

Loss and Damage Fund: Core Response to Climate Change in the Near Future

Fundo de Perdas e Danos: Resposta Central às Mudanças Climáticas no Futuro Próximo

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ABSTRACT

A financial instrument is an essential method for responding to environmental issues in the contemporary era. As "loss and damage" came back to our horizons for the C.O.P. 27 decision of establishing a loss and damage fund, it's appropriate to look back on the developments of the concept now, based on which we could analyze the establishment and the possible effects of the institution. By using the literature review methodology, this article may mainly obtain its source material from original decisions and other official files released by relevant international organizations and conferences. Through comparison analysis, with observations regarding the status quo of similar funds, the painting of the future of L&D fund may come to us.

Keywords: Loss and Damage Fund, climate change, financial instruments, C.O.P. 27, international organizations.

RESUMO

O instrumento financeiro é um método essencial para responder a questões ambientais na era contemporânea. Como a "perda e dano" voltou a nossa atenção com a decisão da COP 27 de estabelecer um fundo de perda e dano, é apropriado revisar o desenvolvimento do conceito agora, com base no qual

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poderíamos analisar o estabelecimento e os possíveis efeitos da instituição. Usando a metodologia da literatura, este artigo pode obter principalmente seu material de origem a partir de decisões originais e outros arquivos oficiais divulgados por organizações internacionais e conferências relevantes. Por meio de análises comparativas, com observações sobre o estado atual de fundos semelhantes, a visão do futuro do fundo de L&D pode vir até nós.

Palavras-chave: fundo de perda e dano; mudança climática; instrumento financeiro; COP 27.

1. INTRODUCTION

The concept of "loss and damage" (L&D) has recently become the headline of massive media since the C.O.P. 27 has provided positive attitudes towards establishing special funds based on it. Historically, as U.N. described, the conference adopted an agreement to prepare to establish a special fund to pay for L&D in climate-vulnerable states. The third response to climate change finally gets its voice before the end of 2022, and hopefully, it may show extensive effects soon.

Generally, responses to climate change in both international and domestic dimensions include two focuses: mitigation and adaptation. While the third response to climate change, addressing L&D, has missed its stage over the past decades. In 1991, the concept of L&D was brought up by the Alliance of Small Island States (AOSIS).² However, Sharm El-Sheikh Implementation Plan announced that it is

for the first time, of matters relating to funding arrangements responding to loss and damage associated with the adverse effects of climate change, including a focus on addressing loss and damage.

² Gregor Vulturius and Marion Davis, "Defining L&D: The Science and Politics around One of the Most Contested Issues within the UNFCCC," *Stockholm Environment Institute* (September 2016).





As an issue of climate justice, L&D is a concept involved with controversies. This article would get the legal angle, starting from clearing up the definition of L&D and its development in the international dimension, then discussing the necessity to respond to the issue, and finally primarily debating about specified questions involved in the establishment of L&D Fund.

2. LEGAL OBLIGATION TO COMPENSATE IN INTERNATIONAL CLIMATE LAW

Either arrangement for "loss and damage" funding or climate change litigation in recent years reflects the same key point in international climate law: responsibility. Before further discussing the fund and its method, the first step is clarifying the responsibility justification.

The no-harm principle in customary international law, which I.C.J. has restated, is applicable in environmental law, as I.C.J. ever stated in the case regarding "Legality of the Threat or Use of Nuclear Weapons,"

existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment.

Thus, precaution and prevention of transboundary harm have become international obligations, breach of which may trigger state responsibility in accordance with customary international law and Draft Articles on State Responsibility for Internationally Wrongful Acts. Apart from the no-harm principle, scholars assert that loss and damage in climate change could be argued on the "polluter pays" principle.

Therefore, theoretically and legally, L&D of climate change possesses the basis to acquire compensation. It deserves to emphasize that the responsibility to pay for the damage in climate law can be purely legal based on





the current legal system, but not just moral responsibility, as some developed countries have argued publicly and repeatedly.³ Moreover, though establishing funds seems to minimize the instinct of legal obligation of its essential concept, it's still necessary to affirm its nature since it may affect the parties' attitudes towards keeping promises under the new agreement.

3. DEVELOPMENTS OF L&D UNDER UNFCCC

As mentioned above, the concept of L&D existed before the United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992. The meaning of the concept could be interpreted as: the limits of mitigation and adaptation, and people would inevitably live with the risks of L&D.⁴ That is, mitigation and adaptation cannot turn back time to restore the environment totally. Nevertheless, according to N.G.O.s' and IGOS' reports on emissions, human beings are still on the way to artificial disasters.

After being brought up, addressing L&D didn't exist in the final version United Nations Framework Convention on Climate Change, with the insurance system mentioned in the context. Supporters of AOSIS later proposed their views on the result: "In spite of its obvious merits and considerable importance...was, not surprisingly, viewed as anathema by the developed countries. It will probably remain so for the foreseeable future."⁵

In 2007, at C.O.P. 13, consideration of means to address L&D was introduced to a negotiated text for the first time. In November 2010, C.O.P. 16 Decision 1/CP.16 stated that:

⁴ Kirstin Dow et al., "Limits to Adaptation," *Nature Climate Change* 3, no. 4 (April 2013): 305–7. ⁵ John W. Ashe, Robert Lierop, and Anilla Cherian, "The Role of the Alliance of Small Island States (AOSIS) in the Negotiation of the United Nations Framework Convention on Climate Change (UNFCCC)," *Natural Resources Forum* 23, no. 3 (August 1999): 209–20.



³ SEI, "Do Rich Countries Have a 'Moral Responsibility' to Pay for the Cost of Climate Change?", https://www.sei.org/about-sei/press-room/moral-responsibility-climate-change/.



Recognizes the need to strengthen international cooperation and expertise in order to understand and reduce L&D associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events.

In 2013, L&D was formally recognized at C.O.P. 19 through the Warsaw International Mechanism on L&D.⁶ Then, in Paris Agreement, Article 8 affirms the context of L&D, with a typical emphasis of no liability or responsibility involved through Decision 1/CP.21.⁷ The Warsaw International Mechanism on Loss and Damage (W.I.M.) was established in accordance with Decision 2/CP.19.⁸ W.I.M. then programmed versions of work plans specializing in investigating and providing research around loss and damage caused by climate change. W.I.M. published a series of documents to help define L&D and to help motivate the development of attention on this topic. From C.O.P. 22 to C.O.P. 24, W.I.M. was brought under the Paris Agreement, and then L&D was included in the rulebook for implementing the Paris Agreement.⁹ It was in 2021, at C.O.P. 26, that proposal regarding L&D Finance Facility had been negotiated for the letter from G77 and China. Scotland stepped forward first to announce national funding for L&D.¹⁰

The developments above indicate the difficulty of realizing the fund of L&D; with around 30 years going by, no substantive progress has been made before C.O.P. 27 released its decision waiting for implementation.

4. THE NECESSITY OF RESPONDING TO L&D

⁹ Centre for Science and Environment. "COP 27: Agenda and Expectations", 2022, https://www.cseindia.org/cop-27-agenda-and-expectations-11485.
¹⁰ Ibid.



⁶ UNFCCC, "Report of the Conference of the Parties on Its Nineteenth Session, Held in Warsaw from 11 to 23 November 2013. Addendum. Part Two: Action Taken by the Conference of the Parties at Its Nineteenth Session.," 2013, https://unfccc.int/documents/8106. ("Warsaw Session")

⁷ UN, "The Paris Agreement," 2015, https://www.un.org/en/climatechange/paris-agreement.

⁸ Warsaw Session.



Different from its dilemma in the legal context, the concept has continuously attracted scholar's and N.G.O.'s attention, for it is of necessity to establish international institution to respond to L&D based on the following aspects:

1. The Less Optimistic Situation

Climate change has been a legal issue in the international dimension since the construction of UNFCCC; however, through observations of reports from IPCC and other environmental groups, the natural environment has not turned to a better status, and the warming process continuously makes its way to the future of human society. In 2022, severe flooding gave rise to heavy losses in Pakistan, with 33 million people affected¹¹. The record flooding results from the La N.I.A. weather phenomenon, which is accordingly attributable to climate change. Opposite to the flooding, Africa and South America were facing with drought for the same reason.

Undoubtedly, according to the nationally determined contribution regulated in Paris Agreement, many states have provided national plans to cut emissions and mend the structure of energy industries, but economic developments still contribute to increasing greenhouse gas emissions. As some economists have pointed out, decoupling growth from environmental impact (or resource use) is impossible, as the extant empirical evidence indicates. For the limitation original from the mode of production and consumption, climate change is foredoomed to maintain its influence on the earth and human beings, even not in a limited period.

¹² Jason Hickel and Giorgos Kallis, "Is Green Growth Possible?," *New Political Economy* 25, no. 4 (June 6, 2020): 469–86.



¹¹ Goldbaum, C., ur-Rehman, Z. and Hayeri, "In Pakistan's Record Floods, Villages Are Now Desperate Islands", The New York Times, 14 September 2022, https://www.nytimes.com/2022/09/14/world/asia/pakistan-floods.html.



2. The Existence of Unavoidable L&D

WFF provides the categories of L&D in a discussion paper, which divides climate change damage into three types: foreseeable L&D that will be avoided, foreseeable L&D that will not be avoided due to inadequate efforts, and unavoidable L&D.¹³

In light of AR6 Synthesis Report 2022, IPCC first assessed L&D in 2018, concluding that residual risks of adaptation limits have existed without efficient risk management institutions and technic. This conclusion stems from limited data, meaning the reality could be worse. Nevertheless, in this Report, IPCC indicates that financial support around L&D is insufficient, the risk detention layer "beyond adaptation" and technical development relating to attribution in this field may motivate the developments of L&D deeply. In other words, L&D has occurred and ought to increase. However, it should be noted that in the Report 2023, IPCC loses its interest in L&D issue; the phrase only exists once while mitigation and adaptation occupy almost all pages. In

The fact witnesses that mitigation and adaptation cannot solve all the problems brought up for climate change, L&D is the topic that actors, especially with vulnerabilities, must pay attention to.

3. The Lack of Finance Mechanism for L&D

L&D was born with characters of financial matters, AOSIS hoped the island states affected by climate change could get access to aid and



¹³ Verheyen and Roderick, "Beyond Adaptation: The Legal Duty to Pay Compensation for Climate Change Damage" (WWF-UK, November 2008).

¹⁴ IPCC, "AR6 Synthesis Report: Climate Change 2022," 2022, https://www.ipcc.ch/report/sixth-assessment-report-cycle/.

¹⁵ IPCC, "AR6 Synthesis Report: Climate Change 2023," 2023, https://www.ipcc.ch/report/ar6/syr/.



compensation through financial mechanisms such as insurance. Since there is common sense that data and technical assistance are of limited use for developing countries if without money.¹⁶

Under UNFCCC, financial matters mainly consist of adaptation funds, green climate funds, and special climate change funds, with no one with specified focus on compensation for loss and damage that have occurred and cannot be solved.

The current financial system presents the intention of UNFCCC to establish a fair economic and technological stage for developing states to participate in mitigating and adapting to climate change. And now, the L&D fund may provide the system with the third part: to deal with the damages that cannot be avoided or have not been avoided. Then, a relevant, complete legal, financial system of climate change would ultimately end its primary development, which has the capacity to show its effects in all chains, from precaution to intervention to damage processing.

In all, L&D fund has got the necessity and importance to be established years ago; conflicts of national interests have stretched the negotiations for so long time.

5. DISCUSSIONS ON DESIGNING THE L&D FINANCE MECHANISM

The decision of C.O.P. 27 has opened the door to access L&D funds, yet more important topics have now formally appeared on the stage of history, that is: How can we construct a feasible L&D finance mechanism under UNFCCC?

¹⁶ Michael Franczak, "Options for a Loss and Damage Financial Mechanism," *International Peace Institute* (October 2022):1-18.





1. Primary Analysis of the Decision

The first step of this section is to analyze the possible structure based on the literal context of the decision, which may give us a limited but significant answer: ¹⁷

- a. Preface of Decision CMA.4 has briefly reviewed the reason or purpose of the climate change law, noting the increasing urgency of enhancing efforts to avert, minimize and address L&D associated with the adverse effects of climate change and the goal to keep global average temperature.
- b. The preface emphasizes the main scientific basis of the decision, original from IPCC's 6th Report.
- c. The preface reviews the previous work regarding the consideration of finance for addressing L&D, taking extreme weather events and slow onset events into the range of contributors of L&D.
- d. The preface acknowledges a lack of funding arrangements to respond to current and future impacts of climate change and address L&D.

The main body consists of 18 articles, which contain the following relevant content:¹⁸

- a. Article 1 indicates the purpose, compensated subjects, and definition of L&D:
- 1) Purpose: To meet the urgent and immediate need for additional and adequate financial recourses to organize assistance.
- 2) Compensated Subjects: Developing countries that are particularly vulnerable to the adverse effects of climate change.
- b. Definition of L&D: From the view of classification, L&D in this decision includes economic and non-economic loss and damage associated

¹⁷ UNFCCC, "Funding Arrangements for Responding to Loss and Damage Associated with the Adverse Effects of Climate Change, Including a Focus on Addressing Loss and Damage. Revised Draft Decision -/CP.27 -/CMA.4," 2022, https://unfccc.int/documents/624434.

¹⁸ Ibid.





with the focusing on mobilizing new and additional feasible financial resources.¹⁹

- Article 4 and 5 indicate the transitional committee assumes responsibility for preparing for the arrangements of the fund, while Article 6 indicates the very basic and necessary information the committee needs to consider during the preparation.²⁰
- d. Article 7-12 indicate the arrangements of resources of external support that could be utilized and mobilized, which may act as the role of databases and think tanks for the work of the establishment.²¹
- e. Article 13 indicates the hope and request that the C.O.P. keep for the international actors to notice and bear the responsibility for climate change.22
- Article 14 and 15 indicate that the following discussion of the arrangements based on the decision shall show the outcomes at C.O.P. 28, while the last three indicate the provision of administrative assistance from the secretariat.

2. The Structure of the Fund in the Decision

According to the primary analysis above, we could paint the simple structure of the fund now; though the complete content cannot be found in the short context, it is still important to notice the starting point since it may act as the bones of the body.

Apart from repeatedly emphasized purposes and situations of urgency, we could summarize the present fund structure as follows:

Potential Resources of funds: Developed country Parties, the operating entities of the Financial Mechanism, United Nations entities and

²⁰ Ibid.



¹⁹ Ibid.

²¹ Ibid.

²² Ibid.



intergovernmental organizations and other bilateral and multilateral institutions, including non-governmental organizations and private sources.²³ Or in other words, almost all influential or powerful actors in the international dimension having the capacity to assist were included.

- b. Main Function: Distribution of the funds to compensate for economic or non-economic L&D;
- c. Compensated Subjects: Developing countries that are particularly vulnerable to the adverse effects of climate change.

The content of the decision is straightforward but clearly pictures the basic structure of the fund: Raising Funds—Standards of Distribution—Funded Subjects.

6. UNANSWERED QUESTIONS IN COLLECTION AND DISTRIBUTION

For the limitation of the discussion at C.O.P. 27, the decision only provides us with several directions of thinking about the establishment of L&D Fund. There are more unanswered questions left involved with the three directions mentioned in part V.2. in this section, referring establishment and operation of the Green Climate Fund (GCF), the special fund established complied with the decision at C.O.P. 16; author would try to suggest some answers.

1. Collection

GCF was decided to be constructed at C.O.P. 16, while the conference reports recorded relevant arrangements for the organization, though, with unclear clause explaining how to raise the fund. Based on the Report of the

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²³ Ibid.



Secretary-General's High-Level Advisory Group on Climate Change Financing released in 2010, the decision to establish GCF contains the potential logic that there is no necessity to worry about the resources of money since in the Report, the Advisory Group reached the conclusion that the goal of accessing to USD\$ 100 billion per year by 2020 is challenging but feasible.²⁴ And present data presents that the goal is so far away from reaching reality.²⁵ Obviously, although there is a wide variety of sources of finance that could potentially be mobilized to sponsor the relevant projects and investments, even an additional percentage of tax from resource industrials could help solve the main funding problem; it cannot be denied that loosening purse-strings of developed countries, domestic and foreign policy priorities of nations could universally be the barriers on the way of proceeding.

GCF has taken no mandatory methods to process the collection, which is consistent with relevant causes under UNFCCC; the national contribution is reported annually through its website, underlying all contribution data in that year. It is understandable that forcing international actors to conduct typical behavior is of hardness in the international dimension, for till today, we cannot point out that there could be or has existed an authority that controlled the power to arbitrarily enforce international law. The arbitrary character itself is inconsistent with the spirit of international law in a way. It seems that continuing and helpless calling is the only means the fund can do.

However, the developments of L&D Fund at C.O.P. 27 imply the positive changes, which are mainly motivated by the severer disaster and more predictable future supported by the scientists referring to the long history of L&D under UNFCCC. The jurists might help in consolidating the definition of the

²⁴ UNFCCC, "Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing," 2010, https://www.ipcc.ch/apps/njlite/srex/.

²⁵ Green Climate Fund, "Annual Results Report 2021," 2022, https://www.greenclimate.fund/document/annual-results-report-2021; Green Climate Fund, "Green Climate Fund," 2022, https://www.greenclimate.fund.





"polluter pays" principle and the legal relations between L&D in climate change and activities of international actors (not only from the aspect of historical responsibility). Only if the legality is constructed solidly, enforcement now which is that soft, could obtain more strength one day. In this way, the answers to collection lie in the cooperation of scientists and lawyers.

2. Distribution

As for distribution, here we just talk about two points that may be meaningful for L&D Fund in the future. There are actually more than two.

a. Grant-Based Distribution

GCF provides several ways for actors to apply for financial support: loan, grant, equity, and guarantee.²⁶ According to the accessed data, approximately half of the fund is distributed by grant, which is consistent with the grant-based idea to a large extent.²⁷ It is also the essential point that L&D Fund shall take into consideration in distribution since the Fund for L&D maintains the meaning to compensate originally, which determines that its public nature even would be more impressive than the fund for mitigation and adaptation, for the former two directions are involved with developments in the other hand.

b. The mechanism as Application System for Funding

Nevertheless, GCF, to solve the problem of adaptation and mitigation, has taken the application system to implement its work, with a complete

University of Finance and Economics, Analysis on the Characteristics of Green Climate Fund (GCF) and Suggestions on China's Use of GCF), accessed November 30, 2022, https://www.huanbao-world.com/green/lsjr/69906.html; "GCF Open Data Library," accessed November 30, 2022, https://data.greenclimate.fund/public.



²⁶ Green Climate Fund, "GCF Programming Manual: An Introduction to the Green Climate Fund Project Cycle and Project Development Tools for Full-Size Projects," 2020, https://www.greenclimate.fund/document/programming-manual.

²⁷ 中央财经大学绿色金融国际研究院, "绿色气候基金(GCF)特征分析和对中国利用GCF的建议-国际环保在线," (Translation: International Research Institute of Green Finance, Central



introduction of the procedures to apply and to end. Application system helps confirm that the money flows to the most needed regions and populations, hopefully, it could be found in the final decision.

While the application system currently is of some questions for the distribution, since there should be certain and enforceable standards that could be applied to the assessment work, for which many scholars call for using the comparison of economic loss data and G.D.P. of the state to decide. And the provision of the standards would directly influence the priority of obtaining funding support.

It may be appropriate to note here that climate litigation has been emphasized under the framework of climate justice. The main distribution methods this article cares about come from the traditional funding system as a method to obtain compensation through judicial channels; climate change litigation is not listed in this part. Meanwhile, the construction and implementation of relevant institutions belong to another complicated issue.

7. CONCLUSION

Though L&D Fund is not a completely new issue at all, as we could conclude through reviewing its developments in international law, the adoption of the decision at COP27 is still historical and meaningful, especially for the climate-vulnerable states and regions. Since this decision may finally make L&D go back to its original way, that is, to be part of the financial matters.

Till now, the prospect of construction of L&D Fund is not clear, both theoretically and practically. The latter one is based on the continuing work of the committee of C.O.P. In the academic field, more confusions could be found in the related essays, for example, there is the idea that wants the L&D Fund to take responsibility for mitigation and adaptation, which is a classic deviation from the fundamental manifesto of L&D. As we understand that professional





careers help improve the profession, that works in the funds world as well. However, integrated the reality that even L&D is still a contentious concept mainly for the counting of the attribution, then the problem of deviation is not like a problem for it.

Under any event, at present, climate change is predictably continuously showing its destructive power, with an inexorable trend of its development. While the advanced industrial society continues its control over developing models and assessing standards of priorities among countries, sufferings brought by production and exploitation would accompany humans continually. At the same time, sufferings that cannot be solved with mitigation and adaptation shall be paid attention to; thought pricing those pains with money may ironically trap us in the same circle, the compensation is of independent sense for helping to guarantee the populations' living conditions, whose houses even hometowns were destroyed in the disasters. For that, L&D should be a core issue of climate change now and later, and L&D Fund may direct us to the third way. It's significant to discuss the construction of the internal and external system of the L&D Fund prudently.

REFERENCE

Gregor Vulturius; Marion Davis. "Defining Loss and Damage: The Science and Politics around One of the Most Contested Issues within the UNFCCC." Stockholm Environment Institute, September 2016.

Stockholm Environment Institute. "Do Rich Countries Have a 'Moral Responsibility' to Pay for the Cost of Climate Change?" Accessed November 26, 2022. https://www.sei.org/about-sei/press-room/moral-responsibility-climate-change/.

Kirstin Dow et al. "Limits to Adaptation." Nature Climate Change 3(4), April 2013.





John W. Ashe et al. "The Role of the Alliance of Small Island States (AOSIS) in the Negotiation of the United Nations Framework Convention on Climate Change (UNFCCC)." Natural Resources Forum 23(3), August 1999.

Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996.

Conference of the Parties 27th Session. "Sharm El-Sheikh Implementation Plan. Revised Draft Decision -/CP.27." Accessed November 26, 2022. https://unfccc.int/documents/621914.

U.N. Framework Convention on Climate Change. "Decisions - Cancun Climate Change Conference - November 2010." Accessed November 29, 2022. https://unfccc.int/process-and-meetings/conferences/past-conferences/cancunclimate-change-conference-november-2010/decisions-cancun-climate-change-conference-november-2010.

U.N. Framework Convention on Climate Change. "Report of the Conference of the Parties on Its Nineteenth Session, Held in Warsaw from 11 to 23 November 2013. Addendum. Part Two: Action Taken by the Conference of the Parties at Its Nineteenth Session.," Accessed November 28, 2022. https://unfccc.int/documents/8106.

U.N. "The Paris Agreement," Accessed November 28, 2022. https://www.un.org/en/climatechange/paris-agreement.

Centre for Science and Environment. "C.O.P. 27: Agenda and Expectations", Accessed 28 April, 2023. https://www.cseindia.org/cop-27-agenda-and-expectations-11485.

Goldbaum, C., ur-Rehman, Z. and Hayeri, "In Pakistan's Record Floods, Villages Are Now Desperate Islands", Accessed November 30, 2022. https://www.nytimes.com/2022/09/14/world/asia/pakistan-floods.html.

Roda Verheyen; Peter Roderick. "Beyond Adaptation: The Legal Duty to Pay Compensation for Climate Change Damage." WWF-U. November 2008.

The Intergovernmental Panel on Climate Change. "AR6 Synthesis Report: Climate Change 2022." Accessed November 28, 2022. https://www.ipcc.ch/report/sixth-assessment-report-cycle/.





The Intergovernmental Panel on Climate Change. "AR6 Synthesis Report: Climate Change 2023." Accessed April 27, 2023. https://www.ipcc.ch/report/ar6/syr/.

Michael Franczak, "Options for a Loss and Damage Financial Mechanism," International Peace Institute. October 2022.

U.N. Framework Convention on Climate Change. "Funding Arrangements for Responding to Loss and Damage Associated with the Adverse Effects of Climate Change, Including a Focus on Addressing Loss and Damage. Revised Draft Decision -/CP.27 -/CMA.4." Accessed November 26, 2022. https://unfccc.int/documents/624434.

U.N. Framework Convention on Climate Change. "Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing," Accessed November 25, 2022. https://www.ipcc.ch/apps/njlite/srex/.

Green Climate Fund. "Annual Results Report 2021." Accessed November 30, 2022. https://www.greenclimate.fund/document/annual-results-report-2021.

Green Climate Fund. "GCF Programming Manual: An Introduction to the Green Climate Fund Project Cycle and Project Development Tools for Full-Size Projects." Accessed November 26, 2022. https://www.greenclimate.fund/document/programming-manual.

Green Climate Fund. "Green Climate Fund." Accessed November 30, 2022. https://www.greenclimate.fund.

Green Climate Fund. "GCF Open Data Library." Accessed November 30, 2022. https://data.greenclimate.fund/public.

Jason Hickel and Giorgos Kallis, "Is Green Growth Possible?," New Political Economy 25(4), June 2020.

"绿色气候基金(GCF)特征分析和对中国利用GCF的建议" (Translation: Analysis on the Characteristics of Green Climate Fund (GCF) and Suggestions on China's Use of GCF) Accessed November 30, 2022. https://www.huanbaoworld.com/green/lsjr/69906.html.

