

Climate Redress Revisited: Loss and Damage, Compensation, and Reparations

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ABSTRACT: Extreme events related to climate change continue to grow in frequency and consequences. Often, the nations most harmed are those least responsible for climate impacts. This dynamic has led some scholars to call for reparations to hold states accountable. This Essay reviews scholarship proposing redress for climate-related harms considering redress and reparations history and literature. To address accountability concerns, it maintains that the Loss and Damage Fund under the United Nations Framework Convention on Climate Change establishes a floor of responsibility for nations contributing to climate change. Further, by drawing on the “polluter pays” and “no harm” principles under international law, the Essay proposes the development of climate compensation funds to address the needs of the most vulnerable countries left unmet by the loss and damage framework. The Essay outlines key features of a climate compensation mechanism utilizing newly enacted climate cost recovery legislation in New York. It concludes by rejecting broad claims for reparations based on climate change—offering instead a narrow case for climate reparations growing out of historic uses and scholarly models of redress.

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INTRODUCTION

We are living in a time of a shared global crisis. Climate change wreaks havoc on ecosystems, animal and human habitats, and threatens neighborhoods, communities, cities, and nations with massive disruption in some cases and destruction in others.¹ Wildfires, hurricanes, droughts, floods, intense storms, and heatwaves cause suffering, devastating human loss, and property damage.² In some cases, island nations and communities face complete eradication from sea level rise.³ Although these climate catastrophes do not threaten the planet *per se*, they clearly threaten human life and civilization. For some, the untenable aspect of the climate crisis is its human origin. Five decades ago, researchers recognized the consequences of ever-increasing fossil fuel use over the past century.⁴ That research connected increasing greenhouse gas (“GHG”) levels in the atmosphere with the increased use of fossil fuels.⁵ Governments and private companies alike were made aware of the deadly relationship between GHG production and threatening climate shifts.⁶ At

1. *Climate Change Impacts on Ecosystems*, U.S. ENV’T PROT. AGENCY (Jan. 23, 2025), <https://www.epa.gov/climateimpacts/climate-change-impacts-ecosystems> [https://perma.cc/PL7G-Q7AE] (discussing how climate change impacts ecosystems and the animals that live within them); *Climate Change Impacts*, NAT’L OCEANIC & ATMOSPHERIC ADMIN. (Nov. 8, 2024), <https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts> [https://perma.cc/ALV4-F2Y] (discussing how climate change affects infrastructure).

2. *Extreme Weather and Climate Change*, NASA (Oct. 23, 2024), <https://science.nasa.gov/climate-change/extreme-weather> [https://perma.cc/S8JG-LRXT].

3. See Chris Parsons, *The Pacific Islands: The Front Line in the Battle Against Climate Change*, U.S. NAT’L SCI. FOUND. (May 23, 2022), <https://new.nsf.gov/science-matters/pacific-islands-front-line-battle-against-climate> [https://perma.cc/3B4T-MN94].

4. See, e.g., Oliver Milman, *Oil Firms Knew Decades Ago Fossil Fuels Posed Grave Health Risks, Files Reveal*, GUARDIAN (Mar. 18, 2021, 5:00 AM), <https://www.theguardian.com/environment/2021/mar/18/oil-industry-fossil-fuels-air-pollution-documents> [https://perma.cc/F3VA-MTEJ].

5. See *id.*

6. See *id.*; *Climate Change in the 1970s*, AM. INST. PHYSICS (2025), <https://history.aip.org/exhibits/climate-change-in-the-70s/index.html> [https://perma.cc/7WEA-WU96].

the international level, the United Nations Framework Convention on Climate Change (“UNFCCC”) was created, and nations began to work together to craft a framework to avert or limit the consequences of the crisis.⁷ This was not unlike decisions following the first Earth Day, when governments and companies were challenged to construct laws and practices to protect human health and the environment from the harms caused by the release of pollutants into the air, soil, and water.⁸ Although the last half century has yielded great progress in addressing those pollutants, GHG reduction has paled in comparison.⁹

The top GHG-producing nations have continued to add to their buildup at dangerous rates while additional nations have joined their ranks.¹⁰ Recognition, however, is necessary that energy production and use is not inherently bad or wrong.¹¹ Moreover, human societies use energy for a host of important and noble purposes. Hospitals, schools, homes, water systems, food production, scientific discovery, and laboratories all depend on energy.¹² Many of these uses save and preserve lives, promote human flourishing, and advance civilization—all valuable and worthy activities.¹³

Unlike many historic evils of nations that resulted from the intentional political abuse of individuals and groups, climate harms originated in the use of technological developments created without knowledge of the harms they would cause or the people who would suffer them.¹⁴ That ignorance and lack of awareness resulted in states’ deployment and later dependence on carbon-producing technology for energy and transportation without appreciation for the harm they would cause.¹⁵ In fact, the increased GHG production of developing nations today results from improved infrastructure to meet basic needs.¹⁶ For China and India, two of the world’s largest producers of GHGs, their per capita emissions are not among the top twenty-five producers

7. See generally *History of the Convention*, UNITED NATIONS CLIMATE CHANGE, <https://unfccc.int/process/the-convention/history-of-the-convention#Climate-Change-in-context> [https://perma.cc/FPJ5-MDQ5] (charting the history and background of the UNFCCC).

8. See *Progress Cleaning the Air and Improving People’s Health*, U.S. ENV’T PROT. AGENCY (Apr. 30, 2024), <https://www.epa.gov/clean-air-act-overview/progress-cleaning-air-and-improving-peoples-health> [https://perma.cc/3A2E-Z36N].

9. *Id.*

10. *Global Greenhouse Gas Overview*, U.S. ENV’T PROT. AGENCY (Sept. 10, 2024), <https://www.epa.gov/ghgemissions/global-greenhouse-gas-overview> [https://perma.cc/2NAA-Z5LC].

11. See *Use of Energy Explained*, U.S. ENERGY INFO. ADMIN. (July 15, 2024), <https://www.eia.gov/energyexplained/use-of-energy> [https://perma.cc/M8X7-Q9VC].

12. *Id.*

13. *See id.*

14. See Kara Anderson, *What Was the Industrial Revolution’s Environmental Impact?*, LEAF BY GREENLY (Aug. 25, 2024), <https://greenly.earth/en-us/blog/ecology-news/what-was-the-industrial-revolutions-environmental-impact> [https://perma.cc/NJG2-V9MM].

15. *Id.*

16. See, e.g., Holly Rooper, *Emissions Growth in the Developing World*, CLIMATE LEADERSHIP COUNCIL (June 20, 2024), <https://clcouncil.org/blog/emissions-growth-in-the-developing-world> [https://perma.cc/X6G4-SN5E].

globally.¹⁷ For other states, however, basic infrastructure for roads, hospitals, food production, water systems, et cetera, was achieved before there was a climate crisis.¹⁸ These developed nations could have led the development of cleaner energy decades ago. Corporate interests in greater profits and government commitments to the status quo often stalled the shifts needed to prevent and lessen the crisis in which we now live. Accordingly, the Loss and Damage Fund was advanced, adopted, and most recently operationalized as a mechanism to provide support for the nation's most vulnerable to and harmed by climate change. At the close of the UNFCCC Conference of the Parties ("COP") 29 in Baku, Azerbaijan, an agreement was reached to operationalize the Loss and Damage Fund at \$300 billion per year by 2035.¹⁹ The fund provides "funding arrangements for assisting developing countries that are particularly vulnerable to the adverse effects of climate change, in responding to loss and damage."²⁰ It was formally established at COP28 and the Board of the Fund held its first meeting in 2024 and selected the Republic of the Philippines as its host country.²¹

In contrast with recent developments in the Loss and Damage Fund, some scholars who engaged the issue of state accountability for GHG production historically called for broad-based climate reparations from developed nations to those suffering the greatest harm and threats from climate change. Others, like Professor Richard Epstein, disagree—rejecting the notion of climate accountability for states altogether.²² This Essay, in contrast, supports the Loss and Damage Fund operating within the UNFCCC while calling for additional accountability for climate-based harm through climate compensation funding to the states most harmed and threatened by climate change. A premise of this Essay is that the Loss and Damage Fund within the UNFCCC establishes a bottom or floor of nations' climate responsibility. Based on its design, however, there is a significant risk that some countries see the fund as climate charity rather than responsibility. This Essay proposes to use a climate compensation scheme to hold countries accountable who fail to meet their obligations under the Loss and Damage Fund framework. Although this Essay disagrees with scholarship making broad claims for climate reparations from the Global North to the Global South, it does find a narrow case for

17. See, e.g., *Per Capita CO₂ Emissions*, OUR WORLD IN DATA (Nov. 21, 2024), <https://ourworldindata.org/grapher/co-emissions-per-capita> [https://perma.cc/TEQ9-33WV].

18. See Anderson, *supra* note 14.

19. COP29 UN Climate Conference Agrees to Triple Finance to Developing Countries, Protecting Lives and Livelihoods, UNITED NATIONS CLIMATE CHANGE (Nov. 24, 2024), <https://unfccc.int/news/co-p29-un-climate-conference-agrees-to-triple-finance-to-developing-countries-protecting-lives-and-livelihoods> [https://perma.cc/W4SX-MU5S].

20. *Fund for Responding to Loss and Damage*, UNITED NATIONS CLIMATE CHANGE, <https://unfccc.int/loss-and-damage-fund/joint-interim-secretariat> [https://perma.cc/E4JR-TQRW].

21. *Philippines Selected to Host the Board of the Fund for Responding to Loss and Damage*, UNITED NATIONS CLIMATE CHANGE (July 12, 2024), <https://unfccc.int/news/philippines-selected-to-host-the-board-of-the-fund-for-responding-to-loss-and-damage> [https://perma.cc/DLE3-5M7Q].

22. See generally Richard A. Epstein, *Throwing Cold Water on Climate Reparations*, 110 IOWA L. REV. 2015 (2025).

climate reparations. This narrow claim is grounded in historic cases of reparations and scholarship on state accountability for crimes against humanity and gross human rights violations. The Essay contends that state actions involving climate can result in justified reparations claims under similar circumstances as those that are not climate related. The Essay additionally contends that climate reparations may represent a viable mechanism in the future to address bad actors, who reject the Loss and Damage Fund and climate compensation mechanisms to fulfill their responsibilities under international law, moving forward.

This Essay rejects claims that the historic production of GHGs alone warrants reparations. The knowledge, intention, and motive of states as well as the likely victims and the context of state actions represent critical aspects of any reparations claim. Building a case for climate reparations requires the same particularity and evidence as building any other case of reparations. Requiring less would obviate the distinction between states' necessary and proper compensation for harming other states and communities from reparations claims grounded in gross human rights abuses, crimes against humanity, and historic injustices grounded in the intentional harm and mistreatment of disfavored groups.

Accordingly, the Essay joins the conversation of scholars examining where accountability for climate harms caused by GHG production may rest by engaging the broader question in multiple parts. Part I provides a brief review of reparations concepts and principles, and Part II surveys legal scholarship recommending redress for climate-related harms and identifies the critical characteristics authors propose for such a program to meet the needs of climate-vulnerable states and communities. In Part III, the Essay proposes a climate compensation mechanism grounded in the principle of "polluter pays" and in breaches of the "no harm" principle under international law. Under this approach, funds would be used to address outstanding needs of the most vulnerable countries and communities experiencing climate-based harms. Part IV outlines the structure and key features of a climate compensation mechanism, informed in part by recent climate cost recovery legislation in New York, and Part V examines the special case for climate reparations.

I. REPARATION CONCEPTS AND PRINCIPLES

To hold states accountable for the climate harms their practices have caused, both scholars and activists have called for climate reparations.²³ To understand these calls, this Essay provides a brief review of what reparations mean and have meant in theory and in practice to nations, groups, and individuals. An examination of reparations literature in both a domestic and international context reveals that reparations resist a single definition—fitting

^{23.} See, e.g., Maxine Burkett, *Climate Reparations*, 10 MELB. J. INT'L L. 509, 526–34 (2009); Vann R. Newkirk II, *What America Owes the Planet*, ATLANTIC (June 11, 2024), <https://www.theatlantic.com/magazine/archive/2024/07/climate-change-reparations-vanuatu-island/678489> (on file with the *Iowa Law Review*).²⁴

more broadly into a range of responses to historic wrongs undertaken by groups or governments.²⁴ Generally characterizing damages given for past harm as reparations represents an insufficiently narrow view. In his foundational work in the field, Roy Brooks maintains that reparations require remorse and the intent to atone.²⁵ The *Oxford English Dictionary* in its definition of “reparation” helps to unpack the concept. In it, “reparation” has multiple meanings.²⁶ The third definition best serves our case—”[t]he action of making amends for a wrong or harm done by providing payment or other assistance to the wronged party.”²⁷ Making amends can be for intended or unintended harmful conduct. This nuance reflects the blurring of reparations and general compensation claims. Compensation often serves as remediation for both wrongful and for accidental conduct, so at a definitional level reparations can have either meaning.²⁸ However, as defined by Brooks and others, reparations only flow from wrongful conduct.²⁹ This connects well with Brooks’s notion of atonement.³⁰ Atonement includes remorse for the wrongs committed, coupled with a desire to communicate that remorse to the moral community and to engage in behavior that resets the moral relationship and acknowledges the wrongs.³¹

Correcting harmful wrongs falls under the banner of rectificatory justice.³² Although less attention has been given to it among philosophers, Aristotle identified it as one of the fundamental types of justice.³³ According to Rodney C. Roberts, “[t]o rectify something is to set it right. Hence, the aim of rectificatory justice is to set unjust situations right.”³⁴ Righting this type of injustice therefore has two aspects—righting the wrong and righting (aka remedying) the harm.³⁵ Wrongs represent violations of established norms or

24. See Roy L. Brooks, *The Age of Apology*, in WHEN SORRY ISN’T ENOUGH: THE CONTROVERSY OVER APOLOGIES AND REPARATIONS FOR HUMAN INJUSTICE 3, 7–11 (Roy L. Brooks ed., 1999).

25. *Id.* at 8.

26. *Reparation*, OXFORD ENG. DICTIONARY (2009), https://www.oed.com/dictionary/reparation_n [https://perma.cc/AJQ6-8G4D].

27. *Id.*

28. See *Compensation*, CORNELL L. SCH. LEGAL INFO. INST. (June 2021), <https://www.law.cornell.edu/wex/compensation> [https://perma.cc/Y3NU-77VZ] (“Compensation is payment or remuneration for work or services performed or for harm suffered”).

29. Brooks, *supra* note 24, at 8.

30. See ROY L. BROOKS, ATONEMENT AND FORGIVENESS: A NEW MODEL FOR BLACK REPARATIONS, at ix–x (2004).

31. *See id.*

32. ARISTOTLE, NICOMACHEAN ETHICS bk. V, at 114–17 (David Ross trans., Oxford Univ. Press 1980) (c. 384 B.C.E.).

33. *Id.* at 109–12, 114.

34. Rodney C. Roberts, *Justice and Rectification: A Taxonomy of Justice*, in INJUSTICE AND RECTIFICATION 7, 15 (Rodney C. Roberts ed., 2002).

35. *Id.* at 15–17; see also Carlton Waterhouse, *Total Recall: Restoring the Public Memory of Enslaved African-Americans and the American System of Slavery Through Rectificatory Justice and Reparations*, 14 J. GENDER, RACE & JUST. 703, 708 (2011) (outlining the philosophical underpinnings of rectificatory justice).

standards of action.³⁶ They find their grounding in the moral evaluation of one or more actors' conduct.³⁷ Discussion of harms look to the consequences of actions.³⁸ Injustice may flow from either frame. Under law, the foreseeable consequences of actions may warrant compensation or remediation even though harm was not intended.³⁹ Likewise, legal remedies may allow compensation without physical harm depending on the severity of the wrong committed.⁴⁰

Moral reasoning dictates that one person's careless or unintended acts that inflict harm require the responsible actor to address the harm. The failure or refusal to do so constitutes an injustice that requires remediation.⁴¹ In a similar fashion, engaging in wrongful conduct that harms others also constitutes injustice that warrants remediation.⁴² Rectificatory justice requires redress for both types of injustice mentioned.⁴³ In one case, it requires both "righting the wrong for the offense made and correcting the harm that is caused."⁴⁴ In the reparations context, the wrongs include insults to human

36. Arto Laitinen & Arvi Särkelä, *Social Wrongs*, 26 CRITICAL REV. INT'L SOC. & POL. PHIL. 1048, 1066 (2023).

37. *Id.*

38. *See id.*

39. Negligence is defined "in its civil relation, [a]s such an inadvertent imperfection, by a responsible human agent, [i]n the discharge of a legal duty, as immediately produces, in an ordinary and natural sequence, a damage to another." *Negligence*, LAW DICTIONARY (2025), <https://thelawdictionary.org/negligence> [<https://perma.cc/7BPN-L6W4>].

40. Punitive damages have been described as the following:

Punitive damages are designed to not only discourage the defendant in question from engaging in similar behavior in the future but are also meant to be a message sent to society at large. Civil courts that punish reckless or negligent behavior with punitive damages indicate to others that such behavior will not be tolerated and that that behavior can lead to monetary consequences.

Compensatory vs. Punitive Damages: What's the Difference?, LAW DICTIONARY (Nov. 19, 2024), <https://thelawdictionary.org/article/compensatory-vs-punitive-damages-whats-difference> [<https://perma.cc/GC6W-TWB5>].

41. As explained by Aristotle:

[T]he justice in transactions between man and man is a sort of equality indeed, and the injustice a sort of inequality . . . For it makes no difference whether a good man has defrauded a bad man or a bad man a good one, nor whether it is a good or a bad man that has committed adultery; the law looks only to the distinctive character of the injury, and treats the parties as equal, if one is in the wrong and the other is being wronged, and if one inflicted injury and the other has received it. Therefore, this kind of injustice being an inequality, the judge tries to equalize it; for in the case also in which one has received and the other has inflicted a wound, or one has slain and the other been slain, the suffering and the action have been unequally distributed; but the judge tries to equalize things by means of the penalty, taking away from the gain of the assailant.

ARISTOTLE, *supra* note 32, at 114–15.

42. *Id.*

43. Roberts, *supra* note 34, at 15.

44. Waterhouse, *supra* note 35, at 709; *see* Roberts, *supra* note 34, at 15.

dignity.⁴⁵ Correcting these offenses means addressing the wrong committed. In those instances, acknowledgement and apology go toward mitigating or reversing the social wrong that precipitated the injustice.⁴⁶ “[W]hen wrongdoers acknowledge their harmful actions, admit their wrongfulness, and apologize to [the] injured,” they work toward resetting the moral relationships between them and the larger moral community.⁴⁷ Talk is cheap, however. Accordingly, Brooks maintains that atonement requires that amends include substantive compensation, rehabilitation, or other acts that ground and legitimate acknowledgements and apologies for wrongdoing.⁴⁸ In doing so, wrongdoers bestow honor and respect on wronged parties by publicly recognizing that they deserved better.⁴⁹

Accordingly, reparations fit this model of moral wrong and harm by affirming the communal standing of the victims and the respect they were wrongfully denied. Compensation alone fails to satisfy this moral dictate.⁵⁰ Financial payments absent acknowledgement of past wrongdoing fail to provide the honor harmed parties are due.⁵¹ Compensation, however, is essential to redress for both wrongful and other conduct and takes several forms, including restitution, rehabilitation, and remediation.⁵² When behavior unintentionally leads to harm, redress allows compensation alone to right the harm. Apologies and acknowledgement are no longer required since no wrongful conduct took place. Righting these harms through compensation alone satisfies the dictates of justice by providing remediation that works to mitigate, undue, or reverse the harms inflicted.

Our current understanding of reparations can be traced to postwar Germany following the end of World War II.⁵³ Allied powers demanded that Germany provide redress through reparations payments to Jewish victims of the Nazi regime and to the new state of Israel.⁵⁴ These politically driven actions by Germany were replicated in a range of countries through the

45. See *Climate Change Undermines Human Rights*, WORLD METEOROLOGICAL ORG. (June 20, 2024), <https://wmo.int/media/news/climate-change-undermines-human-rights> [https://perm.a.cc/32AP-HKGW].

46. See Brooks, *supra* note 24, at 8; Roberts, *supra* note 34, at 15.

47. Waterhouse, *supra* note 35, at 710; see also Brooks, *supra* note 24, at 8–9 (discussing how governments should correct past wrongful actions).

48. Brooks, *supra* note 24, at 8.

49. *Id.*; see also Waterhouse, *supra* note 35, at 710 (explaining how public recognition is necessary for correcting past disrespectful actions).

50. BROOKS, *supra* note 30, at 142–43.

51. *Id.* at 142.

52. See Brooks, *supra* note 24, at 8–9.

53. See Ariel Colonos & Andrea Armstrong, *German Reparations to the Jews After World War II: A Turning Point in the History of Reparations*, in THE HANDBOOK OF REPARATIONS 390, 390–93 (Pablo de Greiff ed., 2006).

54. *Id.*

remainder of the twentieth century and afterward.⁵⁵ Around the world, reparations were established in the wake of war, human rights violations, land theft, medical experimentation, and other abuses and wrongs.⁵⁶ From Europe to North America, Asia to Africa, and Australia to South America, reparations programs and demands have grappled with the legacy of past abuse and mistreatment that individuals, communities, and groups have suffered without prior attention, apology, or rectification.⁵⁷ The United States as a whole, individual states, and cities have all found cause to establish funds, issue apologies, and to otherwise acknowledge past wrongs and harms.⁵⁸ These cases typically reflect the political recognition that intentional past behavior wrongfully harmed victims and that those victims deserved better treatment and respect than they received.⁵⁹

In December 2005, the United Nations General Assembly captured the sentiment in its promulgation of Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law (“Basic Principles and Guidelines”).⁶⁰ The document established the right of victims of gross international human rights violations and serious violations of international humanitarian law to receive remedies and reparations.⁶¹ Basic Principles and Guidelines grounds reparations in the context of international human rights discourse.⁶² Beyond political arrangements, the instrument cites the Charter of the United Nations, the Universal Declaration of Human Rights, the International Covenants on Human Rights, and the Vienna Declaration and Programme of Action by name, grounding the document in a broad set of human rights conventions and declarations.⁶³ Within the Basic Principles and Guidelines, remedies and reparations are distinctly addressed.⁶⁴ Regarding remedies, it states:

55. See generally ELAZAR BARKAN, THE GUILT OF NATIONS: RESTITUTION AND NEGOTIATING HISTORICAL INJUSTICES (2000) (providing an analysis of restitution efforts across the globe in the second half of the twentieth century).

56. *Id.*

57. See generally *id.*

58. See, e.g., Civil Liberties Act of 1988, Pub. L. 100-383, § 1, 102 Stat. 903, 903 (codified as amended at 50 U.S.C. § 4201 (2018)); CAL. TASK FORCE TO STUDY AND DEVELOP REPARATION PROPOSALS FOR AFR. AMS., THE CALIFORNIA REPARATIONS REPORT 39–40 (June 29, 2023), <https://oag.ca.gov/system/files/media/full-ca-reparations.pdf> [<https://perma.cc/4KQL-ML6F>]; Evanston Local Reparations, CITY OF EVANSTON, <https://www.cityofevanston.org/government/city-council/reparations> [<https://perma.cc/5NFJ-VYL9>].

59. See sources cited *supra* note 58.

60. See generally G.A. Res. 60/147, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law (Dec. 16, 2005) [hereinafter Basic Principles and Guidelines].

61. See generally *id.*

62. *Id.* ¶¶ 15–23.

63. *Id.* at 1.

64. *Id.* ¶¶ 11, 15–23.

Remedies for gross violations of international human rights law and serious violations of international humanitarian law include the victim's right to the following as provided for under international law:

- (a) Equal and effective access to justice;
- (b) Adequate, effective and prompt reparation for harm suffered;
- (c) Access to relevant information concerning violations and reparation mechanisms.⁶⁵

Referencing reparations, it states:

In accordance with domestic law and international law, and taking account of individual circumstances, victims of gross violations of international human rights law and serious violations of international humanitarian law should, as appropriate and proportional to the gravity of the violation and the circumstances of each case, be provided with full and effective reparation, as laid out in principles 19 to 23, which include the following forms: restitution, compensation, rehabilitation, satisfaction and guarantees of non-repetition.⁶⁶

In the human rights context, reparations routinely arise from gross human rights violations and serious violations of international humanitarian law.⁶⁷ These almost always reflect, at least, a disregard for the harm inflicted upon others because of their identity rather than without regard to it. Reparations awarded for careless or reckless behavior taken without awareness of the threat to victims falls outside both moral logic and historical precedent. Although compensation for harm caused by governments and groups under those circumstances is reasonably expected and morally dictated, the injuries lack the sense of indignity and injustice typically associated with reparations claims.⁶⁸ States are responsible for environmental harms that they cause but this responsibility falls outside of the reparations frame that focuses on conduct wrongfully undertaken that infringes on human dignity.⁶⁹ Reparations programs are not built around the accidents of nations and governments as much as their conduct that lowers victims' standing in the moral community through

65. *Id.* ¶ 11.

66. *Id.* ¶ 18.

67. *See id.* ¶ 15.

68. A state's intentional rejection of its compensation obligations for inadvertent harms can rise to the level of injustice and indignity that warrants reparations. When states with the capacity to participate under the Loss and Damage framework or the climate compensation fund proposed here refuse to, this warrants an evaluation of reparations as proper recourse consistent with international law norms. Waterhouse, *supra* note 35, at 709.

69. *See* Basic Principles and Guidelines, *supra* note 60, at 3 ("Affirming that the Basic Principles and Guidelines contained herein are directed at gross violations of international human rights law and serious violations of international humanitarian law which, by their very grave nature, constitute an affront to human dignity."); *see also* U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol.1), annex I, Principle 15 (Aug. 12, 1992) (discussing the precautionary principle and obligation of states).

assaults on human dignity.⁷⁰ Consider Robert Westley's articulation of the warrant for reparations for African Americans:

Blacks deserve reparations not only because the oppression they face is "systematic, unrelenting, authorized at the highest governmental levels, and practiced by large segments of the population," but also because they face this oppression as a group⁷¹

Westley's point is well-made. Historic and ongoing governmental and private mistreatment and discrimination against a group or groups represents the paradigmatic warrant for reparations. Reparations differ from standard harm compensation.⁷² They provide redress for the moral offense to the dignity and humanity of victims routinely grounded in group identity.⁷³ Simple negligence or accidents due to incompetence or ineptitude warrant compensatory justice but fall outside of reparations because their occurrence does not reflect an assault on the dignity of the victims or their worth.⁷⁴ As a result, reparations typically arise from intentionality, or a flagrant disregard for the harm inflicted, because of victims' identities rather than without regard to it. To equate the two deprives reparations of its moral sting and the social and political changes with which it is associated. Although compensation for harm caused by governments and groups under those circumstances is reasonably expected and morally dictated, compensation for unintended harm differs from reparations.⁷⁵

Instead, reparations narrowly concentrate on intended conduct that dehumanizes victims.⁷⁶ Accordingly, warrants for reparations address threats to the dignity and humanity of victims.⁷⁷ Harm resulting from ignorance

70. See *Basic Principles and Guidelines*, *supra* note 60, ¶ 15.

71. Robert Westley, *Many Billions Gone: Is It Time to Reconsider the Case for Black Reparations?*, 40 B.C. L. REV. 429, 466 (1998) (footnote omitted).

72. See Elizabeth Yoder, *Sending a Signal: How Reparations Can Lead to Accountability for Civilian Harm*, CTR. FOR CIVILIANS IN CONFLICT (Oct. 28, 2022), <https://civiliansinconflict.org/blog/sending-a-signal-how-reparations-can-lead-to-accountability-for-civilian-harm> [https://perma.cc/6SKR-6SUY]; *Reparations*, INT'L CTR. FOR TRANSITIONAL JUST. (2025), <https://www.ictj.org/reparations> [https://perma.cc/JB2M-5LEP].

73. See *Reparations*, *supra* note 72.

74. Waterhouse, *supra* note 35, at 709; see also Michelle Maiese, *Compensation and Reparations, BEYOND INTRACTABILITY* (Sept. 2003), <https://www.beyondintractability.org/essay/compensation> [https://perma.cc/PZ4G-NGNP].

75. See Waterhouse, *supra* note 35, at 709.

76. See Brooks, *supra* note 24, at 6–9.

77. Brooks lists the most common warrants:

[G]enocide; slavery; extrajudicial killings; torture and other cruel or degrading treatment; arbitrary detention; rape; the denial of due process of law; forced refugee movements; the deprivation of a means of subsistence; the denial of universal suffrage; and discrimination, distinction, exclusion, or preference based on race, sex, descent, religion, or other identifying factor with the purpose or effect of impairing the recognition, enjoyment, or exercise, on an equal footing, of human rights and fundamental freedoms in the political, social, economic, cultural, or any other field of public life.

without intention warrants compensatory justice but falls outside of reparations because its occurrence does not reflect a judgment on victims or their worth. Accidents, however, resulting from a disregard for the actual or likely victims and intentional carelessness based on the identity of potential victims would fall within the moral logic and history of reparations. Nations and groups purposefully underfunding safety protocols or neglecting the likely harm to known communities, groups, and regions discount the worth and value of those threatened. The lowering of the worth or value of likely victims insults their dignity and constitutes a moral offense in environmental context just as it does in other governmental decisions.⁷⁸

Likewise, groups suffering historic subordination or systemic institutional exclusion, and discrimination based on their identity likely qualify for climate-based reparations when governments disregard their welfare during climate-related disasters.⁷⁹ Hatred, malice, xenophobia, religious animosity, sexism, persecution of sexual minorities, and other forms of animus, as well as political corruption and greed, represent reprehensible motivations for political decision-making that reparations flag as illegitimate. Where climate-based harms fall within historic or contemporary practices of social dominance and group-based hierarchy, they fall within a context of socially ascribed subordination irrespective of the subjective intent of officials and groups over production and emissions of GHGs.⁸⁰ Harms to human dignity take place within rather than outside of a moral context.⁸¹ When that moral context reveals longstanding or ongoing human rights violations, moral offenses, and insults to the worth of group members, climate harms fall within a bucket of indignities and insults. Climate reparation claims, in those cases, fall within a broader human rights and reparations analysis that represent an important special case under this analysis. Climate harms falling upon communities outside of those contexts will typically warrant mechanisms that hold responsible parties accountable to the climate vulnerable though not through reparations.⁸²

Reparations programs seek to shine a light on bad motives that denigrate and abuse victims—the reckless use of a technological solution to a legitimate social need that indiscriminately harms others could warrant reparations when the motivation rises from personal gain to decision-makers. Political decision-making can be complex and complicated, but it has significant consequences. Navigating the range of challenging and difficult decisions along with the foreseen and unforeseen consequences is the heart of statecraft.

78. See Waterhouse, *supra* note 35, at 709–11.

79. See generally Manann Donoghoe & Andre M. Perry, *The Case for Climate Reparations in the United States*, BROOKINGS (Mar. 2023), <https://www.brookings.edu/articles/the-case-for-climate-reparations-in-the-united-states> [https://perma.cc/433M-WBX2] (arguing the impacts of climate change on racial minorities justify climate reparations).

80. See Carlton Waterhouse, *Moving Toward Sustainable Environmental Protection and Justice: Lessons from Social Dominance Theory*, 15 GEO. WASH. J. ENERGY & ENV'T L. 111, 112–16 (2024).

81. *Id.*

82. *Id.*

Bad political judgment and even incompetence fall outside the normal bounds of actions warranting reparations.

Recklessness without regard for the outcome or the possible victim presents another case. Reckless behavior reflects a disregard for human well-being and the consequences of actions taken, generally.⁸³ Although recklessness has not been widely considered in reparations discourse or history, it presents a special case that would also warrant clear disapproval by the moral community. Although it lacks the specific disregard associated with the intent to harm or the willingness to harm particular victims, recklessness reflects a willingness to harm any and all.⁸⁴ It reduces the worth or value of humanity more broadly and indiscriminately harms its victims in turn.⁸⁵ Depending on the motivation of the reckless behavior, it could warrant reparative or compensatory justice.⁸⁶

Imagine a nation, faced with the total starvation of its population, that is offered a new technology that promises to produce food that will prevent starvation completely but is highly likely to permanently contaminate land while fatally poisoning some people and permanently debilitating others. If the leadership of the nation recklessly disregards exploration of other options or evaluation of the likely harms the technology will cause and puts it to use, moral accountability will be required once starvation has been averted, land has been contaminated, and members of the population have suffered debilitation and death. Would reparations properly arise in this case? More information is likely needed to answer; however, the genuine desire to resolve one crisis that causes another crisis without ill intention or corrupt motivation likely falls outside of reparations. In contrast, if under the same hypothetical the leadership rejected other starvation solutions based on a promise of personal financial gain or political advantage, the case would reflect bad motives, leading to indiscriminate harm that would increase the likelihood that reparations would be appropriate.

In the context of climate change, each day brings us closer to justifiable reparations for an increasing number of parties as nations reject mitigation despite greater awareness of the consequences of GHG emissions and who will suffer them. Nations or groups that demonstrate a flagrant disregard for climate change impacts, based on their current knowledge of who will suffer and how they will suffer, fall within a traditional scheme of reparations. In fact, those circumstances should merit attention under a reparative framework because they reflect the kind of behavior that we as a global community want to discourage and to identify as abhorrent and improper within the human community.⁸⁷ Climate reparations in these cases play an important role in

83. See Ty McDuffey, *Recklessness*, FINDLAW (Aug. 22, 2023), <https://www.findlaw.com/injury/accident-injury-law/recklessness.html> [https://perma.cc/7FJW-VCDB] (defining recklessness).

84. *See id.*

85. *See id.*

86. *Id.*

87. *See* Basic Principles and Guidelines, *supra* note 60, ¶ 15.

signaling the path forward and connecting nations' deliberate and intentional decision-making with the victims of the harms they caused.

II. CALLS FOR CLIMATE REDRESS

To address the poor response to climate adaptation needs in the Global South and the substantial demands for climate finance in the developing world, many scholars have proposed climate reparations to hold nations accountable.⁸⁸ This Essay recognizes the urgent need for greater accountability of nations driving climate change expressed by the authors below. It attempts to do so through an approach explicitly grounded in the historic norms and principles guiding the use of reparations. Accordingly, the Essay examines the proposals below for consistency with the moral and legal reasoning underlying reparations claims articulated above. The evaluation explores six prominent and distinctive models reflected in climate scholarship. Although the review does not find a definitive warrant for reparations grounded exclusively in climate-based harm, it identifies critical elements from the approaches reviewed important to a structured accountability mechanism for countries failing to meet their obligations to the Loss and Damage Fund. Drawing on those elements, this Essay proposes international climate compensation funds, financed through claims against nations disregarding or out of compliance with Loss and Damage Fund responsibilities, and a reparations mechanism for the special case of "bad climate actors" and "climate recalcitrant states."⁸⁹

A. THE HUMAN RIGHTS MODEL

The right to a clean, healthy, and sustainable environment was recognized by the United Nations General Assembly in 2022.⁹⁰ It followed the earlier decision of the United Nations Human Rights Council finding the same right.⁹¹ In *Verein Klimaseniorinnen Schweiz v. Switzerland*, the European Court of Human Rights ("ECHR") found that Switzerland failed to meet its obligation under Article 8 of the European Convention on Human Rights to protect the plaintiffs' rights to "life, health, well-being and quality of life" threatened by heat waves worsened by climate change.⁹² The U.N. Declaration on Human Rights and the ECHR opinion directly connect the experience of environmental harms to the international human rights regime. For this Essay, these developments illustrate a critical principle for climate compensation and

88. See, e.g., Adrien Salazar, *The Case for Climate Reparations in the United States*, ROOSEVELT INST. (Apr. 4, 2023), <https://rooseveltinstitute.org/publications/the-case-for-climate-reparation-s-in-the-united-states> [https://perma.cc/275S-B69X].

89. These terms are discussed in greater detail *infra* Section II.B.

90. G.A. Res. 76/300, The Human Right to a Clean, Healthy and Sustainable Environment (July 28, 2022).

91. Human Rights Council Res. 48/13, The Human Right to a Clean, Healthy and Sustainable Environment (Oct. 8, 2021).

92. *Verein Klimaseniorinnen Schweiz v. Switzerland*, App. No. 53600/20, ¶ 544 (Apr. 9, 2024), <https://hudoc.echr.coe.int/eng/?i=001-233206> [https://perma.cc/GBK5-77D7].

climate reparations claims—actors causing climate-based harm to people and communities threaten human rights and face moral culpability.

This Essay grounds the obligation to provide climate compensation and climate reparations in moral reasoning rather than in international or domestic hard law. This decision reflects the belief that moral reasoning informs and often grounds political actions for the common good. Reparations and victim compensation schemes grow out of recognition and awareness that past government or group behavior violated the duties owed to fellow human beings. The human rights model of redress draws on these shared understandings of what nations and groups owe to the human beings they affect through their decisions and practices.

In *Remedies for Human Rights Violations Caused by Climate Change*, Margaretha Wewerinke-Singh presents the case for climate change redress under international law.⁹³ Without exploring the moral warrant for a reparations specific approach, the article examines remedies more broadly for human rights violations under international law.⁹⁴ Looking to the foundation for remedies in treaties and custom, Wewerinke-Singh focuses attention on two key components for remedying human rights violations presented in the Basic Principles and Guidelines: (1) access to justice at the state, regional, and international level; and (2) substantive redress through restitution, compensation, and satisfaction.⁹⁵ Wewerinke-Singh's examination discusses how climate-based harms might be addressed through individual human rights-based claims at the state, regional, and international levels of adjudication.⁹⁶ The examination articulates the firm foundation for climate remediation in international human rights law.⁹⁷ In doing so, it highlights important contributions of a human rights-based approach: (1) the range of available remedies to address human rights violations; and (2) the significant burden that litigation-based approaches place upon climate-vulnerable communities.⁹⁸

A significant benefit of examining climate redress through a human rights lens is the range of remedies recognized for human rights violations under international law.⁹⁹ As discussed by Wewerinke-Singh and described in Basic Principles and Guidelines, restitution, compensation, and satisfaction have all been recognized as important mechanisms for remedying human rights violations.¹⁰⁰ Each provides benefits to meet the differing needs of

93. See generally Margaretha Wewerinke-Singh, *Remedies for Human Rights Violations Caused by Climate Change*, 9 CLIMATE L. 224 (2019) (arguing for “access to justice” and “substantive redress” for climate-based violations).

94. *Id.* at 239–42.

95. *Id.* at 227–42.

96. *Id.* at 227–34.

97. See *id.* at 229–36.

98. *Id.* at 231–34.

99. *Id.* at 234–42.

100. *Id.* at 239–42.

victims grounded in the distinct harms experienced.¹⁰¹ Restitution allows for the return or restoration of things lost because of the violations, while compensation provides resources that support the replacement of things lost and amends for harms caused when restitution is not possible.¹⁰² Satisfaction goes to mechanisms, symbolic and otherwise, that attend to victims' and the broader community's desire to understand why and how the violations took place.¹⁰³ Apologies, truth commissions, inquiries, and reports on actions and practices causing human rights violations all sound in satisfaction-based remedial mechanisms.¹⁰⁴ In the climate context, each of these approaches will be vital to provide redress for the diverse harms threatening and experienced by climate-vulnerable communities. The loss of land, home, culture, political autonomy, health, well-being, family, life, and more all flow as potential and actual harms caused by climate change. A robust remedial scheme to address these is necessary to enable just responses to climate-based harms from those most responsible to those most harmed.

Another important insight from Wewerinke-Singh's work is the limitation and potential inadequacy of litigation-based approaches.¹⁰⁵ Bringing claims for climate-based human rights violations based on existing treaties, domestic courts, and regional and international bodies can place undue burdens upon climate-vulnerable communities and the individuals who live within them.¹⁰⁶ The lack of justice available in some domestic courts, as well as the legal and financial burdens of successful litigation within them, and in regional and international bodies reveals the substantial hurdle a litigation-based approach places upon communities and people reeling under past and threatened future climate-based harm. As a practical matter, the high barriers to access will undoubtedly leave many communities without the remedies they need and to which they would be entitled. Moreover, the cost and time required for litigating the wide range of claims and parties would direct far too many resources for the judicial bodies, harmed individuals and communities, and responsible parties toward the procedural requirements of litigation. Accordingly, this Essay proposes climate compensation and climate reparations mechanisms based in the development of compensation and, where appropriate, reparations funds to which climate-vulnerable victims can present claims for preestablished forms of redress.¹⁰⁷

B. MAXINE BURKETT: REMAKING THE WORLD THROUGH CLIMATE REPARATIONS

In her pioneering work, *Climate Reparations*, Maxine Burkett writes:

101. *Id.*

102. *Id.* at 239–41.

103. *Id.* at 241–42.

104. *See id.*

105. *Id.* at 228–29.

106. *Id.* at 227–34.

107. Space does not allow for articulating the design and operation of such funds in this Essay; however, the subject presents an important area for future research.

‘[C]limate change . . . has the potential for improving [our ethics and politics]. Successfully responding to climate change can make us better people and help us to reclaim our democracy’. For the [United States] and its citizens—and all citizens of the West—a reparations discourse could indeed prove transformative.¹⁰⁸

Burkett’s early foray into the warrant for reparations based on climate change provides a firm foundation for climate reparations discourse.¹⁰⁹ This Essay celebrates Burkett’s pioneering work while adding additional perspective on the issues. Burkett grounds climate reparations claims in moral logic and attends to reparations theory in developing the case.¹¹⁰ This Essay draws on Burkett’s notion of the “climate vulnerable” and “climate responsible.”¹¹¹ Looking more closely at the moral wrongs associated with reparations, this Essay classifies Burkett’s climate reparations claims as grounds for climate compensation—the necessity that climate responsible harm doers compensate the climate vulnerable for past, ongoing, and imminent harm. The climate reparations designation warrants more than a harm remediation formula. It necessitates a wrong that lowers or demeans the dignity of the victim. To make this case, actors’ motivations and acts take center stage. Beyond responsibility for foreseeable consequences caused by careless acts, reparations arise from intended harm, in most cases, or a flagrant disregard for a known set of victims, otherwise.¹¹² Burkett’s approach uses a broad designation of responsibility that blurs the distinction between “bad climate actors” and anyone historically responsible for the climate crisis.

Reparations cases against “the developed world” on behalf of “the developing world” or against the Global North on behalf of the Global South or other broad constructions may ignore or insufficiently examine the moral wrong warranting redress.¹¹³ Although the transformative potential of “climate reparations” envisioned by Burkett and others provides a worthy goal, this Essay maintains that the same vision can be accomplished through “climate compensation funds” in most cases, while climate reparations are reserved for cases that reflect the moral abhorrence associated with historical reparations claims. The Holocaust, torture, disappearances, apartheid, internment, racial massacres, medical experimentation, and cultural genocide, for example, all reflect deeper wrongs than an insufficient regard for the consequences of one’s actions generally. When established, reparations typically

108. Burkett, *supra* note 23, at 526 (second and third alterations in original) (footnote omitted) (quoting Dale Jamieson, *The Moral and Political Challenges of Climate Change*, in CREATING A CLIMATE FOR CHANGE: COMMUNICATING CLIMATE CHANGE AND FACILITATING SOCIAL CHANGE 475, 481 (Susanne C. Moser & Lisa Dilling eds., 2007)).

109. *See id.* at 524–26.

110. *Id.*

111. *Id.* at 520–31.

112. *See id.* at 510.

113. *See, e.g., id.* at 526–34.

signal behavior that reflects a disregard for a particular group demonstrated by intentional abuse, mistreatment, or neglect.¹¹⁴

Categorizing irresponsible and careless behavior that lacks a known victim, when undertaken, as justifying reparations lessens the moral force of reparations claims and the promise of non-repetition. The historical examples mentioned above all reflect a degree of maliciousness or animus by the perpetrators. In contrast, carelessness threatens harm to anyone and demands accountability and remedy but does not require the moral level setting dictated by reparations discourse and precedents. This does not eliminate the case for climate reparations. Instead, it narrows it for “bad climate actors” and “climate recalcitrant states.” Burkett’s climate “responsible” should provide compensation for the harms they have caused with less attention on their motivation than on responsibility for the foreseeable consequences of their actions.¹¹⁵ “Bad climate actors” and “climate recalcitrant states,” on the other hand, warrant the symbolic strength of a reparations claim and program that requires their recognition of their reprehensible behavior and reestablishes the moral standing and worthiness of the victims of better treatment.

C. CLIMATE REPARATIONS FOR THE CONTINUING LEGACY OF SLAVERY AND COLONIALIZATION

Some articles connect climate change harms with the legacy of slavery and colonialization facing the Global South.¹¹⁶ In these articles, climate change represents the continuing harms of colonialization and slavery for Global South countries forced to bear the harms of climate change grounded in the history of European imperialism and racial capitalism.¹¹⁷ These climate reparations calls focus less on the specific case for reparations grounded in climate change harms than on articulating the outstanding warrant for reparations for historic injustices further demonstrated through the climate change consequences born by the Global South and precipitated by the past and ongoing practices of the Global North.¹¹⁸ As mentioned above, the climate harms in these cases represent additional insults and harms for preexisting claims that establish the moral warrant for reparations.¹¹⁹ Where those claims have been established, climate harms may add additional human rights violations and harms to a preestablished debt. These claims sound in

¹¹⁴. See *id.* at 524–28.

¹¹⁵. *Id.* at 528.

¹¹⁶. See, e.g., Sage Howard, *Slavery Fueled Our Climate Crisis. Here’s How Reparations Can Slow It Down*, NAT’L AFR.-AM. REPARATIONS COMM’N (Aug. 16, 2022), <https://reparationscomm.org/rep> arations-news/slavery-fueled-climate-crisis-reparations-can-slow-it-down [https://perma.cc/EU2 6-FTU9] (tracing the economic ties between slavery and unsustainable climate damage).

¹¹⁷. See *id.*; Dorothy Guerrero, *Colonialism, Climate Change and Climate Reparations*, GLOB. JUST. NOW (Aug. 4, 2023), <https://www.globaljustice.org.uk/blog/2023/08/colonialism-climate-change-and-climate-reparations> [https://perma.cc/5LWY-XDVW].

¹¹⁸. See Sarah Riley Case, *Looking to the Horizon: The Meanings of Reparations for Unbearable Crises*, 117 AM. J. INT’L L. UNBOUND 49, 50–53 (2023).

¹¹⁹. *Id.*; see *supra* Part I.

traditional reparations claims for historic injustices with the added insult of climate-based harms.

D. REPARATIONS MECHANISMS FOR LOSS AND DAMAGE AND DISRUPTION

In contrast with the moral arguments for climate reparations grounded largely around historical justice, Keston K. Perry “seeks to offer an action agenda for the international community to take stock of two proposed multilateral solutions . . . called the Global Climate Stabilization Fund and Resilience Fund Programmes for loss and damage associated with climate change.”¹²⁰ Perry explains, “[c]onsidering the increased threat to macro-economic conditions of developing and marginalised societies, through drought, flooding, sea level rise, megastorms, displacement from coastal areas, and the knock-on effects on livelihoods, a global mechanism that is democratically set up and respond[s] to the needs of these communities is urgently required.”¹²¹ Perry’s policy prescriptions establish the warrant for reparations in the economic dependence of the Global South on the Global North resulting from colonialism and neocolonialism.¹²² These arrangements, Perry notes, increased the Global South’s economic vulnerability to climate change impacts and subjects states to catastrophic economic risk that necessitate action by the Global North.¹²³ Beyond the historical relationships, Perry identifies the drastic bias in climate funding for the most vulnerable states toward mitigation over loss and damage or adaptation.¹²⁴ Perry’s case here is that climate financing fails to prioritize these nations’ loss and damage and adaptation needs based on their heightened vulnerability, focusing instead on mitigation despite these nations’ greater need to address ongoing climate harms and to protect against those to come.¹²⁵

The Global Climate Stabilization Fund is advanced by Perry as a multilateral financial mechanism “aimed at providing macro-economic and rapid-response financial support to marginalised communities and developing-country populations who suffer from the compounded effects and ravages of colonialism, financial disaster and climate change.”¹²⁶ In addition to its research and capacity-building objectives, the fund would “provide immediate budgetary and rapid response financial support” to “address loss and damage

^{120.} See KESTON K. PERRY, REALISING CLIMATE REPARATIONS: TOWARDS A GLOBAL CLIMATE STABILIZATION FUND AND RESILIENCE FUND PROGRAMME FOR LOSS AND DAMAGE IN MARGINALISED AND FORMER COLONISED SOCIETIES 4 (Mar. 1, 2020), <https://ssrn.com/abstract=3561121> [https://perma.cc/VS2G-CW8L].

^{121.} *Id.* at 5.

^{122.} See *id.* at 9–17.

^{123.} *Id.* at 4–6.

^{124.} *Id.* at 11–13.

^{125.} *Id.* at 13 (“While paying attention to mitigation is important, it is a long-term solution, while marginalised and developing societies are already experiencing major damage as a result of the contrived vulnerabilities on account of their historical and economic status as formerly colonised countries.”).

^{126.} *Id.* at 16.

linked to climate breakdown.”¹²⁷ The Resilience Funding Programme for Loss and Damage is the second fund proposed by Perry.¹²⁸ It would focus on funding resilience for “social groups, structures, infrastructure, livelihood, health and other related programmes” toward enabling sustainability.¹²⁹ Perry’s funds would provide climate-vulnerable nations with essential funding to meet their financial, technical, and social needs in addressing climate losses and building resilience.¹³⁰ These mechanisms are reparative, according to Perry, in that they address historic injustice and avoid the continued debilitating practices of the World Bank and International Monetary Fund that heighten climate vulnerability for the formerly colonized communities of the Global South while addressing the injustices of climate change.¹³¹

Perry, like Burkett, grounds climate reparations claims in the history of colonialism without attention to specific claims or cases warranting redress.¹³² In some cases, these claims will fall into preexisting reparations warrants. In those cases, Perry’s approach will address the historic debt challenges to support climate aspects of those reparations cases.¹³³ Outside of those preestablished claims, however, Perry fails to articulate the moral warrant for reparations.¹³⁴ Reparations necessitate focused attention on the nature of the wrongs perpetrated to produce acknowledgement and commitments to non-repetition.¹³⁵ Although the debt inequities raised by Perry make out a harm that requires remediation, alone they would not likely warrant reparations.¹³⁶ Perry’s thoughtful attention to harm remediation, however, provides a valuable framework for creating the climate compensation funds proposed by this Essay to provide redress for most climate harms.¹³⁷

E. CLIMATE DISPLACEMENT DICTATES

Kyle Fruh argues that climate displacement represents a significant and growing harm that requires attention.¹³⁸ Fruh asserts that reparative and non-reparative mechanisms can address the phenomenon, but that reparative approaches are necessary to acknowledge the injustice that precipitated the displacement to better frame and structure proper remedies for the substantial harm it causes.¹³⁹ Deprivations of displacement noted by Fruh include the loss

127. *Id.* at 18.

128. *Id.*

129. *Id.* at 20.

130. *Id.* at 16–20.

131. *Id.* at 8, 16–20.

132. *See id.*

133. *See id.*

134. *See id.* at 7–9, 16–20.

135. *Id.*

136. *Contra id.* (arguing for climate compensation funds as reparations).

137. *See id.*

138. Kyle Fruh, *Climate Change Driven Displacement and Justice: The Role of Reparations*, 22 ESSAYS PHIL. 102, 103–04 (2021).

139. *Id.*

of material resources, security and health, land, personal identity and history, shared history, community, culture, political affiliation, and agency.¹⁴⁰ Most of these deprivations are devastating harms alone. As a combined experience, their destructive impact on individuals and communities warrants greater attention. A reparative framework, in Fruh's estimation, (1) allows for recognition of the unique and sometimes irreducible nature of some deprivations of displacement;¹⁴¹ (2) the necessity for tailored non-financial remedies; and (3) the restoration of relationship between victims and those responsible for the harm. Fruh makes a strong argument for a reparative response to the injustices of climate change as a guiding mechanism in shaping nonfinancial remedies for climate displacement.¹⁴²

Climate displacement that forces people from their country creates a need for a home elsewhere and, in some cases, a desire for a new community that exercises self-determination grounded in a former political identity.¹⁴³ Decisions about which countries should provide territory, citizenship, or even approved residential access, Fruh suggests, are best informed by the "wrongful past impositions of harm that ground duties of states to cede territory to displaced political communities."¹⁴⁴ Fruh makes a strong point here; however, non-reparative remedies can also be tailored to unique and distinct harms including those of displacement.¹⁴⁵ Where some countries' actions have collectively caused the destruction and loss of home and homeland, or entire nations, justice demands facile immigration rights in some cases, and in others that territory be provided. Reparations, however, represent one form of corrective justice. Compensatory justice also allows for recognition of responsibility for harms in crafting just remediation.

To address climate displacement, Fruh's insights correctly direct climate crisis compensation to include political remedies to address statelessness and the loss of political identity of nations, as well as communities and individuals.¹⁴⁶ Accordingly, climate displacement claims can properly be addressed outside of the narrow case for reparations since they fail to present a sufficient or distinct wrong warranting reparations, although the harms call for the use of distinct and tailored remedies.

^{140.} *Id.* at 106–10.

^{141.} *Id.* at 112 ("[T]he deprivations of displacement will play a central role in making determinations of what kinds of interventions would not only restore displaced political communities to the capacity for self-determination, but in ways that are informed by what the community has lost.").

^{142.} *Id.* at 105–11.

^{143.} *Id.* at 111–12.

^{144.} *Id.* at 106.

^{145.} *See id.* at 104–06.

^{146.} *Id.*

F. PARTIAL REPARATIONS TO INCENTIVIZE MITIGATION AS NON-REPETITION

Benoit Mayer's approach to reparations seeks to motivate industrialized nations to mitigate GHG production as reparations to the developing nations.¹⁴⁷ He maintains:

This argument can be based on a breach of the “no harm” principle, from which arises an obligation for states to prevent activities within their jurisdiction that cause cross-boundary environmental damage. The injury caused by this internationally wrongful act is most persuasively conceived of as an injury to the global atmospheric commons—or, in the terms of the UN Framework Convention on Climate Change, as a “dangerous anthropogenic interference with the climate system”. The International Law Commission (ILC) recognized that breaches to obligations owed to the international community as a whole could also give rise to an obligation to pay reparations. . . . [I]t seems possible to assume, in line with the state-centred nature of international law, that compensation should accordingly be paid to the states representing the populations most affected by the injury caused to the global commons.¹⁴⁸

Benoit Mayer's approach conceives of the wrong to be addressed by climate reparations differently than others.¹⁴⁹ Seeing the wrong in the offense to the global community through abuse of the global commons, Benoit harkens back to property conceptions that connect humanity through its shared use and dependence on the natural environment.¹⁵⁰

Ultimately, Mayer rejects full reparations as an obligation of state responsibility due to the adverse political consequences and the nuanced and varied circumstances and degrees of culpability associated with state's GHG emissions.¹⁵¹ Instead, Mayer proposes “a prompt admission of responsibility accompanied by a limited payment of reparations.”¹⁵² The approach would be intended to spur more meaningful commitments by states to reduce GHG emissions as a means of “ceas[ing] excessive wrongful acts” to protect the global commons and the harms caused by climate change.¹⁵³ This approach more closely approximates reparations models through its identification of a wrong, requirement that the wrong be acknowledged, and that satisfaction and substantive redress be given.¹⁵⁴

¹⁴⁷. See Benoit Mayer, *Climate Change Reparations and the Law and Practice of State Responsibility*, 7 ASIAN J. INT'L L. 185, 186–89 (2017).

¹⁴⁸. *Id.* at 187 (footnotes omitted).

¹⁴⁹. See *id.* at 186–89.

¹⁵⁰. *Id.* at 190.

¹⁵¹. *Id.* at 185–89, 215–16.

¹⁵². *Id.* at 189.

¹⁵³. *Id.*

¹⁵⁴. See *id.* at 185–89, 193–96, 202, 214–16.

However, Mayer's instrumental approach to reparations completely neglects the climate vulnerable.¹⁵⁵ As a pragmatic matter, Mayer contends that preventing future climate harms supersedes attending to harms already inflicted.¹⁵⁶ Although this intentional disregard of the harms caused and threatened by climate change to the climate vulnerable removes Mayer's approach from what this Essay considers reparations, it does cohere with the argument that the harm rests in a state's damage to the global commons through excessive emissions.¹⁵⁷

Although this argument may have been viable three decades ago, before sea level rise threatened the very existence of small island states and measurable increases in the harms inflicted by extreme heat, wildfires, and floods, a discussion on reparations that neglects those most harmed and threatened misses the point. Concern about preventing or mitigating the undesirable consequences threatening the least vulnerable communities and nations that disregards the death and destruction already wrought, or imminent, for the most vulnerable communities insufficiently attends to the current harm experienced by the climate vulnerable and the fact that they deserve better.

Mayer refines this approach in a recent article, *Climate Reparations*.¹⁵⁸ Rather than grounding mitigation obligations in the “no harm” principle, in this article, Mayer finds a stronger, more enduring obligation in customary international law.¹⁵⁹ Customary international law provides “the two main premises of an international law argument for climate reparations invoking state responsibility: the existence of a wrongful act, which entails the international responsibility of the state, and the existence of an injury caused by this wrongful act, for which reparation is due.”¹⁶⁰ States’ failure to meet due diligence obligations to mitigate climate change as an obligation under customary international law constitutes the “wrongful act” that grounds state responsibility.¹⁶¹

Mayer contends that the customary international law norm requiring states “to prevent activities that could harm other states” requires them to exercise due diligence to mitigate climate change.¹⁶² In application, Mayer recognizes that finding a state in violation would be a challenge—stating that a breach would likely require it to “repeatedly fall[] short of [articulated mitigation] expectations without a reason, while other states do generally fulfil these expectations.”¹⁶³ As a further hurdle, Mayer contends that establishing a state’s obligation necessitates quantifying “the GHG emissions that the state would have avoided if it had fulfilled its obligations and the harm that these

^{155.} See *id.* at 188.

^{156.} *Id.* at 211–15.

^{157.} See *id.* at 186–87.

^{158.} See Benoit Mayer, *Climate Reparations*, 24 NEV. L.J. 963, 995 (2024).

^{159.} See *id.*

^{160.} *Id.* at 989.

^{161.} See *id.* at 994–1000.

^{162.} *Id.* at 994.

^{163.} *Id.* at 999.

additional emissions cause.”¹⁶⁴ To that end, Mayer rejects international negotiations and courts as the basis of viable climate reparations for climate wrongs and finds courts most valuable as mechanisms for “prompting and directing” international negotiations.¹⁶⁵ Contrary to Mayer’s mitigation based approach, this Essay grounds climate redress in compensation for the harms caused and exacerbated by climate change and the cost of adaptation and the construction of resilient infrastructure for vulnerable states and communities.

III. CLIMATE REDRESS CALLS CONSIDERED

Harm compensation represents a fundamental principle of human justice and contemporary legal systems.¹⁶⁶ The expectation or demand for harm remediation for intentional, and even unintentional but foreseeable acts, garners little controversy in theory, although its application can be quite contentious as a factual and legal matter. In most cases, reparations differ from common harm remediation due to the cause and the nature of the harm inflicted.¹⁶⁷ As noted above, reparations typically relate to dignity harms inflicted due to intent or conscious disregard for the victims’ humanity or well-being.¹⁶⁸ Accordingly, climate compensation funds or payments fall within the theory of harm remediation once the proper victims, harmful acts, and responsible actors have been identified. They roughly correspond to victims as communities and nations suffering harm from climate-based events; responsible actors as nations or private entities polluting in sufficient amounts to cause climate change; and harmful acts represented by the conscious or reckless emission of GHGs at levels sufficient to cause or worsen climate change without regard for the consequences. This approach is inclusive of each of the climate redress calls above and allows sufficiently tailored remedies to meet the range of outcomes envisioned.¹⁶⁹ Rather than an in-depth examination of the structure and mechanisms for a climate compensation program, this Essay focuses on the moral basis for such a program to address most climate-based harm while outlining critical features a program should include.¹⁷⁰

Contrary to this approach, Burkett argues:

^{164.} *Id.* at 1005.

^{165.} *Id.* at 1022.

^{166.} See generally James W. Nickel, *Justice in Compensation*, 18 WM. & MARY L. REV. 379 (1976) (discussing the moral and philosophical issues in the practice of compensation).

^{167.} See sources cited *supra* note 74.

^{168.} See *supra* Part I.

^{169.} See generally Daniel A. Farber, *Basic Compensation for Victims of Climate Change*, 155 U. PA. L. REV. 1605 (2007), for a foundational exploration of potential approaches that could support compensation for climate harms from nations and others responsible for high greenhouse gas emissions.

^{170.} This Essay supports an administered fund overseen by an international body that distributes funds provided by responsible parties to climate vulnerable nations and communities as contemplated by Farber. *Id.* at 1640–49; see also Burkett, *supra* note 23, at 517 (discussing the UNFCCC in the context of accepting climate responsibility).

Attempts have been made to craft a comprehensive approach to achieve compensation based on climate change, both within and beyond the *UNFCCC*. One such attempt was a discussion paper by Roda Verheyen and Peter Roderick, which seeks to provide clarity and to review options for addressing damage and compensation within the *UNFCCC* process. Yet even this framework does not address the ethics and justice elements that are key to a valuable system of reparation by climate change damages. Verheyen and Roderick persuasively argue that, at the international level, claims for compensation by the climate vulnerable against specified developed countries would have a firm basis in international law if brought before the appropriate tribunal.¹⁷¹

Burkett's argument, however, rests on the nature of international lawmaking through the development of cases rather than the sufficiency of the remedial awards or the accountability process to satisfy the moral demands.¹⁷² The pragmatic and practical concerns of case-by-case litigation can be addressed through the creation of one or more multilateral climate compensation funds that acknowledge the moral demand for correcting the harm caused by past actions and provide the range of remedies that climate vulnerability necessitates.

As Burkett and others note, one foundational ingredient of the climate compensation case is the international law norm against causing harm to another nation.¹⁷³ The “no harm” rule exists as a principle of customary international law and is reflected in multiple international law decisions.¹⁷⁴ The principle grew out of an international environmental law case of transboundary pollution between the United States and Canada.¹⁷⁵ In subsequent cases, the International Court of Justice has found a due diligence requirement in the rule, stating “[a] State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State.”¹⁷⁶

Applying this requirement to climate change, it is clear that more than a few nations have failed to act to prevent damage to the environment of other states.¹⁷⁷ The damage these states have caused on the climate vulnerable,

^{171.} Burkett, *supra* note 23, at 517 (footnotes omitted).

^{172.} *Id.* at 517–18.

^{173.} *Id.* at 517 n.41.

^{174.} See Ruslan Klafeln, Comment, *Burning Down the House: Do Brazil's Forest Management Policies Violate the No-Harm Rule Under the CBD and Customary International Law?*, 35 AM. U. INT'L L. REV. 941, 949–52 (2020) (discussing the development and application of the No-Harm Rule in international law).

^{175.} See *Trail Smelter* (U.S. v. Can.), 3 R.I.A.A. 1905, 1965 (Ottawa Conv. 1941) (citing *Georgia v. Tenn. Copper Co.*, 237 U.S. 474, 477 (1915)).

^{176.} *Pulp Mills on the River Uruguay* (Arg. v. Uru.), Judgment, 2010 I.C.J. 14, ¶ 101 (Apr. 20).

^{177.} For a discussion of possible challenges to the No-Harm Rule, see Jacob Wise, Note, *Climate Change Loss and Damage Litigation: Infeasible or a Useful Shadow?*, 38 WIS. INT'L L.J. 687, 697–99 (2021).

like small island states, warrants compensation, possible remediation, and financing for robust adaptation measures to avoid future harm. Compensation schemes can also include and account for behavioral changes by the climate responsible to prevent future harm to the same or other victims. My case for climate compensation follows Burkett and others' remedial mechanisms described above.

IV. CLIMATE COMPENSATION FUNDS

To create a comprehensive approach to climate accountability, this Essay envisions a three-tiered structure. The Loss and Damage Fund under the UNFCCC establishes a minimum set of requirements for states to meet their common but differentiated responsibilities to address climate change. Climate compensation funds provide a second-tier accountability mechanism that makes funds available for states and communities most vulnerable to climate harm. Climate compensation funds would make resources available to the least developed countries, small island states, and communities most vulnerable to the harm caused by climate change. Nations rejecting their obligations to the Loss and Damage Fund would be required to make payment to the climate compensation fund under international law norms noted above. The International Court of Justice and other international tribunals would direct nations failing to meet their obligations to provide funding to climate compensation funds.

Climate compensation funds have been developed through legislation in the United States in Vermont and most recently in New York.¹⁷⁸ These funds draw on the model of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").¹⁷⁹ The groundbreaking legislation enacted in 1980 reflects the "polluter pays" principle by holding polluters responsible for the cost of cleaning up contaminated sites.¹⁸⁰ Under CERCLA, a tax on chemical manufacturers created and sustained the Superfund—a government fund that enables the Environmental Protection Agency to carry out emergency response actions, assess site contamination, and conduct cleanups at the nation's most contaminated sites.¹⁸¹

Although the New York and Vermont laws follow a similar model for the costs of climate adaptation—holding large scale GHG emitters responsible for

178. See *Vermont and New York Climate Acts Are First in a Wave of Likely Climate Change Cost Recovery Laws*, SIDLEY AUSTIN (June 20, 2024), <https://www.sidley.com/en/insights/newsupdates/2024/06/vermont-and-new-york-climate-acts-are-first-in-a-wave-of-likely-climate-change-cost-recovery-laws> [https://perma.cc/K8VH-CHKH].

179. *Id.*; see Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. § 9601).

180. Amanda G. Halter, Ashleigh Myers, Jillian Marullo & Kelsey Parker, *New York's "Climate Superfund" Bill Becomes Law, Part of a Trend*, PILLSBURY WINTHROP SHAW PITTMAN (Jan. 6, 2025), <https://www.pillsburylaw.com/en/news-and-insights/climate-superfund-new-york.html> [https://perma.cc/EJZ4-YHZ6].

181. *Superfund: CERCLA Overview*, U.S. ENV'T PROT. AGENCY (Oct. 8, 2024), <https://www.epa.gov/superfund/superfund-cercla-overview> [https://perma.cc/AGR5-JRP2].

offsetting some of the massive costs the states have incurred and will incur in infrastructure and other adaptation efforts—this Essay focuses exclusively on the New York statute.¹⁸² In its findings, the New York legislation presents the following at section two, paragraphs four and five:

4. It is the intent of the legislature to establish a climate change adaptation cost recovery program that will require companies that have contributed significantly to the buildup of climate change-driving greenhouse gases in the atmosphere to bear a proportionate share of the cost of infrastructure investments and other expenses necessary for comprehensive adaptation to the impacts of climate change in New York state.
5. The obligation to pay under the program is based on the fossil fuel companies' historic contribution to the buildup of greenhouse gases that is largely responsible for climate change. The program operates under a standard of strict liability; companies are required to pay into the fund because the use of their products caused the pollution. No finding of wrongdoing is required.¹⁸³

In New York, a fixed amount of seventy-five billion dollars was selected for the fund.¹⁸⁴ The cost recovery program described above seeks to impose cost amounts to individual polluters proportionate to their share of that fixed amount.¹⁸⁵ Accordingly, the law contemplates a governmental infrastructure that both assesses and collects funds and then redistributes those funds to climate adaptation infrastructure projects.¹⁸⁶ As described above, the program avoids questions of wrongdoing and culpability by holding companies strictly liable for the pollution caused by their products.¹⁸⁷

Paragraph six of that section establishes how the cost recovery funds will be used:

Payments by historical polluters into the climate change adaptation cost recovery program would be used for new or upgraded infrastructure needs such as coastal wetlands restoration, storm water drainage system upgrades, energy efficient cooling systems in public and private buildings, including schools and public housing, support for programs addressing climate-driven public health challenges, and responses to extreme weather events, all of which are necessary

^{182.} See *supra* note 178 and accompanying text.

^{183.} Assemb. A3551B, 2023–2024 Leg., Reg. Sess. §§ 2(4)–2(5) (N.Y. 2023) (enacted); see also N.Y. ENV'T CONSERV. LAW §§ 76-0101 to 76-0105.

^{184.} See Jonathan Allen, *New York to Fine Fossil Fuel Companies \$75 Billion Under New Climate Law*, REUTERS (Dec. 26, 2024, 2:43 PM), <https://www.reuters.com/sustainability/new-york-fine-fossil-fuel-companies-75-billion-under-new-climate-law-2024-12-26> [https://perma.cc/7RY2-6TPA].

^{185.} *Id.*

^{186.} *Vermont and New York Climate Acts Are First in a Wave of Likely Climate Change Cost Recovery Laws*, *supra* note 178.

^{187.} See Allen, *supra* note 184.

to protect the public safety and welfare in the face of the growing impacts of climate change.¹⁸⁸

These uses make clear that the funds' dedicated purpose directly relates to the costs being recovered from the liable parties.¹⁸⁹ Beyond the infrastructure projects mentioned in the Act's preamble, the section identifies responses to extreme weather and climate-related public health concerns.¹⁹⁰ Accordingly, the law contemplates a range of costs borne by the state that far exceed the seventy-five billion dollars sought by the Act.¹⁹¹ The language used indicates that the legislation is remedial rather than punitive—calling for polluters to pay a fraction of the total costs their products have imposed upon the state and its residents.¹⁹²

In the global climate context, the New York Climate Cost Recovery Program provides a helpful model for a climate compensation scheme. The emphasis on cost recovery, proportionate responsibility, and distribution for climate adaptation infrastructure development, extreme weather responses, and related public health challenges accords well with climate migration and relocation costs and other features noted above for one or more climate compensation mechanisms.¹⁹³ This Essay proposes the use of a comparable funding model to promote resilience in climate-vulnerable states and communities consistent with the funding objectives of Perry's Resilience Funding Programmes for Loss and Damage.¹⁹⁴ A second-tier compensation fund of this type, focused on nations that reject or otherwise fail to meet Loss and Damage Fund obligations, represents a critical climate compensation support that encourages compliance with the negotiated UNFCCC Loss and Damage Fund levels.¹⁹⁵ The second-tier fund proposed in this Essay would likewise assign proportionate responsibility to address the most vulnerable nations' costs that exceed those captured by the Loss and Damage Fund.¹⁹⁶ Loss and Damage Fund discussions at COP29 envision these costs being

188. N.Y. Assemb. A3551B § 2(6)(a).

189. *Id.*

190. *Id.*

191. *Id.*

192. *Id.*

193. *See id.* § 2.

194. Perry lists the following objectives for resilience funding:

1. To provide upfront financial support based on appropriate assessments of current and future loss and damage[.] 2. To deploy the technical and other relevant long-term support to create and encourage the endurance of community solidarities within marginalized countries. 3. To fund democratically controlled community-based initiatives (cultural, economic, social etc.) based on self-designed community decision-making structures. 4. To foster the continued existence and longevity of social groups, structures, infrastructure, livelihood, health and other related programmes that enable sustainability.

PERRY, *supra* note 120, at 20.

195. *See Fund for Responding to Loss and Damage, supra* note 20.

196. *See id.*

addressed through loans and other funding mechanisms that can have significant adverse consequences for vulnerable nations.¹⁹⁷ As Perry writes:

[L]oans provided through the IMF's Rapid Credit Facility (RCF) and other such mechanisms . . . are utilized as levers to maintain a prescriptive macro-economic regime favourable to financial markets and to encourage private flows of finance to these countries. . . . Loss and damage funding needs to be disentangled from international capital markets and harmful macroeconomic policies that disable countries from pursuing a broad range of developmental policies, paralyse their policy autonomy, and restructure their financial systems.¹⁹⁸

Utilizing a second-tier climate compensation fund that holds nations accountable who fail to honor the funding levels committed to under the Loss and Damage Fund provides a meaningful alternative to an increased debt burden for nations that have been unfairly saddled with bearing the costs of pollution produced by others and from which others reaped huge financial, social, and other benefits.

Although space does not allow for a detailed description of the global climate compensation funds proposed, critical components gleaned from the scholarship considered above are presented in brief with further development and research envisioned. Drawing on the insight of the redress approaches above, three key fund components are proposed that build on the cost recovery structure from the New York law considered above. The first component flows from Wewerinke-Singh's insight regarding international litigation burdens on climate-vulnerable states.¹⁹⁹ The second-tier Climate Compensation Funds ("CCF") payment obligations should be administered through the regional international courts, with Burkett's climate responsible parties making payments to the CCF and claimants within those regions submitting claims for harm remediation and adaptation planning and implementation to a regional fund administrator for review and payment.²⁰⁰ Claims for the funds would be made at the national or subnational governmental level based on the harms presented and the adaptation proposed. The second component, also drawn from Wewerinke-Singh's work, is support for a broad base of claims that allows claimants to capture the range of harm wrought by climate change upon affected communities.²⁰¹ Keeping human rights and their protections in mind, claims should allow for inclusion of the range of harm caused and exacerbated by climate change. Within this component, Fruh's critical understanding of displacement and migration plays an integral

197. See Chelsea Johnson, *Adaptation, Loss & Damage at COP29: Some Progress Made, Much Remains*, CTR. FOR CLIMATE & ENERGY SOLS. (Jan. 8, 2025), <https://www.c2es.org/2025/01/adaptation-loss-damage-at-cop29-some-progress-made-much-remains> [https://perma.cc/H9Q3-GCJL].

198. PERRY, *supra* note 120, at 12–13 (footnote omitted).

199. See *supra* notes 93–107 and accompanying text.

200. See *supra* notes 111–12 and accompanying text.

201. See *supra* notes 93–107 and accompanying text.

role.²⁰² The uniqueness of displacement-based harms means that claims will need to include political remedies that address the harms that fall beyond the scope of monetary damages, including residency and citizenship opportunities as well as opportunities for community-based land acquisition.²⁰³ The third component seeks to incorporate significant features of Perry's fund proposals.²⁰⁴ The CCF would need at least three tiers of claims. The first tier would address the "macro-economic and rapid-response financial support" needed for remediation of significant infrastructure damage and remediation costs.²⁰⁵ A second tier of claims would focus on large and community-level adaptation planning and implementation, while a third tier would allow national and subnational governments to present claims for the wide range of community-based harm described by Wewerinke-Singh and Fruh and included under the first component.²⁰⁶ Undergirding the three components is a modified version of Burkett's "climate responsible."²⁰⁷ With the creation of the Loss and Damage Fund under the UNFCCC, many of the "climate responsible" will meet their responsibility through contributions to it. The CCF, in contrast, will be financed by states outside of the Loss and Damage Fund process or those who fail to honor their commitments or responsibilities under it.

V. THE NARROW CASE FOR CLIMATE REPARATIONS

Burkett's "climate vulnerable" will typically qualify as deserving claimants.²⁰⁸ A fulsome reparations process should be developed that enables claimants to present claims and engage in a process for the development of meaningful reparations mechanisms. The reparations case leans heavily toward victims proximate to "bad climate actors." Proximity connects the actor with the victim in specific rather than abstract ways. This allows for transboundary climate reparations but will more often reflect actors within nations that subject known groups of climate-vulnerable peoples to harm. In addition to their vulnerability to climate impacts, these victims may also share location, heritage, history, religion, race, tribe, ethnicity, class, or other characteristics.

In these cases, the "bad climate actors" will make climate-related decisions that will increase or disregard their vulnerability in ways that harm them. These policies go beyond GHG emissions, which dominate most climate reparations discourse, to include policies and practices that knowingly enhance their risk of harm from climate impacts, deny them protection from climate impacts, or prevent their adaptation to known impacts. The goal is to identify both the political actors or regimes engaged in abhorrent behavior and the behavior itself. Non-repetition benefits from specificity and particularity.

202. See *supra* Section II.E.

203. See Fruh, *supra* note 138, at 10–11.

204. See *supra* Section II.D.

205. PERRY, *supra* note 120, at 16; see *supra* notes 124–31 and accompanying text.

206. See *supra* Sections II.A, II.E.

207. See *supra* notes 110–12, 115 and accompanying text.

208. See Burkett, *supra* note 23, at 513–14.

It signals widely the types of decisions and behaviors that must not be repeated. This supports non-repetition by the guilty actors and the entire community.

Climate reparations should flow from gross human rights abuse. As noted above, these behaviors will reflect malice, animus, or a conscious disregard for the harm threatening vulnerable groups. Reparative forms should include monuments, memorials, and museums; apology, atonement, and rehabilitation/remediation. The full suite of reparations tools applies in the climate reparations case; following Brooks's atonement model, apology and subsequent remedial action demonstrate the legitimacy of the apology.²⁰⁹ Moreover, victims' engagement and participation in the remedial approach will be essential. This could reflect monuments and memorials to lost loved ones and destroyed neighborhoods or communities. As a matter of rehabilitative reparations, robust climate adaptation investments and engagement should be used to limit future risks and threats and to bolster the resilience of the communities. "Climate recalcitrant states" would also potentially qualify for reparations claims based on their rejection of responsibility to provide compensation for those harms. In those cases, the rejection of responsibility would provide the warrant for reparations rather than the initial production of GHGs. As the consequences and victims of GHG production have moved on from the unknown and unknowable a century ago, culpability and obligation have also shifted toward current GHG producers. When presented with their violations of the "polluter pays" principle and the principle of "no harm," states rejecting compensation obligations act with intent and possible disregard for those injured by their actions. A Climate Reparations Fund financed through payments made by "bad climate actors" and "climate recalcitrant states" would allow the same range of remedies available under the CCF with the additional expectation that "bad climate actors" issue apologies or other acknowledgments of their climate-based wrongs in addition to reparative efforts directly related to the harms inflicted as a means of atonement.²¹⁰

CONCLUSION

This Essay has explored redress for climate-based harms by drawing on the moral reasoning and history of reparations and compensation for harms. Through a review of distinct approaches to redress for climate redress it concludes that climate compensation funds financed by states outside of the UNFCCC Loss and Damage Fund mechanism will address most climate harms not covered by Loss and Damage. It also finds that a narrow case for climate reparations exists for "bad climate actors" and "climate recalcitrant states" and proposes institutional mechanisms for implementing climate compensation and reparations that draw on the insights from climate redress approaches reviewed. Future research on the structure and function of climate compensation funds is envisioned to develop a workable structure to provide climate-

^{209.} See *supra* notes 24–31 and accompanying text.

^{210.} See BROOKS, *supra* note 30.

vulnerable communities and states with the resources needed to address the climate crisis.