Economics and Finance of Climate Change
Foundations Course

Manila, 23–26 November 2026

Jointly organized by the Asian Development Bank (ADB) and the Philippines Department of Finance (DOF)
under the ASEAN Climate Finance Policy Platform (ACFPP)
Delivered in partnership with SOAS University of London and the University of the Philippines Diliman (UPD)

Background and Rationale

Climate change poses growing macroeconomic and fiscal challenges for ASEAN Member States, highlighting the need to strengthen the capacities of Ministries of Finance to manage climate-related fiscal risks, integrate climate considerations into fiscal policies, and mobilise financing for climate resilience and low-carbon development.

In response, the ASEAN Climate Finance Policy Platform (ACFPP) was established as a regional technical assistance (TA) initiative supported by the Asian Development Bank (ADB) under its Fiscal Resilience Initiative. The Platform provides targeted capacity building, technical support, and opportunities for knowledge sharing and peer learning to strengthen the ability of ASEAN Ministries of Finance to address climate-related fiscal and financing challenges. The ACFPP was formally endorsed as a regional mechanism for climate finance cooperation during the ASEAN High-Level Policy Dialogue on Climate Finance, convened on 9 April 2026 on the margins of the 13th ASEAN Finance Ministers' and Central Bank Governors' Meeting (AFMGM), under the Philippines' ASEAN Chairship.

As part of the ACFPP's 2026 work programme, ADB and the Philippines Department of Finance (DOF) are jointly organising this training to strengthen government officials' capacities to assess and manage climate-related macro-fiscal risks, integrate climate considerations into public financial and investment management, and mobilise climate finance. The programme builds on the ACFPP's ongoing assessment of climate finance capacities across ASEAN Member States and will combine international expertise with the Philippine policy and institutional context.

The training will be delivered by SOAS University of London, through the Resilience Adaptation Mainstreaming Programme (RAMP), in collaboration with the University of the Philippines Diliman (UPD).

Course Description and Objectives

This course provides an overview of the climate-related macroeconomic and fiscal risks facing the Philippines and how they can be mitigated. The course explores the dimensions in which climate change can affect macro-fiscal dynamics, both as future risks emerge and as economies adapt to decarbonisation. We will discuss the transmission channels through which climate change can affect public finances and sovereign risk, and discuss the potential threats, mitigation strategies, and opportunities. Particular attention is given to green public investment management (green PIM), including the integration of climate considerations into project planning, appraisal, selection, budgeting, implementation and evaluation, and green public financial management (green PFM), through which climate and environmental priorities can be embedded across fiscal strategy and the budget cycle. The course also examines public climate finance and sustainable finance, including national budgets, international climate funds, development finance and policies and instruments that can mobilise and align private capital with the Philippines's climate and development priorities. It concludes by considering how the Philippines Department of Finance (DOF) and other Philippine authorities can effectively sequence policy measures, reforms, and investments.

The course is designed for officials from the Philippines DOF and other relevant ministries and authorities. By combining conceptual discussions with case-based illustration and group exercises, we emphasise active learning and regional applicability The course will be delivered by two faculty members from SOAS University of London and the Resilience Adaptation Mainstreaming Programme (RAMP) and faculty members from the University of the Philippines Diliman (UPD).

On successful completion of the course, participants should be able to:

1. Have a good understanding of the macroeconomic and fiscal impacts and risks of climate change and the approaches to measuring them.
2. Have knowledge of macroeconomic models, metrics, and climate impact data used to assess macroeconomic and fiscal risks and opportunities and inform climate adaptation and mitigation strategies.
3. Apply core green PIM approaches to integrate climate risks and objectives into economic appraisal and the wider public investment cycle.
4. Identify green PFM entry points across fiscal strategy and the budget cycle, including budget preparation, expenditure tracking and tagging, reporting and oversight.
5. Have knowledge of different instruments for mobilising public and private adaptation and mitigation finance and sustainable finance more broadly, including the implications of climate change for public debt management and the potential use of sustainable bond instruments.
6. Identify policy priorities, barriers, and opportunities for the Philippines DOF and other national authorities to strengthen investment in climate resilience and low-carbon infrastructure while safeguarding macroeconomic stability.

Course Overview and Schedule

The course consists of eight half-day sessions over four days. Sessions will run for three hours, inclusive of a 15-minute refreshment break and a 45-minute group exercise for groups of up to 5. Morning sessions will run from 9:00 to 12:00, followed by the afternoon session running from 13:00 to 16:00. At the close of each afternoon session, a 5-minute slot will be allotted for attendees to reflect and share their thoughts or any relevant updates on the subject matter. All sessions will end at 16:05 to allow for self-study.

DAY 1: Climate Change as a Macro-critical Risk			
Session		**Time**	**Group exercise**
0	Welcome	9:00-9:30	
1	Climate change as a macro-critical risk for the Philippines	9:30-12:00	Identifying key climate-related macrofiscal risks for the Philippines
2	The macroeconomic dimensions of climate impacts	13:00-16:00	Assessing macroeconomic implications in the Philippines
DAY 2: Data modelling and metrics & green public investment management			
Sessions		**Time**	**Group exercise**
3	Green public investment management: Economic appraisal and the investment cycle	9:00-12:00	Conducting climate-sensitive economic appraisal
4	Modelling macroeconomic impacts of climate change and climate policies	13:00-16:00	Modelling exercise
DAY 3: Planning and Tracking Climate Adaptation and Mitigation Expenditure			
Sessions		**Time**	**Group exercise**
5	Green public financial management: Budgeting, tagging and expenditure tracking	09:00-12:00	Identifying and tagging climate-relevant budget lines
6	Climate and sustainable finance and the public sector	13:00-16:00	Comparing financing instruments for climate adaptation and mitigation, and sustainability
DAY 4: Finance Instruments for Climate Action / Policy Options and Priorities for Government Action			
Sessions		**Time**	**Group exercise**
7	Climate and sustainable finance and the private sector	09:00-12:00	Assessing innovative tools to mobilise private finance for climate mitigation, adaptation and sustainability
8	Policy options and barriers	13:00-16:00	How to finance adaptation and mitigation priorities and plan an effective way forward

Session Overviews

Day 1: Climate change as a macro-critical risk

Session 1: Climate change as a macro-critical risk for the Philippines (Prof Renato Reside, Jr., Prof Ulrich Volz). This opening session introduces climate change as a source of macroeconomic, fiscal and financial risk rather than solely an environmental concern. It distinguishes physical risks from transition risks and examines how climate impacts can affect key sectors, livelihoods, infrastructure, ecosystems and economic activity in the Philippines. Participants will consider the channels through which these effects can influence government revenue and expenditure, public debt sustainability, financial stability and long-term development. The session will also introduce the respective roles of adaptation and mitigation, distinguish ex-ante risk reduction from ex-post disaster response, and establish the economic rationale for investing in resilience, sustainability and a low-carbon transition.

Suggested readings:

- Armas, J.et al. (2024), "Macroeconomic Effects of Temperature Shocks in the Philippines: Evidence from Impulse Responses by Local Projections", BSP Discussion Paper No. 2, Manila: Bangko Sentral ng Pilipinas. https://www.bsp.gov.ph/Sites/researchsite/Publications/BSP-Discussion-Papers/DP202402.pdf
- Beirne J., Renzhi, N., and Volz U. (2021), "Bracing for the Typhoon: Climate Change and Sovereign Risk in Southeast Asia." *Sustainable Development* 29: 537–551. https://doi.org/10.1002/sd.2199
- Nie, O., Dunz, N., and Pollitt, H. (2024), "2024 A Climate Transition Risk Assessment for the Banking Sector of the Philippines", Washington, DC: World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099072324045016211
- OECD (2026), *OECD Economic Surveys: Philippines 2026*, Paris: OECD Publishing, Chapter 4 on "Confronting Climate Change". https://www.oecd.org/en/publications/oecd-economic-surveys-philippines-2026_f0e0c581-en/full-report/confronting-climate-change_d3856ef6.html
- Rivera, J.P.R., Miral, R.M.L., and Ruiz, M.G.C. (2024), "Estimating the Impacts of Climate Change on Fiscal Health in the Philippines: Designing a Policy toward a Climate-resilient Fiscal Sector", PIDS Discussion Paper No. 2024-34, Manila: Philippine Institute for Development Studies. https://doi.org/10.62986/dp2024.34
- Saloma-Akpedonu, C. et al. (2011), *The Social Impacts of Tropical Storm Ondoy and Typhoon Pepeng. The Recovery of Communities in Metro Manila and Luzon*, Manila: Institute of Philippine Culture, Ateneo de Manila University. https://documents1.worldbank.org/curated/en/767871468094149664/pdf/686620ESW0P1250Typhoon0Pepeng0FINAL.pdf
- UNEP (2025), *The Adaptation Gap Report 2025: Running on Empty*, Nairobi: United Nations. https://www.unep.org/resources/adaptation-gap-report-2025
- Volz, U. et al. (2020), *Climate Change and Sovereign Risk*, London, Tokyo, Singapore, and Berkeley, CA: SOAS University of London, Asian Development Bank Institute, World Wide Fund for Nature Singapore, and Four Twenty Seven. https://doi.org/10.25501/SOAS.00033524
- Volz, U. (2021), "The IMF and the Macro-Criticality of Climate Change." In K.P. Gallagher, and H. Gao (Eds.), *Building Back a Better Global Financial Safety Net*. Boston, MA: Global Development

Policy Center, Boston University, pp. 108-118. https://soas-repository.worktribe.com/output/380732/the-imf-and-the-macro-criticality-of-climate-change
- World Bank (2011), Philippines – Typhoons Ondoy and Pepeng: Post-Disaster Needs Assessment", Washington, DC: World Bank. https://doi.org/10.1596/2777
- World Bank (2026), "Philippines – Climate and Health Vulnerability Assessment", Washington, DC: World Bank. https://doi.org/10.1596/45814

Session 2: The macroeconomic dimensions of climate impacts (Prof Renato Reside, Jr., Prof Ulrich Volz). This session examines how climate change and climate-related disasters can affect economic output, productivity, inflation, employment, trade, exchange rates, capital flows and the cost of capital. It then considers the implications for government revenue and expenditure, public assets, contingent liabilities and public debt, including how climate risks can affect borrowing costs, access to finance, and the currency and maturity profile of government debt. Drawing on empirical evidence and Philippine and international examples, participants will explore how impacts can spread across sectors and accumulate over time. The session will also introduce approaches to identifying and managing climate-related fiscal risks, including fiscal risk statements, scenario analysis, financial protection and consider how climate risks can be reflected in medium-term fiscal planning, debt sustainability analysis and public debt management.

Suggested readings:

- Armas, J.C. (2026), "Unpacking Macroeconomic Impacts of Climate Events and Policy Implications in the Philippines", IMF Selected Issues Paper No. 2026/004, Washington, DC: International Monetary Fund. https://www.imf.org/en/publications/selected-issues-papers/issues/2026/01/30/unpacking-macroeconomic-impacts-of-climate-events-and-policy-implications-in-the-573629
- Fuje, H., Yao, J., Choi, S.M., and Mighri, H. (2023), "Fiscal Impacts of Climate Disasters in Emerging Markets and Developing Economies", IMF Working Paper No. 2023/261, Washington, DC: International Monetary Fund. https://www.imf.org/en/Publications/WP/Issues/2023/12/15/Fiscal-Impacts-of-Climate-Disasters-in-Emerging-Markets-and-Developing-Economies-542408
- Hallegatte, S., et al. (2022), "Bank Stress Testing of Physical Risks under Climate Change Macro Scenarios. Typhoon Risks to the Philippines", IMF Working Paper No. 2022/163, Washington, DC: International Monetary Fund. https://www.imf.org/en/publications/wp/issues/2022/08/19/bank-stress-testing-of-physical-risks-under-climate-change-macro-scenarios-typhoon-risks-to-522486
- Kling, G., Lo, Y.C., Murinde, V., and Volz, U. (2025), "Climate Vulnerability and the Cost of Debt", *Oxford Open Economics*, forthcoming. https://doi.org/10.1093/ooec/odaf003
- Lo, Y.C., and Volz, U. (2025), "The Impacts of Disasters on Capital Flows, International Reserves and Exchange Rates: Implications for Public Sector Financial Risk Management and Development Lenders", SOAS Economics Working Paper No. 267. London: SOAS University of London. https://www.soas.ac.uk/sites/default/files/2025-03/economics-wp267.pdf
- Nguyen, A.T.N., and Nguyen, H.M. (2024), "Currencies in Turbulence: Exploring the Impact of Natural Disasters on Exchange Rates", IMF Working Paper No. 24/186. https://www.imf.org/-/media/files/publications/wp/2024/english/wpiea2024186-print-pdf.pdf

- Nie, O., Dunz, N., and Pollitt, H. (2024), "2024 A Climate Transition Risk Assessment for the Banking Sector of the Philippines", Washington, DC: World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099072324045016211
- Regeling, M.G.J. (2019), "Philippines Financial Sector Assessment Program: Climate Change and Environmental Risks and Opportunities", Technical Note, Washington, DC: World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/244321629266625579
- World Bank (2026), *Climate and Health Vulnerability Assessment*, Washington, DC: World Bank Group. https://documents1.worldbank.org/curated/en/099070324142020101/pdf/P50199312dea7508f1bd361aa091aeb08d7.pdf
- World Bank and ADB (2021), "Climate Risk Country Profile – Philippines", Washington, DC and Manila: World Bank Group and Asian Development Bank. https://www.adb.org/publications/climate-risk-country-profile-philippines

Day 2: Data modelling and metrics & green public investment management

Session 3: Green public investment management: Economic appraisal and the investment cycle (Jerome Abesamis, Dr Harald Heubaum). This session examines how climate and nature-related risks and objectives can be integrated across the public investment cycle, from strategic planning and initial project screening to appraisal, selection, budgeting, implementation, monitoring and ex-post evaluation. It considers the role of cost–benefit analysis (CBA) and complementary methods, including multicriteria analysis, and discusses how adaptation, mitigation and wider social and environmental benefits can be identified and valued. Particular attention will be given to uncertainty, discounting, distributional effects, avoided losses and the benefits of nature-based solutions. Philippine examples from infrastructure, energy, water and agriculture will be used to identify practical entry points for strengthening green public investment management.

Suggested readings:

- Brandon, C., Kratzer, B., Aggarwal, A., and Heubaum, H. (2025), *Strengthening the Investment Case for Climate Adaptation: A Triple Dividend Approach*, Working Paper, Washington, DC: World Resources Institute. https://doi.org/10.46830/wriwp.25.00019
- Li, J., Mullan, M., and Helgeson, J. (2024), "Improving the practice of economic analysis of climate change adaptation", *Journal of Benefit Cost Analysis*, 5(3): 445-467. https://doi.org/10.1515/jbca-2014-9004
- Van Zanten, B.T. et al. (2023), *Assessing the Benefits and Costs of Nature-Based Solutions for Climate Resilience: A Guideline for Project Developers*, Washington, DC: World Bank. https://www.naturebasedsolutions.org/knowledge-hub/58-assessing-benefits-and-costs-nature-based-solutions-climate-resilience-guideline
- Watkiss, P. (2025), "Uncertainty in the Economic Appraisal of Adaptation", in Mearns, L.O., Forst, C.E., Fowler, H.J., Lempert, R., and Wilby, R.L. (eds.), *Uncertainty in Climate Change Research: An Integrated Approach*, pp. 247-254. https://link.springer.com/book/10.1007/978-3-031-85542-9

- World Bank (2022), Philippines Country Climate and Development Report (CCDR), Washington, DC: World Bank. https://openknowledge.worldbank.org/entities/publication/3f76eedd-4ab6-5250-ab4e-75f39593f1b3
- World Bank (2023), Philippines Country Climate and Development Report – Background Paper PH-1: Climate Change Institutional Analysis. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/099100523112524127

Session 4: Modelling and metrics (Jerome Abesamis, Dr Yannis Dafermos, Prof Ulrich Volz). This session discusses how climate-economy models, scenarios and indicators can help governments quantify climate impacts and assess the potential effects of adaptation and mitigation policies. The session will also examine commonly used climate and macro-fiscal metrics and how modelling results can inform fiscal planning, policy choices and public investment decisions in the Philippines. Participants will learn how core macroeconomic modelling frameworks can be used to analyse the macrofinancial effects of environmental change and environmental policies, how to calibrate and run models, building hands-on skills for constructing and interpreting policy scenarios. A central feature of the session is the hands-on simulation exercises in an R-based platform. Participants will calibrate and run models, construct policy scenarios and compare outputs across different modelling approaches. They will learn how to critically evaluate model outputs and understand assumptions underlying different methodological approaches. No prior knowledge of R is required.

Suggested readings:

- Abalo, K. et al. (2025), "The Macroeconomic Implications of Climate Change Impacts and Adaptation Options. A Modeling Approach", Policy Research Working Paper No. 11133. Washington, DC: World Bank. https://openknowledge.worldbank.org/server/api/core/bitstreams/3b12ad3c-3182-4772-95b3-205076b6bf14/content
- Armas, J.C. (2026), "Unpacking Macroeconomic Impacts of Climate Events and Policy Implications in the Philippines", IMF Selected Issues Paper No. 2026/004, Washington, DC: International Monetary Fund. https://www.imf.org/en/publications/selected-issues-papers/issues/2026/01/30/unpacking-macroeconomic-impacts-of-climate-events-and-policy-implications-in-the-573629
- Mitra, P. et al. (2025), "Integrating Climate Change into Macroeconomic Analysis: A Review of Impact Channels, Data, Models, and Scenarios", IMF Working Paper No. 2025/170, Washington, DC: International Monetary Fund. https://www.imf.org/en/Publications/WP/Issues/2025/08/26/Integrating-Climate-Change-into-Macroeconomic-Analysis-A-Review-of-Impact-Channels-Data-569996
- NGFS (2024), *Climate Macroeconomic Modelling Handbook*. Paris: Network for Greening the Financial System Technical document. https://www.ngfs.net/system/files/import/ngfs/medias/documents/ngfs_climate-macroeconomic-modelling-handbook.pdf

Online resources:

- DEFINE Online Model: https://define-model.shinyapps.io/model-builder-app/
- IMF Climate Change Dashboard: https://climatedata.imf.org
- Climate Change Knowledge Portal: https://climateknowledgeportal.worldbank.org

Day 3: Green public financial management and investment

Session 5: Green public financial management: Budgeting, tagging and expenditure tracking (Dr Harald Heubaum). This session introduces green PFM as the integration of climate and environmental priorities into existing fiscal institutions, systems and processes. It examines entry points across fiscal strategy, medium-term planning, budget preparation, budget execution, accounting, reporting, procurement, control and audit. Participants will explore how tools such as climate budget tagging, climate expenditure reviews and performance indicators can help improve the allocation, tracking and evaluation of public resources. The session will emphasise that tagging is one component of a wider green PFM system and not just an end in itself. Drawing on experience from the Philippines, the session will examine how national climate plans, public investment priorities, annual budgets, and actual expenditures can be better aligned.

Suggested readings:

- ADB (2024), Climate-Resilient Fiscal Management: Experience from Southeast Asia, Manila: Asian Development Bank. https://www.adb.org/publications/climate-resilient-fiscal-management-southeast-asia
- DBM (2023), Workshop on the Guidelines in Tagging Government Expenditures for Climate Change for FY 2024, Circular Letter No. 2023-4, Manila: Department of Budget and Management, Republic of the Philippines. https://www.dbm.gov.ph/wp-content/uploads/Issuances/2023/Circular-Letter/CIRCULAR-LETTER-NO-2023-4-DATED-FEBRUARY-22-2023.pdf
- DBM (2024), Philippine Public Financial Management Reforms Roadmap 2024–2028: Propelling Transformation, Achieving Prosperity, Manila: Department of Budget and Management, Republic of the Philippines. https://www.dbm.gov.ph/wp-content/uploads/DBM%20Publications/PFM-Reforms/PFM_roadmap-110624.pdf
- Government of the Philippines / PEFA (2025), Climate-Responsive Public Financial Management Assessment Report, Manila: Government of the Philippines / Public Expenditure and Financial Accountability (PEFA). https://www.pefa.org/sites/default/files/2025-08/PH-Apr2025-CRPFM-Public%20with%20PEFA%20Check.pdf
- UNDP (2025), *Using Public Financial Management to Implement NDCs and NAPs*, Guidance Note, New York: United Nations Development Programme. https://www.undp.org/sites/g/files/zskgke326/files/2025-08/guidance_note_on_pfm_for_ndcs_and_naps.pdf

Session 6: Climate and sustainable finance and the public sector (Dr Harald Heubaum): This session examines how governments can mobilise, combine and manage different sources of finance for climate-resilient, sustainable and low-carbon development. It covers national budgets and fiscal instruments, international climate funds, multilateral and bilateral development finance, public development banks, concessional finance and sovereign/ thematic debt instruments. It also considers how climate risks and investment needs affect public debt management and medium-term debt strategies, and examines sovereign green, social, sustainability and sustainability-linked bonds, as well as catastrophe bonds and other risk-transfer instruments. Participants will consider how financing sources should be matched to different types of investment, taking account of their costs, benefits, fiscal risks, affordability, additionality, implementation capacity and debt sustainability. The session will also explore how the Philippines' NDC, adaptation priorities and public investment pipeline can be translated into financeable programmes, and

how the DOF, line ministries and development partners can coordinate resource mobilisation and project preparation.

Suggested readings:

- Climate Change Commission (CCC) and Department of Environment and Natural Resources (DENR) (2024), National Adaptation Plan of the Philippines 2023-2050, Manila: Government of the Philippines. https://www.climate.gov.ph/public/ckfinder/userfiles/files/Knowledge/PH%20NAP%202023-2050.pdf
- Chin, N., Bansal, S., and Rawal, A. (2025), *Public Development Banks' Climate Commitments 2025: Trends and Progress of PDB Climate Ambition*, London: Climate Policy Initiative. https://www.climatepolicyinitiative.org/wp-content/uploads/2025/12/PDB-Climate-Commitments-2025.pdf
- Choi, E., and Laxton, V. (2023), "The Role of Multilateral Development Banks in Climate Finance for Developing Countries", in Mookherjee, P. (ed.), *Bridging the Climate Finance Gap: Catalysing Private Capital for Developing and Emerging Economies*, New Delhi: Observer Research Foundation, pp. 62-70. https://www.orfonline.org/public/uploads/posts/pdf/20230405144001.pdf
- Dodd, A., and Bourgeault, E. (2025), "Bridging the Finance Gap for Adaptation", Briefing Paper, London: E3G. https://www.e3g.org/wp-content/uploads/E3G-briefing-Bridging-the-finance-gap-for-adaptation-2.pdf
- Hernandez, M., Ledwell, C., and Yang, G.J. (2025), *Finance for National Adaptation Plan Processes: What Can We Learn from Countries' National Adaptation Plans?*, National Adaptation Plan Global Network. Winnipeg: International Institute for Sustainable Development. https://napglobalnetwork.org/wp-content/uploads/2025/06/napgn-en-2025-finance-nap-processes.pdf
- Naran, B. et al. (2025), *Global Landscape of Climate Finance 2025*, London: Climate Policy Initiative. https://www.climatepolicyinitiative.org/wp-content/uploads/2000/06/compressed_Global-Landscape-of-Climate-Finance-2025.pdf
- Republic of the Philippines (2026), Philippines Nationally Determined Contribution (NDC 3.0), Manila: Government of the Philippines. https://unfccc.int/sites/default/files/2026-09/1.%20PH%20Nationally%20Determined%20Contribution%202026.0715.pdf
- Republic of the Philippines (2022), Sustainable Finance Framework, Manila: Bureau of the Treasury and Department of Finance, Government of the Philippines. https://www.treasury.gov.ph/wp-content/uploads/2022/01/Republic-of-Philippines-Sustainable-Finance-Framework-vF-with-disclaimer.pdf

Day 4: Private capital mobilisation & policy options and priorities for government action

Session 7: Climate and sustainable finance and the private sector (Prof Ulrich Volz). This session introduces climate and sustainable finance and the policies, institutions, standards and financial practices through which climate, environmental and social considerations are incorporated into financial decision-making and capital allocation. It examines sustainable finance strategies and principles, taxonomies, disclosure frameworks, environmental and social risk management, green lending and the issuance of

green, social and sustainability bonds by corporates, banks, and other financial institutions. Participants will then assess how blended finance, guarantees and other risk-sharing instruments can address barriers to private investment in adaptation and mitigation and sustainability-themed areas more broadly. Attention will be given to additionality, risk allocation, bankability/investability and the limits of private finance. The sustainable finance framework and the initiatives of the banking sector in the Philippines form the basis for identifying opportunities to strengthen the enabling environment for sustainable investment.

Suggested readings:

- Connolly, J. et al. (2024), *Tracking and Mobilizing Private Sector Climate Adaptation Finance*, London: Climate Policy Initiative. https://www.climatepolicyinitiative.org/wp-content/uploads/2024/09/Tracking-and-Mobilizing-Private-Sector-Climate-Adaptation-Finance-2024.pdf
- Meirovich, H.G., Gómez, S., and Araujo Ferreira, P.I. (2022), *Scaling Adaptation Finance in the Private Sector*, Washington, DC: IDB Invest. https://idbinvest.org/en/publications/scaling-adaptation-finance-private-sector
- Oxera (2025), The Role of the Private Sector in Climate Adaptation — Prepared for International Chamber of Commerce. https://iccwbo.org/wp-content/uploads/sites/3/2025/07/2025-ICC-Oxera-The-role-of-the-private-sector-in-climate-adaptation-Full-report.pdf
- Reitmeier, L. (2024), *What Role Do Catastrophe Bonds Play in Managing the Physical Risks from Climate Change?*, London: Grantham Research Institute on Climate Change and the Environment. https://www.lse.ac.uk/granthaminstitute/explainers/what-role-do-catastrophe-bonds-play-in-managing-the-physical-risks-from-climate-change/
- Watkiss, P., and England, K. (2025), *Adaptation Finance and the Private Sector: Opportunities and Challenges for Developing Countries*, Zurich: Zurich Climate Resilience Alliance. https://www.mercycorps.org/sites/default/files/2025-09/zcra-private-finance-evidence.pdf

Session 8: Policy options and barriers (Dr Harald Heubaum, Prof Ulrich Volz). This concluding session brings together the course's macro-fiscal, green PIM, green PFM, public and private climate and sustainable finance strands. Participants will consider how the available frameworks and tools can be combined into a coherent government approach. The session will examine institutional mandates, coordination, data and capacity constraints, as well as the political and practical barriers that can prevent identified priorities from moving into budgets and implementation. The group exercise will identify and sequence near- and medium-term actions for the Philippines, clarify the roles of the DOF and other key authorities, and develop the economic, fiscal and development case for financing selected climate and sustainability priorities. Key questions include: Where can the Government of the Philippines start to better manage climate risks and build economic and financial resilience? What are the best tools and best practice examples? What are the opportunities and barriers? How would you make the case for / justify adaptation and/ or mitigation funding from a DOF or line ministry perspective?

Overview of teaching faculty



Jerome Abesamis is a senior lecturer and PhD candidate at the University of the Philippines School of Economics. His work focuses on macroeconomic modelling and forecasting, international finance, and economic analysis of government programmes. From 2019 to 2024 he was a consultant at the Asian Development Bank, where his work consisted of maintaining and working on various macroeconomic models. His research has been published in the Asian Development Review and Emerging Markets Finance and Trade and has contributed to the Asian Development Outlook 2019 Update and the Asia-Pacific Trade Facilitation Report. He has also consulted for The Asia Foundation and USAID. He currently teaches money and banking at the U.P. School of economics. He holds an MA in Economics from the University of the Philippines and a BS in Applied Economics and Legal Management from De La Salle University.



Dr Yannis Dafermos is a Reader in Economics and the Head of the Department of Economics at SOAS University of London. His research interests lie in ecological and financial macroeconomics, climate finance, climate-aligned development, inequalities and the political economy of the green transition. His work has been published in several academic journals, including the Cambridge Journal of Economics, Ecological Economics, Environment and Planning A: Economy and Space, the Journal of Banking & Finance, the Journal of Financial Stability, Nature Climate Change and New Political Economy. He has led and co-led multiple projects on the role of macroeconomic and financial policies in the green transition and has run capacity building programmes on climate change for many central banks. Yannis is a Senior Fellow at the SOAS Centre for Sustainable Finance and a Fellow at the Forum for Macroeconomics and Macroeconomic Policies. He is also an Associate Editor of the Journal of Post Keynesian Economics, an Editorial Board member of the journal Ecological Economics and an Associate Editor of the Review of Evolutionary Political Economy. He has acted as consultant for several organisations, including Banco Central do Brasil, ClientEarth, GIZ, Greenpeace, UNCTAD and the New Economics Foundation. At SOAS he teaches Macroeconomics and Sustainability. He has been working with the Bangko Sentral ng Pilipinas in developing an ecological micromodel for the Philippines.



Dr Harald Heubaum is Deputy Director of the SOAS Centre for Sustainable Finance, Chair of the SOAS Centre for Energy and Climate Policy, and Senior Lecturer in Global Energy and Climate Policy. Harald's research and teaching interests focus on change and innovation in global climate and financial governance, economic analysis of climate adaptation and resilience investments, and the quantification of social and environmental benefits of the low-carbon transition. He developed and currently convenes the MSc Global Energy and Climate Policy on campus and online, and the Coursera Massive Open Online Course (MOOC) Global Energy and Climate Policy with over 20,000 learners. Harald serves as Deputy Academic Director of the RAMP University Network for Strengthening Macrofinancial Resilience to Climate and Environmental Change and is Policy Fellow at the UK Department for Environment, Food and Rural Affairs (Defra) where he leads research on economic appraisal of climate adaptation investments.



Professor Renato Reside, Jr. has been teaching at UP School of Economics in Diliman since obtaining his MA and PhD in Economics from Fordham University in New York City in 1993 and 1996, respectively. He usually teaches macroeconomics classes. But he also has extensive consulting experience in the field of public finance, providing advice to the Department of Finance in Manila over matters related to various tax breaks, tax expenditures, and pension reforms. He occasionally gets invited to hearings at the House and the Senate as resource person related to these issues. He helped provide background research for the TIMTA and CREATE bills of the DOF. He also recently helped the Bangsamoro Autonomous Region of Muslim Mindanao organize its finance and budget ministries and draft a tax bill. Beyond that, he also has past experience writing policy papers for and working for the World Bank, Asian Development Bank, JICA and UP School of Economics. He served as Undersecretary of Finance, in charge of Tax Research and Expenditure Monitoring at the Philippines Department of Finance from 2024-2026. As Undersecretary at DOF, he conducted and supervised research on the Global Minimum Tax and on applications of machine learning in analyzing local government tax collections and tax administration. He also previously served as Board Member, representing the academe, at the Philippine Energy Research and Policy Institute (PERPI) from 2022-2024. Related to this, Professor Reside is currently conducting research on the impact of firm-level permit facilitation on energy investment. He is an alumnus of the Ateneo de Manila University where he got his Bachelors degree in 1988.



Professor Ulrich Volz is Professor of Economics and Director of the Centre for Sustainable Finance at SOAS, University of London. He is also a Senior Research Fellow at the German Institute of Development and Sustainability, Visiting Professor at the London School of Economics and Political Science, Research Fellow at the Centre for Economic Policy Research, and Fellow at DIW Berlin. Ulrich was part of the UN Inquiry into the Design of a Sustainable Financial System and a member of the NGFS-INSPIRE Study Group on Biodiversity and Financial Stability. In 2024, Ulrich was appointed by the Brazilian G20 Presidency to the Group of Experts of the G20 Taskforce on a Global Mobilization against Climate Change. He has acted as an advisor to numerous governments, central banks, international organisations and development agencies on matters of macroeconomic policy, climate risk and sustainable finance, and financial sector development. In 2021-2022, he supported the Bangko Sentral ng Pilipinas in developing a Sustainable Central Banking Roadmap.

Overview of co-organising institutions

About SOAS and the Centre for Sustainable Finance

The SOAS Centre for Sustainable Finance aims to advance the transition to an equitable, low-carbon and resilient economy by providing a forum for interdisciplinary research and teaching on sustainable finance and investment. The Centre's academics, senior fellows, and professors of practice include some of the world's leading thinkers and practitioners on these issues. Located in the SOAS Department of Economics, the Centre seeks to enhance knowledge and understanding of sustainable finance and investment in both the Global North and South and act as a focal point for policy debates in this area. Centre members are working with and funded by national and international partners. Members of the SOAS Centre for Sustainable Finance have helped numerous central banks and financial supervisors in developing climate

stress tests, disclosure frameworks and sustainable finance strategies. The Centre has been a pioneer and leader in capacity building among finance ministries, central banks and financial supervisors. Centre members have also convened major capacity building and executive training programmes in sustainable finance and climate risk for international organisations and commercial financial institutions. Centre members have also convened courses in climate negotiations, climate finance and sustainable finance for the UK FCDO and the UK Cabinet Office.

About the Resilience Adaptation Mainstreaming Programme (RAMP)

In 2022, the SOAS Centre for Sustainable Finance together with the World Resources Institute established the Resilience Adaptation Mainstreaming Programme (RAMP), a large-scale capacity building programme designed to accelerate climate adaptation in developing countries by strengthening capacity in ministries of finance, planning and economics to understand, plan for, and finance climate adaptation actions. A key part of RAMP is the RAMP University Network, the Secretariat of which is hosted by the SOAS Centre for Sustainable Finance. The University Network develops curricula and course materials and delivers teacher training and supports research activities to enable faculty at its member universities in climate-vulnerable developing countries to offer high-quality graduate-level teaching and professional training for governments. Through such capacity-building, RAMP and the University Network contribute to systemic change in public financial management and public policy for climate finance in climate-vulnerable countries. RAMP is a knowledge partner of the Coalition of Finance Ministers for Climate Action and works in close partnership with the International Monetary Fund, the World Bank, UNDP, regional development banks, and other stakeholders.

About the Asian Development Bank

The Asian Development Bank (ADB) is the leading multilateral development bank in Asia and the Pacific, providing finance, technical assistance and policy advice to support sustainable and inclusive development. Climate change is one of the ADB's strategic priorities, with the Bank playing a central role in financing climate adaptation and mitigation investments, strengthening public financial management, and helping governments mobilise both public and private climate finance. In the Philippines, the ADB is one of the country's largest development partners and plays a central role in financing climate-resilient and low-carbon development. It supports individual investment projects and works to strengthen the institutions and policies needed to mainstream climate considerations across public finance and development planning. Recent ADB programmes have focused on climate-resilient infrastructure, integrated water resources management, urban resilience, renewable energy, and public financial management reforms, while also supporting improvements in public investment management, fiscal resilience and climate finance mobilisation.

About the University of the Philippines Diliman (UPD)

The University of the Philippines Diliman is a modern research university advancing sustainable, innovative, and people-centered national development. This public mission is carried out by a socially engaged community that upholds honor, excellence, and integrity in all areas of research and education.