

ENVIRONMENTAL FINANCE: A CASE STUDY OF FCPF-CF IN EAST KALIMANTAN

Dimas Priyambudhi^{1*}, Imam Subhan² and M. C. Emeraldin Adwitian³

^{1,3} Directorate General of Treasury, Ministry of Finance, Indonesia

² Directorate General of Fiscal Balance, Ministry of Finance, Indonesia

E-mail: dimas.priyambudhi@kemenkeu.go.id

ABSTRACT

This study provides an in-depth examination of the financial processes within the Forest Carbon Partnership Facility's Carbon Fund (FCPF-CF) in East Kalimantan, Indonesia. By conducting a descriptive analysis of existing literature and interviewing key stakeholders, the study identifies the mechanisms involved in sourcing, allocating, and disbursing funds. It also illuminates significant challenges, including the absence of a carbon trading market, governance and accountability issues, dynamic policy changes, reporting requirements, and a lack of local government understanding of the FCPF program. These findings enrich the literature on environmental conservation initiatives by offering insights into the adaptations of financial mechanisms in FCPF-CF East Kalimantan. The study's outcomes provide valuable lessons for the development and implementation of similar programs worldwide, contributing to the broader field of environmental finance.

Keywords: Environmental Finance, Carbon Fund, East Kalimantan, FCPF, REDD+

REFERENCES

- Amerasinghe, N.M., Thwaites, J., Larsen, & G., Ballesteros. A. (2017). Future of the Funds: Exploring the Architecture of Multilateral Climate Finance. *World Resource Institute. World Resour Inst Work Pap*, 100
- Angelsen, A., Martius, C., De Sy, V., Duchelle, A. E., Larson, A. M., & Pham, T. T. (2018). *Transforming REDD+: Lessons and new directions. CIFOR*.
- Arnell, N. W., Lowe, J. A., Challinor, A. J., & Osborn, T. J. (2019). Global and regional impacts of climate change at different levels of global temperature increase. *Climatic Change*, 155, 377-391.

- Ba, S., Yang, C., & Yao, S. (2018). Review on the research progress of China's green finance. *J. Financial Serv. Res*, 6, 3-11.
- Banga, J. (2019). The green bond market: A potential source of climate finance for developing countries. *Journal of Sustainable Finance & Investment*, 9(1), 17–32.
- Boer, H. J. (2020). Power, REDD+ and reforming forest governance in Indonesia. *Third World Quarterly*, 41(5), 783-800.
- Bom, R. A., Piersma, T., Alves, J. A., & Rakhimberdiev, E. (2024). Global temperature homogenization can obliterate temporal isolation in migratory animals with potential loss of population structure. *Global Change Biology*, 30(1), e17069.
- BPDLH. (2020). The Indonesian Environment Fund (BPDLH). BPDLH. Retrieved July 15, 2024, from <https://web.bpdh.id/about-bpdh/>.
- Brockhaus M, Korhonen-kurki K, Sehring J, Di Gregorio M, Assembemvondo S, Babon A, et al. REDD+, transformational change and the promise of performance-based payments: a qualitative comparative analysis. *Clim Policy* [Internet]. 2017;17(6):708–30. Available from: <https://doi.org/10.1080/14693062.2016.1169392>
- Enrici, A. M., & Hubacek, K. (2018). Challenges for REDD+ in Indonesia. *Ecology and Society*, 23(2).
- FCPF. (2020). Emission Reductions Payment Agreement: *Indonesia Emission Reductions Program* (Report No. TF0B3148). Forest Carbon Partnership Facility.
- Heinrichs, H., Martens, P., & Wiek, A. (2016). *Sustainability science*. Springer, Dordrecht.
- Hermawan, S., Karim, M. F., & Rethel, L. (2023). Institutional layering in climate policy: Insights from REDD+ governance in Indonesia. *Forest Policy and Economics*, 154, 103037.
- Indrawan, M., Mori, A., Prihatno, J., Manuri, S., Haryanto, J. T., Hindarto, D. E., ... & Gunawan, I. (2023). REDD+ in Indonesia through the Context of a Sustainable Landscape Approach. In *The Climate–Energy–Land Nexus in Indonesia* (pp. 114-130). Routledge.
- Korhonen-Kurki K, Brockhaus M, Sehring J, Di Gregorio M, AssembeMvondo S, Babon A, et al. What drives policy change for REDD+? A qualitative comparative analysis of the interplay between institutional and policy arena factors. *Clim Policy* [Internet]. 2019;19(3):315–28. Available from: <https://doi.org/10.1080/14693062.2018.1507897>
- Kuenen, J. J. P., Visschedijk, A. J. H., Jozwicka, M., & Denier Van Der Gon, H. A. C. (2014). TNO-MACC_II emission inventory; a multi-year (2003–2009) consistent high-resolution European emission inventory for air quality modelling. *Atmospheric Chemistry and Physics*, 14(20), 10963-10976.
- Kumar, B., Kumar, L., Kumar, A., Kumari, R., Tagar, U., & Sassanelli, C. (2023). *Green finance in circular economy: a literature review*. *Environment, development and sustainability*, 1-41.
- Law no. 70/2017 of 24 January 2018 concerning the governance of REDD+.*

Law no. 21/2022 of 20 October 2022 concerning the implementation procedures for carbon economic value.

Masripatin, Nur. (2022). Indonesia REDD+ National Strategy 2021-2030. Ministry of Environment and Forestry of the Republic of Indonesia.

Ministry of National Development Planning. (2021). Performance Report. Ministry of National Development Planning.

Moeliono, M., Brockhaus, M., Gallemore, C., Dwisatrio, B., Maharani, C. D., Muharrom, E., & Pham, T. T. (2020). REDD+ in Indonesia: A new mode of governance or just another project?. *Forest Policy and Economics*, 121, 102316.

Morita, K., & Matsumoto, K. I. (2023). Challenges and lessons learned for REDD+ finance and its governance. *Carbon Balance and Management*, 18(1), 8.

Nawir, A. A., Paudel, N. S., Wong, G., & Luttrell, C. (2019). Thinking about REDD+ benefit sharing mechanism (BSM).

Pham, T. T., Moeliono, M., Yuwono, J., Dwisatrio, B., & Gallo, P. (2021). REDD+ finance in Brazil, Indonesia and Vietnam: Stakeholder perspectives between 2009-2019. *Global Environmental Change*, 70, 102330.

Rasendriya, R. D. (2024, February). A Review of Climate Change Finance Policy in Indonesia. *In Proceeding International Conference Restructuring and Transforming Law* (pp. 82-95).

Secretariat, S. (2022, January 20). *President Jokowi Attends World Economic Forum*. Setneg.go.id. <https://www.setneg.go.id/>

Setyowati, A. B. (2020). Governing the ungovernable: contesting and reworking REDD+ in Indonesia. *Journal of Political Ecology*, 27(1), 456-475.

Stern N. The economics of climate change: the stern review [Internet]. Cambridge: Cambridge University Press; 2007.

Subnational East Kalimantan Government. (2020). Portal Kaltim. Retrieved July 2, 2024, from <https://www.kaltimprov.go.id/kaltim-green>.

Sugiyono, S. (2016). Metode penelitian kuantitatif, kualitatif, dan r & d. Bandung: alfabeta, 288.

Tao, H., Zhuang, S., Xue, R., Cao, W., Tian, J., & Shan, Y. (2022). *Environmental finance: an interdisciplinary review*. *Technological Forecasting and Social Change*, 179, 121639.

Voigt C, Ferreira F (2015) The Warsaw Framework for REDD+: implications for national implementation and access to results-based finance. *Carbon Clim Law Rev* 9(2):113–129

Werksman, J. (2014). *Greening international institutions*. Routledge.

Wertz-Kanounnikoff, S., & Angelsen, A. (2009). Global and national REDD+ architecture. *Realising REDD*, 13.

Wiati, C. B., Dharmawan, I. W. S., Sakuntaladewi, N., Ekawati, S., Wahyuni, T., Maharani, R., ... & Khadka, C. (2022). Challenges to and strategies for the climate village program plus: A lesson learned from Indonesia. *Sustainability*, *14*(9), 5530.

Wijaya, A., Chrysolite, H., Ge, M., Wibowo, C. K., Pradana, A. L. M. O., Utami, A. F., & Austin, K. (2017). How can Indonesia achieve its climate change mitigation goal? An analysis of potential emissions reductions from energy and land-use policies. *World Resources Institute. World Resour Inst Work Pap*, 1-36.

Wilder, M., Millar, I., Dibley, A., Wilson, K., Bamsey, H., Waterworth, R., & George, M. (2014). The Consolidated Guide to the REDD+ Rules under the UNFCCC.

Yamanoshita, M., Samejiwa, H., & Scheyvens, H. (2017). Japan's New Initiative for REDD+ Results-based Financing: Opportunities and Challenges. *Glob. Environ. Res.*, *21*, 47-52.