunil Batra v. Delhi Admin.*, (1978) 1979 SCR 392, 397–98 (India).

³⁵⁶ See *M.C. Mehta (Taj Trapezium Matter) v. Union of India*, (1997) 2 SCC 353.

³⁵⁷ *Id.*

³⁵⁸ *Id.* at 384.

³⁵⁹ *Id.*

³⁶⁰ *Id.* at 381–84.

³⁶¹ See, e.g., *M.C. Mehta v. Union of India*, (1988) 2 SCR 530, 531 (holding that the tanneries who were discharging effluents in the River Ganga must pay under “polluter pays principle”); *People's Union for Democratic Rights v. Union of India*, (1983) 1 SCR 456, 458 (holding that PIL “is a strategic arm of the legal aid movement and which is intended to bring justice within the reach of the poor masses, who constitute the low visibility area of humanity.”); *Sunil Batra v. Delhi Admin.*, (1979) 1 SCR 392, 392 (India) (holding that

it is unclear whether the Supreme Court Justices are acting more like interpretivists rather than environmentalists or activists.³⁶² For example, in 2004, in *M.C. Mehta v. Union of India*,³⁶³ the Supreme Court held that despite its previous order, the degradation of the environment continued and reached a stage of no return, yet the Supreme Court said that it would only consider the closure of mines if necessary in the future.³⁶⁴ Although the Supreme Court was concerned that the Aravalli mountain areas must be protected, the Supreme Court stepped back due to cost considerations of mining activity.³⁶⁵ The Supreme Court noted that despite the rising population and increasing demand from the forest, environmental laws have to be strictly implemented.³⁶⁶

Perhaps the Supreme Court was right in considering that the Aravalli must be protected at any cost. Nevertheless, after fourteen years, the Supreme Court recently found that thirty-one mountains in the Aravalli range disappeared within a few years because of mining activities—this forced the Supreme Court to issue a stop order to the State of Rajasthan.³⁶⁷ Two Justices, Justices Madan B. Lokur and Deepak Gupta, noted that the State of Rajasthan was enjoying a royalty payment of approximately 713 million dollars from mining activities in the region and let illegal mining continue.³⁶⁸ The Supreme Court was concerned with thirty-one whole mountains disappearing which would endanger the lives of millions of people in the Delhi area and aggravate air pollution.³⁶⁹

As discussed previously, in *Manohar Lal Sharma*, the Supreme Court issued a ninety-seven page opinion.³⁷⁰ Under the Constitution of India, the Supreme Court found that the central government received massive bribes through unlawfully allocating coal blocks to private parties and thus stole billions of dollars since 1999.³⁷¹ Interestingly, the Supreme Court for the first time held that the central government unlawfully

the Supreme Court must depart from the traditional rule of standing by authorizing community litigation).

³⁶² See *infra* notes 364–69 and accompanying text.

³⁶³ *M.C. Mehta v. Union of India*, (2004) 12 SCR 128.

³⁶⁴ *Id.* at 183 § 89.

³⁶⁵ *Id.* at 167–68 § 48.

³⁶⁶ *Id.*

³⁶⁷ *Implementing the SC's Order on Aravalli in letter and spirit*, HINDUSTAN TIMES (Oct. 25, 2018), <https://www.hindustantimes.com/editorials/implement-the-sc-order-on-aravallis-in-letter-and-spirit/story-Sk6OyNeaV9oMcPIHooj3iI.html> [<https://perma.cc/R5RA-QW6P>].

³⁶⁸ *Id.*

³⁶⁹ *Id.*

³⁷⁰ *Manohar Lal Sharma v. The Principal Sec'y & Others*, (2015) 9 SCC 516 (India).

³⁷¹ *Id.* at 521, 540–41; see *supra* note 139 and accompanying text.

allocated coal blocks and the central government allowed diversion of coal from mega-utilities to end users for further commercial exploitation.³⁷² Although the Supreme Court interpreted this case based on MMDR and CMNA, the Supreme Court used the common law doctrine of public trust in making its decision.³⁷³ The Supreme Court's decision forced the Modi administration to amend its environmental laws in 2015.³⁷⁴

After the Modi administration amended the law in 2016, the State of Meghalaya filed a petition to the Supreme Court asking to lift the ban that the Supreme Court earlier placed on transport of coal.³⁷⁵ The Supreme Court extended the time for transportation of the extracted 500,000 MT of coal lying in various places in the State of Meghalaya without lifting the previously mandated restriction.³⁷⁶ The Supreme Court also clarified that “no new extraction [of the coal] shall [be allowed by anyone,] “and the government must ensure the compliance of the Court's order.”³⁷⁷ Although the Supreme Court's activist jurisprudence is remarkable in many ways, “the coal saga” remains a challenging issue for the courts and the people of India.

Although modern statutory interpretation rests on many political discourses, judges are there, after all, to decide whether voices of the complainants should be given a broader meaning within the legal doctrines and whether other non-legal factors should be considered when listening to complainants. It is undoubtedly correct that the Indian courts' environmental consciousness has undergone a positive change. Consequently, the courts have played a major role in exposing a significant threat to the environment and human health as discussed earlier in this Article.³⁷⁸ Therefore, it is fair to claim that Indian judges carry a more “environmentalist approach” than the executive or legislative wings of the Modi administration. On the other hand, the courts in the United States often herald a conservative approach rather than an activist one.³⁷⁹ Despite their conservatism, the courts in the United States have provided many remarkable decisions, which has caused U.S. environmental

³⁷² *Manohar Lal Sharma*, 9 SCC at 609–13.

³⁷³ *Id.*

³⁷⁴ *See generally* Mines & Minerals (Development & Regulation) Act, No. 67 of 1957, INDIA CODE (amended 2016).

³⁷⁵ *Ka Hima Nongstoin Land Owners v. All Dimasa Students Union*, I.A. No. 40667 of 2018, Supreme Court of India (Mar. 28, 2018) (on file with author).

³⁷⁶ *Id.*

³⁷⁷ *Id.*

³⁷⁸ *See* Gettleman et al., *supra* note 352.

³⁷⁹ *See, e.g.,* *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 457 (2001).

law to be an example on a global level.³⁸⁰ Therefore, the judiciary will step in if, in the future, there is an “environmental gridlock.”

Although the notion of judicial activism is a useful adjunct to these democracies, the above cases suggest that the courts resort to such activism only in very exceptional circumstances.³⁸¹ In the United States, this exception is yet to be seen.³⁸² However, applying *Marbury*, the Supreme Court can act when the nation demands it due to unlawful acts of the political branches of government.³⁸³ On the other hand, the Court in India has marshaled when addressing polluting industries, but in many instances, the Supreme Court is reluctant to step against the executive and legislative wings of the government.³⁸⁴

CONCLUSION

The Trump Administration and Modi Administration have many similarities concerning their influence on the federal agencies’ rule-making authority, congressional response, and the courts. Despite many years in the global arena by these democracies to curtail emissions of GHGs, executive authority used by these leaders is not favorable at the national and global levels. President Trump’s executive order addressing energy independence and the Modi administration’s ordinance concerning allocation of coal-blocks might not have violated constitutionalism because both leaders used the loopholes in the constitutional structure of their respective democracies.³⁸⁵

In fact, the Trump administration influenced Congress, which can be seen in the recent H.R. Bill 637.³⁸⁶ It is expected that Congress should kill H.R. Bill 637 and attempt to enact better legislation regulating power plants and climate change by preserving the cooperative federalism notion as history intended. In either case, however, the Trump administration cannot pass environmentalism muster. Rather than curtailing coal consumption in the United States, President Trump completely ignored global and national environmental, health, and environmental justice concerns associated with “more coal” and the operation of coal-fired power plants without any stringent regulation like Obama’s CPP. Although

³⁸⁰ See *supra* discussion Part III.

³⁸¹ *Id.*

³⁸² *Id.*

³⁸³ See *Marbury v. Madison*, 5 U.S. 137, 176–78 (1803).

³⁸⁴ See *supra* discussion Part III.

³⁸⁵ See *supra* discussion Part I.

³⁸⁶ See Stopping EPA Over-Reach Act of 2017, H.R. 637, 115th Cong. (2017).

the U.S. courts maintain a more interpretive or conservative approach than the activist approach, for the most part, the courts helped federal agencies in shaping U.S. environmental law through many remarkable decisions.³⁸⁷

On the other end, the Modi administration has somewhat maintained constitutionalism in the light of its energy independence by way of promoting coal-fired power plants and coal production in India.³⁸⁸ However, the Modi administration's ordinance repealing existing law that previous administrations passed through proper congressional procedure sounds unfair and unconstitutional. The Supreme Court has held that certain allocations of coal blocks could be unconstitutional. However, the Supreme Court has not focused on that issue; it is beyond the scope of this Article. Like the Trump administration, the Modi administration also ignored environmentalism for the most part. Recent decisions suggest that the Supreme Court is wearing a more conservative hat when deciding coal mining cases and coal-fired power plant cases, rather than its usual activist hat. In essence, we may have an opportunity to observe more illuminating decisions by the Supreme Court.

Nevertheless, the comparative studies show that President Trump's Executive Order and the Modi administration's ordinance have invited an unwanted wave of changes in environmental law in these democracies. It could be possible that in the future, both administrations may usher a new era of more stringent environmental legislation addressing coal mining and coal-fired power plants to reduce emissions of GHGs and other pollutants. For now, however, it seems unlikely.

³⁸⁷ See *supra* notes 301–36.

³⁸⁸ See *supra* discussion Section I.C.