

Exploring Green Climate Fund Allocations: A Study of its Project/Program

Tawfiqullah Muradi^{1*}, Dr. Hansdeep Kaur², Sonu Pateer³, Dr. Vikram Sandhu⁴

¹Research Scholar, University Business School, Guru Nanak Dev University, Amritsar. Punjab. India. (mu-raditawfiq@gmail.com)

²Assistant Professor, University Business School, Guru Nanak Dev University, Amritsar. Punjab. India. (hansdeep.ubs@gndu.ac.in)

³Research Scholar, University Business School, Guru Nanak Dev University, Amritsar. Punjab. India (sonuubs.rhs@gndu.ac.in)

⁴Professor, University Business School, Guru Nanak Dev University, Amritsar. Punjab. India. (sand-hu.vikram@yahoo.com)

Received: 20 Dec 2024

Revised: 14 Jan 2024

Accepted: 12 Feb 2025

Published: 27 Feb 2025

Abstract

Green Climate Fund (GCF), as an operating organization within UNFCCC and the Paris Agreement, is the world's largest climate fund, mandated to help developing countries realize their NDCs and their ambitions toward a low-emission, climate-resilient pathway through projects and proposals. Furthermore, it uses its opportunities to address the climate crisis, fragile infrastructure, and vulnerable sectors that sustain economic and GDP growth, and its desires for the countries to get on the GCF floor. Furthermore, GCF is leading and approving climate finance projects designed for vulnerable countries and calling for funding proposal approvals. GCF allocation funds are designed in various types, such as a project portfolio with 10.8 billion dollars in funding, and out of 200 projects, 128 projects are approved for developing countries; a readiness and preparatory support program, a simplified approval process (SAP); and a project preparation facility (PPF) is approved, as well as a readiness and preparatory support program, a SAP, and a PPF. To achieve the above aims, countries require a comprehensive approach to channeling funds into sustainable sectors. In this paper, we briefly discuss the GCF's anticipated project design and funding program allocation.

Keywords: Green Climate Fund, Project Portfolio, Paris Agreement. Readiness, NDA, Accredited Entities



© 2025 by the authors; licensee Advances in Consumer Research. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY-NC-ND) license (<http://creativecommons.org/licenses/by/4.0/>).

INTRODUCTION

Green Climate Fund (GCF), serves as a UNFCCC operating entity and financial mechanism to assist developing countries in climate change adaptation and mitigation practices. It provides direct and indirect access based on a country-driven approach and encourages the involvement of relevant stakeholders (COP17, 2012). Nations have to meet their pledge to mobilize USD 100 billion annually for resilience and reducing GHG emissions. Furthermore, the GCF committee allocates three terms of fund design to the disbursement fund: "financial instruments," "funding window," and "access modalities" (GCF Guideline, 2020; Tanner et al., 2019). This paper attempted to preview and analyze based on research objectives and the explicit approaches that the developing country wishes to pursue with the GCF financial funds. Moreover, narrate the literature review, the methodology by which nations want to get funds, the objectives of the research, the interpretation in the case of a financial instrument, the funding window, the access mode, and the project requirements in the following section. GCF Programming designed and, lastly analyzed the funding.

LITERATURE REVIEW

Fukuda, K. and Noriko Sh. (2012). Illustrated Project/program formulation and implementation support by GCF window for preparation of NAPA, NAP, NAMA, IDN, and BUR. It has tangible results on the ground, each phase identifies the strengths and weaknesses of the adaptation window, by analyzing different practices. Securing experts for review proposals and project formulation, provision of technical assistance during implementation, and amplifying appraisal of house policy and site visits.

Wang, B., & Rai, N. (2015). Says Direct access to climate funds is complicated for undeveloped countries. By examining three entities that are accredited by the adaptation fund (AF), we can observe that direct access supports institutional capacity improvement from the implementing entity down to the executing entity. Furthermore, institutional strengthening can lead to transformational changes, demonstrating that direct access is more than just a funding channel; it is a strategic opportunity to improve national organizations and country systems. LDCs should be aware of this opportunity and seek direct access to the GCF.

Chen, L. (2018). Depict, GCF architecture at \$10.3b. In two years, 76 projects were approved, \$3.7 billion, and partnerships with 59 accredited entities. In the formula-

tion stages, the Competitive process is challenging for approval with less capacity, large numbers of approved NIEs projects, Limited volume/role for formulation and less technical expertise of PPRC during review proposals, Lack of technical support for project implementation, and Strong reliance on written materials by Fund during evaluation.

Cui, L., & Huang, Y. (2018). Explored the Schemes for GCF financial instruments and assessment involving the trade of emission permits, taxes on emissions from international shipping and aviation, global carbon tax, and emissions trading levy to generate funds for GCF, evaluate the potential magnitude of financial transfers from developed countries to developing countries by establishing the global carbon market, role of private and public sector in climate finance has considered by methods for investment and using financial instruments, such as equity investments, debt financing, guarantees, and direct subsidies.

Tanner, T., Bisht, H., Quevedo, A., Malik, M., & Nadiruzzaman, M. (2019). Illustrated that the project approval process is lengthy and resource-consuming. There is a lack of clarity on the GCF's requirement for projects to lead to a "paradigm shift," Making the economic case for projects can be challenging, especially for adaptation projects and in fragile contexts. Lack of technical skills means IAEs are favored, which works against building national capacity as well as project design challenges. Conceptual confusion and poor data make it hard to build a climate rationale.

As stated by Prasad, S., and Kaushik, M. (2020). The Independent Redress Mechanism (IRM) can only propose the GCF Board's non-binding recommendations; and decide by the Board to take necessary action. Despite this, IRM is special for starting a law lawsuit on its own without filing a complaint based on its observations and press inspecting right that enabled action to be taken against a project in Peru that was judged detrimental to the local indigenous populations. The transparency and completeness of the IRM's decision-making process in handling complaints, notwithstanding

RESULTS

GCF has defined four different project sizes. The majority of projects, so far, are small and Medium-sized projects according to the GCF's definition of access modalities (Fukuda & Noriko, 2012). Fund balance between nations is core communication between countries to support the fund for national objectives and priorities, and it is integrated within their national action plans (NDA), which requires the establishment of NDA. Also provides letters of nomination to direct access entities and provides "non-objection" letters; acts as a focal point with the GCF, as an interface between each country and the Fund, and facilitates the communication of nominations of entities engaged with national plans and strategies (GCF Guidebook Series, 2020).

Figure 1: GCF Project Approval Process

ing the low number of cases to assess the efficacy of the IRM, and how IRM enforces using persuasion strategies, and its legal authority is restricted.

Analyzed by Puri, J., Prowse, M., De Roy, E., & Huang, D. T. (2021). The GCF portfolio is made up of mixed initiatives with high potential for paradigm shift and others that seem to have less promise.

Similarly, the GCF Secretariat may consider using its learned skills, portfolio composition, systematic motivation, capitalizing on links with other climate funds, and learning from previous experiences to mentor project plan selection and improve the significant impact of its investment opportunities.

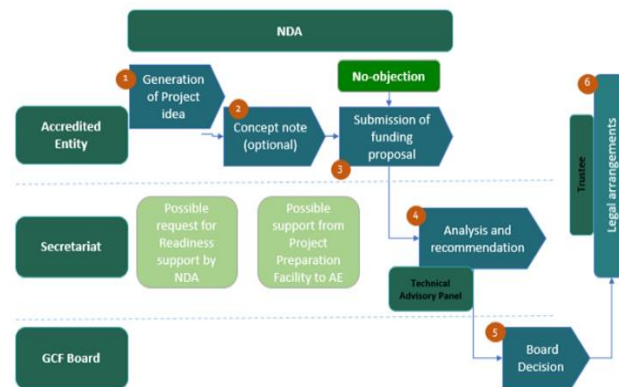
RESEARCH METHODOLOGY

and funding allocation. Vulnerable countries with fragile economies require increased engagement and use of GCF finance to increase resilience and reduce GHG emissions. However, the data for this paper were gathered from secondary sources using quantitative and descriptive approaches, and for the quality of the paper, GCF documents, websites, and reports related to the research were reviewed. Furthermore, data is gathered, collected, and analyzed using explanatory, conceptual, and theoretical means, and analyzed with charts and graphs for better clarification and authentication of the GCF pledged and project funding program under the GCF as well.

OBJECTIVES

Climate Change is running faster than we are and we need more ambition and urgency, finance is the key to developed nations, need to meet their pledge to mobilize USD 100 billion a year by GCF, on mitigation and adaptation in developing countries (Tanner et al., 2019). For this purpose, it needs:

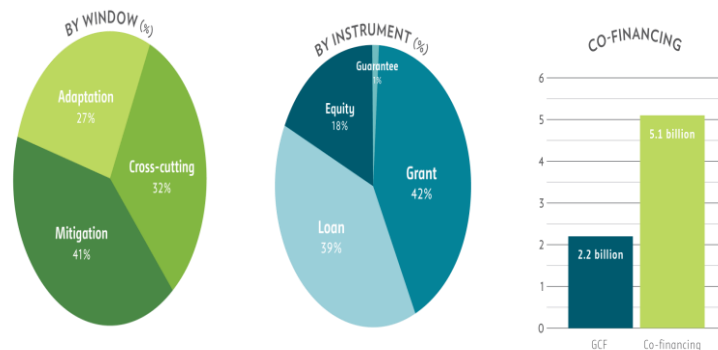
- To analyze different types of Green Climate Fund Project Design
- To study the requirement allocation fund and project proposal.



Source: www.greenclimate.fund

- Financial Instrument: It can be provided by loans, grant loans, market-based loans, concessional loans, equity investment, guarantees, and climate finance support adaptation action in developing countries (COP17, 2012).
- Funding window: Total portfolio 50/50 split between adaptation and mitigation, forestry, and capacity-building activities with geographic balances of the cross-cutting project and program (Lattanzio, 2014; COP17, 2012).

Figure 2: GCF project criteria by window, instrument, and co-finance activities.



Source: <https://www.greenclimate.fund/themes-result-areas>

- Access modality funding: Access modality funding: during this stage countries access or channel with third parties of accredited implementing agencies, like UN agencies, multilateral development banks, and nongovernmental organizations. During the Cancun negotiations, mention the direct access modality and permit the recipient country to access financial resources directly from the fund via an NDA or focal point (Wang & Rai, 2015; COP17, 2012). Also, direct access implies the facilitation and project management function played by multilateral, international, and bilateral entities isn't wont to access international public finance, and instead, this function is taken on by a national entity, to finance as an idea is applicable across both multilateral and bilateral financing thorough cost-benefit analysis is suggested before deciding on the accreditation of national entities. It's not a prerequisite, but rather an additional option allowing countries to pick the most suitable mechanism. Using multilateral or regional implementing entities is often equally effective (GCF Guidebook Series, 2020).

IV. I. Project requirements:

GCF has a three-status design imminence running system to identify early warning signals and manage design threats to strengthen portfolio integrity. First accepted by accredited objects with GCF to authenticate their threat supervision systems via delegation Andre-accreditation processes. Second is the control function accepted by the Secretariat throughout the design cycle, from design to implementation, the third place ensures that threats are in line with the threat operation framing and includes modifications by the interior examination and a visionary technique to help integrity violations by the Independent Integrity Unit. Further Designing the project cycle should be considered as essential such as, Needs must be identified, project designs must be created, project proposals must be evaluated, finance institutions must approve, the project must be implemented, and the project must be valued (GCF Guidebook Series, 2020).

- Eligibility criteria for the project for a simplified Approval process (SAP) include a paradigm shift toward low-emission and climate-resilient development, which is being promoted. It is ready for scaling up and has the

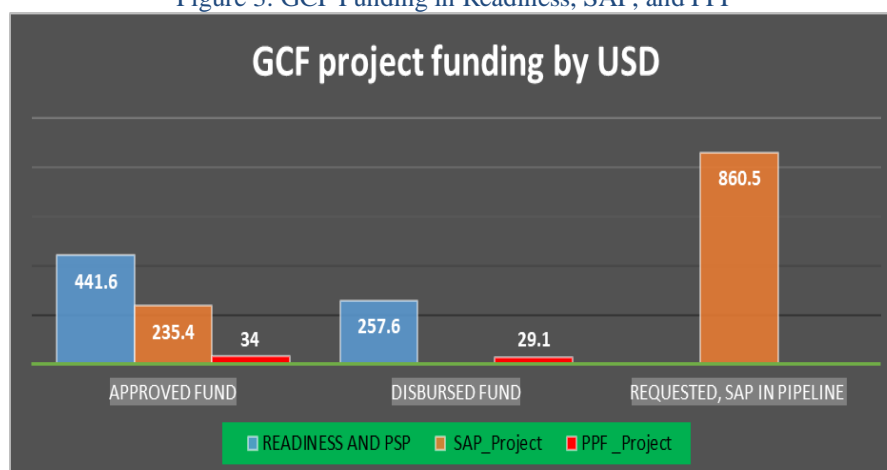
potential for change. Additionally, ask for up to USD 10 million in funding for the entire project budget. Impacts and risks related to the environment and society are rated as minimal to none (GCF Guidebook Series, 2020).

- Eligible activities for the project include Capacity building, institutional improvement, planning support, advisory services, communication and outreach, early warning, and other monitoring systems.
- Household-level facilities and production, (basic post-harvest processing, rainwater harvesting, picot micro-scale renewable energy, retrofitting renewable energy systems and energy efficiency and conservation, smallholder agroforestry, and small-scale climate resilient agriculture);
- Small-scale rural and urban community-based projects, rural water supply and drainage at village, rural energy, small-scale infrastructure (including in-situ rehabilitation, upgrading and maintenance of existing public facilities where waste will not be an issue), small-scale community-based watershed and habitat management and rehabilitation, climate resilient agriculture, soil and water conservation, and community forest management activities (Fund C.G., 2020; Muradi & Sandhu, 2023).

IV. II. GCF Programing Designed:

- According to the concept note approved for PPS, in terms of investment criteria, GCF (PPF) offers financial assistance to AE, to help them prepare comprehensive Funding Proposals for the Board's consideration. PPF can help fund initiatives like risk assessments, environmental, social, and gender studies, identifying program- and project-level indicators, pre-feasibility studies, project design, pre-contract services, revision of tender documents, and advisory and other services to financially structure an initiative (PPF Guideline, 2020).
- technical support and increasing skills are provided through, GCF Readiness and PSP, to enhance reached and in climate funds. To enhance institutional capacity and programming as required under the GCF Governing Instrument. First-round support based on the filing of competitive bids and an offer of an annual budget of up to USD 1 million may be set out for capacity building, coordination, policy, and planning. Maximum 100,000 USD. Each country is eligible to receive up to USD 3 million for the development of NAPs (Fukuda & Noriko, 2012). As a result, the GCF approved more preparation projects than it had originally planned, totaling USD 314.8 million. Additionally, nations have direct financial access to NDAs, PSP, and GCF Readiness. GCF has signed with Readiness and PSF Agreements

Figure 3: GCF Funding in Readiness, SAP, and PPF

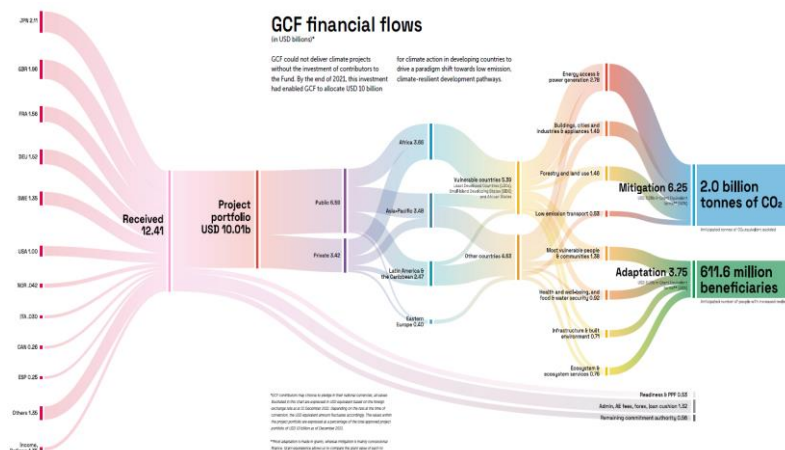


Source: www.Greenclimate.fund

FINDING AND ANALYSIS

The GCF Simplified Approval Process (SAP). Begins with a concept note that intends to obtain basic information about the proposed project or program. First, it requests detailed program/project information. It includes necessary information to understand the project/program's expected performance against the Fund's investment criteria. Secondly, it provides an overview of the financing for both the requested GCF amount and co-financing (SAP, 2024). Lastly, the list of annex documents to assess risk factors and specific impacts on society, and the maximum number of concept pages should not exceed 6 pages, excluding annexes. Moreover, GCF's private and public financing portfolio is about 3.7B equal to 35% within 24 projects, and the financial flow of GCF is presented in Figure 4.

Figure 4: GCF Financial Flow



(Source: Available: <https://www.greenclimate.fund/annual-results-report-2021>).
As well as in public financing about 7.0B around that is presented in figure 5 by percentage.

Figure 5: GCF funding private and public by result areas

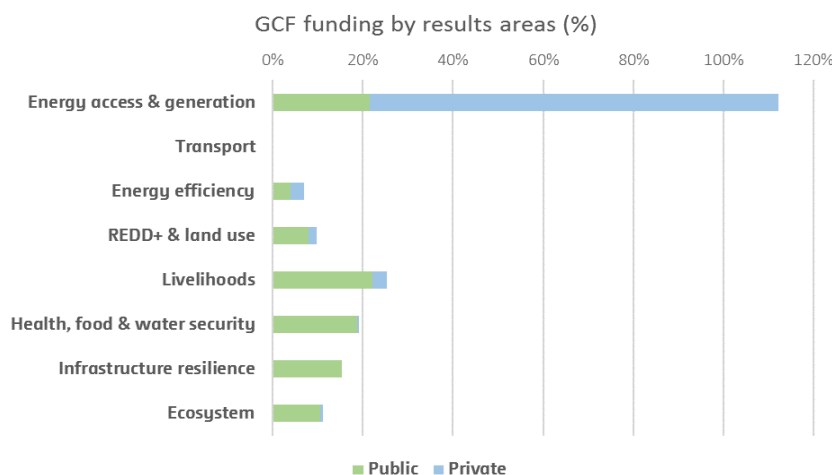


Figure 5. Explains the funding result areas in different sectors by percentage, with the highest allocation of funds in Energy access and generation and the lowest in infrastructure and resilience. Besides, in the public sector, the most funded resources are in Livelihood and the least in Energy efficiency (Muradi & Sandhu, 2023). Furthermore, other GCF funding projects and designs are accessed via the recipients as well as by characteristics, as Table 1 shows.

Table 6. GCF at Glance, Project Portfolio as of 24 September 2022.
GCF PORTFOLIO TO DATE (USD)

128 Developing countries with approved projects	200 Approved projects	10.8B GCF funding approved 29.4B Co-financing 40.2B Total value of approved projects	166 Projects under implementation with 7.6B of GCF funding	113 Entities approved for accreditation 58 Direct access (National) 13 Direct access (Regional) 42 International access	2.8B disbursed
---	---------------------------------	--	--	--	--------------------------

APPROVED PROJECTS VALUE BY THEME		
Adaptation	2.04b	30.08%
Cross-cutting	2.46b	36.32%
Mitigation	2.28b	33.60%

(Source: <https://www.greenclimate.fund>)

The approved project's value which is presented in Table 6 is the amount of GCF funding in grant equivalent terms in Adaptation, cross-cutting, and Mitigation areas in developing countries directly by national, regional, and International Intermediaries or by accredited entities through GCF-approved funds (Muradi & Sandhu, 2023).

CONCLUSION

The climate finance allocation through GCF is crucial in supporting mitigation and adaptation efforts to address climate change (Giglio *et al.*, 2021). The finding of the study on the GCF project and program reveals that the fund has made significant strides in directing resources towards initiatives that aim to reduce greenhouse gas emissions and enhance resilience to the impacts of climate change in developing countries through enhancing capacity, building resilience, increase scientific knowledge on project and proposal writing and adjusting with technologically innovative improvement approaches (Binet *et al.*, 2012). In addition, mainstreaming climate change adaptation into broader development efforts and aligning climate finance with sustainable development goals can be a strategic approach to maximize the impact of limited resources. Table 1 presents the GCF Funded and Readiness activities.

Table 1: GCF Funded activities & GCF Readiness activities

GCFs Funded Activities							
Approved Projects:	286	Total GCF Financing:	\$15.86 Billion	Total Co-Financing:	\$45.34 Billion	Total Adaptation:	1,270,342,038 Beneficiaries
Total Countries:	133	Total GCF Mitigation:	3.06 billion tCO2e	Total Financing:	\$61.20 Billion	Avg. of Female Beneficiaries:	49.10%
Green Climate Funds Readiness Activities							
Approved Grants:	809	NAP Support Grants:	119	DAE Support Grants:	91	Total Funding Approved:	USD 649.56 Million
Grants with Completion Report Submitted:	243	Grants closed:	297	Total Countries:	142	Total Disbursed:	USD 418.30 Million

(Source:

<https://data.greenclimate.fund/public/data/projects>).

The above table shows that the GCF funding activities are crucial for underscoring the need for a more holistic and integrated approach to the climate finance that considers the interconnections between different development challenges, such as water, sanitation, and climate change. Policymakers and funding institutions should work to ensure that climate finance is deployed in a way that not only addresses mitigation and adaptation but also supports Developing countries through funded and readiness activities that present in Table 1. Which are often the most vulnerable to the effects of climate change, need crucial climate finance to implement the necessary mitigation and adaptation measures and the achievement of the Sustainable Development Goals (Giglio *et al.*, 2021; Dickin *et al.*, 2020).

ACKNOWLEDGEMENT (Optional)

REFERENCES

1. Fukuda, K., & Shimizu, N. (2012). Designing Adaptation Finance for the Green Climate Fund: Challenges and Opportunities Drawn from Existing Multilateral Funds for Adaptation. Institute for Global Environmental Strategies. <http://www.jstor.org/stable/resrep00902>
2. COP17 (2012).” Part Two: Action taken by the Conference of the Parties at its seventeenth session”, United Nations Framework Convention on Climate Change (UNFCCC). Available at: http://unfccc.int/resource/docs/2011/cop17/eng/09a_01.pdf
3. Fund, A., Plan, A. A. W., Fund, G. G. C., für Wiederaufbau, K. K., Country, L. L. D., Fund, L. L. D. C., ... & Small, S. M. E. (2013). Project Document. Ministry of Economy & Ministry of Environment.
4. B., Zhu, L., Springmann, M., & Fan, Y. (2014). Design and analysis of the green climate fund. *Journal of Systems Science and Systems Engineering*, 23(3), 266-299. <https://doi.org/10.1007/s11518-014-5250-0>
5. Wang, B., & Rai, N. (2015). The Green Climate Fund accreditation process: barrier or opportunity? International Institute for Environment and Development. Available at: <https://www.iied.org/17311ied>
6. Cui, L., & Huang, Y. (2018). Exploring the Schemes for Green Climate Fund Financing: International Lessons. *World Development*, 101, 173-187. <https://doi.org/10.1016/j.worlddev.2017.08.009>
7. Lattanzio, R. K. (2014). International Climate Change Financing: The Green Climate Fund (GCF). Congressional Research Service.
8. Cui, L., & Huang, Y. (2018). Exploring the schemes for green climate fund financing: International lessons. *World Development*, 101, 173-187. <https://doi.org/10.1016/j.worlddev.2017.08.009>
9. Tanner, T., Bisht, H., Quevedo, A., Malik, M., & Nadiruzzaman, M. (2019). Enabling Access to the Green Climate Fund: Sharing Country Lessons from South Asia. Available at: <https://eprints.soas.ac.uk/id/eprint/35237>
10. Fund, G. C. (2020). Green climate fund. <https://www.greenclimate.fund/about>. Accessed, 16. <https://ieugreenclimate.fund>
11. PPF Guideline, (2020).” Project Preparation Facility (PPF Guidelines), Green Climate Fund institution. Available at: https://www.greenclimate.fund/sites/default/files/document/ppf-guidelines_1.pdf

12. GCF, (2024). Readiness & preparatory support”, Green Climate Fund Institution. Available at: <https://www.greenclimate.fund/readiness>
13. GCF GUIDEBOOK SERIES (2020). “GCF Programming Manual, Full-size project”, Green Climate Fund Institution. Available at: <https://www.greenclimate.fund/sites/default/files/document/gcf-programming-manual.pdf>
14. Prasad, S., & Kaushik, M. (2020). Accountability at the Green Climate Fund: taking a look at the independent redress mechanism. *Environmental Policy and Law*, 50(3), 165-170. Available at: <https://content.iospress.com/articles/environmental-policy-and-law/epl200211>
15. Puri, J., Prowse, M., De Roy, E., & Huang, D. T. (2021). Assessing the likelihood for transformational change at the Green Climate Fund. <https://doi.org/10.1016/j.crm.2022.100398>
16. Dickin, S., Bayoumi, M., Giné, R., Andersson, K., & Jiménez, A. (2020). Sustainable sanitation and gaps in global climate policy and financing. *NPJ Clean Water*, 3(1), 24. <https://doi.org/10.1038/s41545-020-0072-8>
17. Giglio, S., Kelly, B., & Stroebe, J. (2021). Climate finance. *Annual review of financial economics*, 13(1), 15-36. <https://doi.org/10.1146/annurev-financial-102620-103311>
18. Binet, Silvia, Matthijs De Bruijn, Daisuke Horikoshi, Rene Kim, Byungsuk Lee, Max Markrich, Peter Mwandri, Kulthoum Omari-Motsumi, Martin Prowse and Galyna Uvarova (2021). Final report on the independent evaluation of the adaptation portfolio and approach of the Green Climate Fund. Green Climate Fund. Available at: <https://ieu.greenclimate.fund/document/independent-evaluation-adaptation-portfolio-and-approach-green-climate-fund>
19. Giglio, S., Kelly, B., & Stroebe, J. (2021). Climate finance. *Annual review of financial economics*, 13(1), 15-36. <https://doi.org/10.1146/annurev-financial-102620-103311>
20. SAP (2024). Overview of Simplified Approval Process. Green Climate Fund. Available at: <https://www.greenclimate.fund/projects/sap>
21. Muradi, T., & Sandhu, V. (2023). Climate Change Convention: COP27 Activities and Study of GCF Pledged Finance. *World Economics*, 24(3), 125-144.
22. Dhankhar, S., Sandhu, V., & Muradi, T. (2024). E-Mobility Revolution: Examining the Types, Evolution, Government Policies and Future Perspective of Electric Vehicles. *Current Alternative Energy*, 6(1), E24054631308595.
23. Pateer, S., Kaur, H., & Sandhu, V. (2024). From Origins to Modern Practices: A Comprehensive Review of Sustainable Agriculture and the Influence of Government Initiatives. *Library of Progress-Library Science, Information Technology & Computer*, 44(3).
24. Pateer, S., Dhankhar, S., Kaur, H., & Sandhu, V. The Role and Evolution of Conservation Agriculture: Strengthening Sustainable Farming Practices.
25. Dhankhar, S., Pateer, S., Sandhu, V., & Kaur, H. Barriers to Electric Vehicle Adoption in India: A Comparative Review and Future Growth Prospects.