



Strategies for Mainstreaming Climate Action in Ministries of Finance:

Governance, Capacities, and Research Practices

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A product of the Helsinki Principle 2 workstream

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List of Acronyms

EMDEs	Emerging Markets and Developing Economies
GDP	Gross Domestic Product
HP	Helsinki Principle
IDB	Inter-American Development Bank
IMF	International Monetary Fund
IP	Institutional Partner (of the Coalition)
MoF	Ministry of Finance
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-Operation and Development
SDGs	Sustainable Development Goals
WBG	World Bank Group
WRI	World Resources Institute

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Executive Summary

The Helsinki Principle 2 (HP2) workstream of the Coalition of Finance Ministers for Climate Action (the 'Coalition') is deepening engagement with Member Ministries of Finance (MoFs) on how they are mainstreaming climate action into their work and processes, and how best to progress these efforts going forward.

The HP2 2021 Work Programme includes:

1. Reviewing the current situation of climate mainstreaming in MoFs and identifying future expertise and capacity needs.
2. Mapping ongoing initiatives undertaken by the Coalition's Institutional Partners (IPs) and identifying key areas where they can help build competencies and expertise in MoFs.
3. Developing a training program based on the findings, in close collaboration with IPs and academia.
4. Preparing a report that seeks to address these priorities, reviewing good MoF practices on strategies, governance, and research in support of mainstreaming climate considerations in economic policies, as well as identifying key research areas for further effort.

This report is a key deliverable under the HP2 Work Programme.

Considering that climate change is elevating tangible costs, impacting fiscal positions, and heightening financial risks, action is needed to move towards low-carbon and climate-resilient economies. However, mainstreaming climate into economic and financial policies requires significant changes in approach and investments in capacity. MoFs will need to evolve strategies, expertise, tools and management practices accordingly.

The first section of this report assesses the current situation in MoFs in addressing climate change and mainstreaming climate action, largely based on surveys of Members, findings from workshops, and country cases that highlight experience and good practice. Five key conclusions emerge: First, there is a need for governments to raise awareness of climate change issues in all MoF departments, as well as cooperating with key institutions like central banks. Second, MoFs need to develop structures, tools, analytical work, and skills to facilitate progress, and a 'whole-of-government' approach has been recognized as key to achieving climate goals. Third, MoFs need to be specific about the kinds of support they seek, especially regarding multidisciplinary analysis, enabling research institutes and universities to engage effectively. Fourth, MoFs need to build capacity. Fifth, strong leadership from the Head of State/Prime Minister/Finance Minister and key ministries is essential to raise awareness, integrate climate systematically into economic and financial policymaking, and address the challenges of climate change.

The second section focuses on the concrete steps needed for climate mainstreaming, including mapping existing options, boosting training programs, and expanding cooperation and engagement with IPs (many have capacity-building programs available or under development). In order to help avoid duplication, this section catalogs existing training options offered by IPs, organizations, academia, and universities through a preliminary mapping exercise to identify gaps and entry points.

The third section provides findings on actions by MoFs and the role of the Coalition to take this agenda forward. MoFs could advance the climate mainstreaming agenda by raising awareness, investing in expertise and capacity-building, and ensuring appropriate institutional frameworks and practices. The Coalition can further support its Members by integrating their needs in its annual work programme to promote future research efforts on identified priorities. In addition, the Coalition can act as a platform for active discussions and knowledge sharing.

Introduction: Mainstreaming Climate into the Work of Ministries of Finance

The active engagement of MoFs in national efforts to address climate change is critical from a horizontal, economy-wide perspective, as they are responsible for implementing economic, fiscal, and financial policies. It is therefore vital that climate change considerations—including risks stemming from biodiversity loss—are mainstreamed in their work preparing economic projections and impact assessments, budget planning (expenditures and revenues/taxation) and the sustainability of public finances. MoFs are a key part of ‘whole-of-government’ approach to addressing climate change. In some cases, strengthening MoF engagement on climate change will be helped by implementing institutional and legal adjustments for integrating climate within the MoF’s mandate. In addition, in-house skills and expertise need to be enhanced to enable MoF action in support of low carbon economic development and the achievement of both short- and long-term national climate goals.

The main objective of this report is to explore entry points for mainstreaming climate into the work of MoFs. The effort is based on the key findings of two surveys conducted by the HP2 workstream since 2019 that detail the current involvement of MoFs and best practices. In addition, the report describes the main challenges and capacity gaps within MoFs, and suggests ways to address them at the national level and in cooperation with peers and IPs through the Coalition. Finally, this report also aims to underpin the development of an impactful Coalition-sponsored training program for MoFs to boost their climate work.

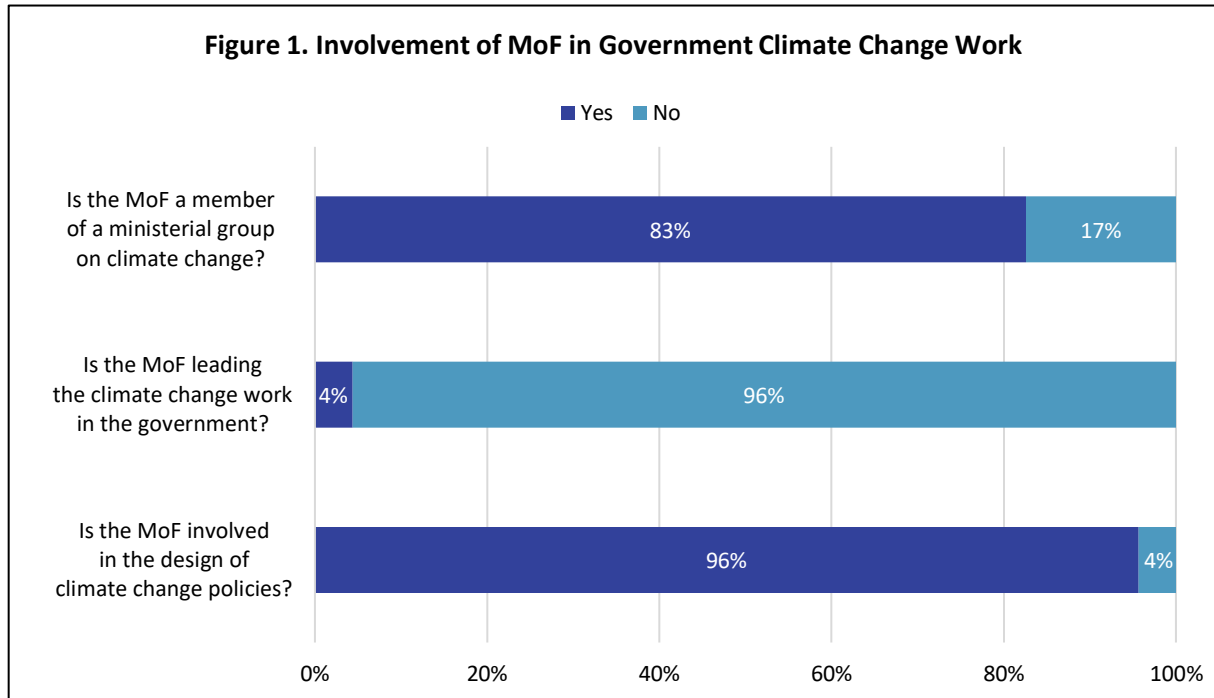
1) The Current Situation in Ministries of Finance

1.1 Surveys of Coalition Members

The Coalition conducted two surveys in 2020 and 2021 to better understand how MoFs have reflected climate change considerations in their work.¹

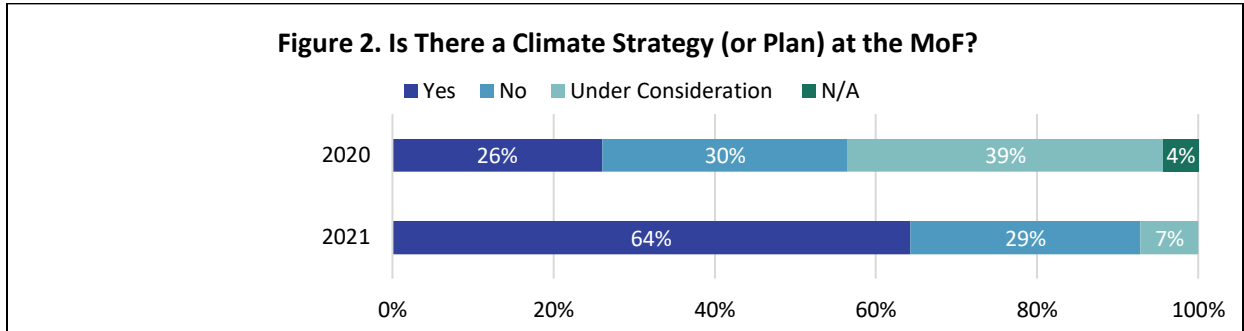
The main findings of the surveys are as follows:

- **In most countries, MoFs are involved in climate policies.** The MoF is often part of a ministerial group responsible for national climate processes (but not in a leading role), and participates in the design of climate change policies (Figure 1).

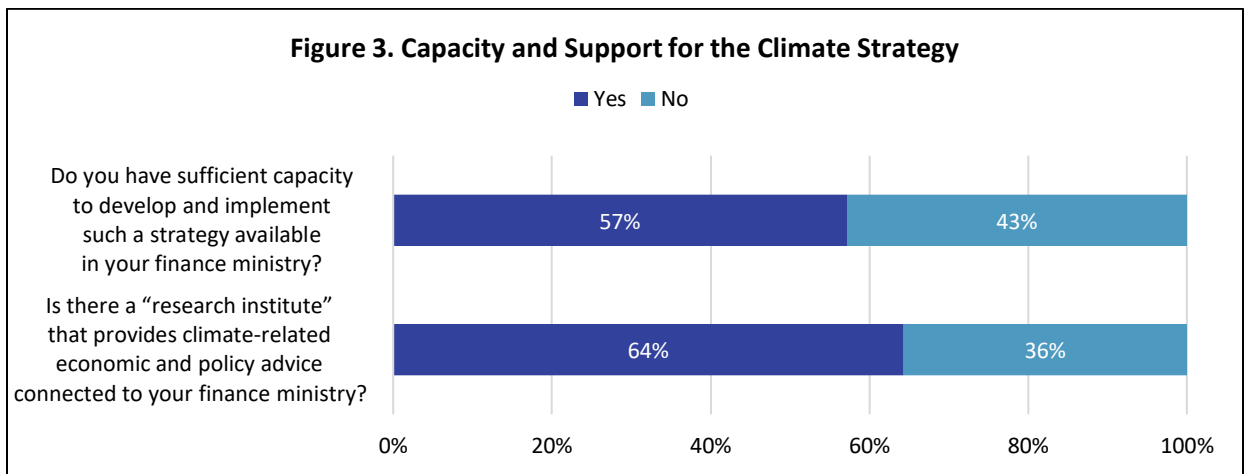


- **More ministries are considering adopting a climate strategy.** In 2020, six of the 23 respondents had a climate strategy, including a few as part of a government-wide strategy. In addition, a number of MoFs were planning to incorporate climate aspects into their strategies. The 2021 survey showed that MoFs in nine additional countries had a climate strategy in place (bringing the total number to 15 or 65 percent of respondents, Figure 2). Only one MoF had a biodiversity strategy in place.

¹28 Members responded to one or both surveys. 23 Members responded, to the first survey, and 14 to the second survey.



- **Gaps in skills and capacities exist**, both in high income and emerging market and developing economies (Figure 3). Very few countries had started to enhance their capacities.



- **The role of research is not structured.** Many Members indicated that they have some country-level capacity that can provide assistance and research to back policy design. Where such support is available, it is limited to specific areas without systematic and horizontal approaches. Utilization of research is often limited to individual research projects.
- **Most countries have plans in place to increase capacity.** This is more clearly visible in the 2021 survey. Only two countries indicated that they had no plans to increase resources at this time.
- **The need for training is clear.** MoFs generally do not have adequate skills on climate-related issues. In the 2021 survey, only four countries stated that they have training in climate-related issues within their MoF.
- **The Coalition can play a valuable role.** Members expect the Coalition to help share best practices and expertise in capacity-building, strategies implementation, and research utilization. Support from IPs and other entities was also seen as valuable. Some countries raised the need for more knowledge on biodiversity issues and the link to climate change mitigation efforts.

1.2 Workshops on Key Areas and Functions

In May 2021, the Coalition hosted a workshop on strategies, capacities, and research practices of MoFs. The workshop presented country cases that demonstrated challenges and potential solutions for incorporating climate change considerations in the work of MoFs. The workshop deepened the understanding of obstacles and key drivers of MoF climate action. The main obstacles were summarized as: 1) limited awareness and willingness within MoFs to engage on climate change issues; 2) weak institutional basis for involvement; and 3) limited technical capacity in MoFs and related ministries.

1.2.1 Awareness

Limited political will and awareness of climate change issues was observed both institutionally and among leading MoF officials. Moreover, climate change was often seen as only an environmental mandate under Ministries of Environment; a perception that constrains MoF engagement. There is a need to raise awareness of climate change issues in all MoF departments, as well as within financial institutions, like central banks. This requires leadership that systematically raises awareness and integrates climate into economic and financial policymaking.

1.2.2 Governance and the Institutional Basis for MoF Involvement

Since roles and functions of MoFs extend from existing practice following national legislation, engaging more directly on climate issues may require changes to the structure of MoFs and perhaps even legislative changes. While challenging to undertake, legislative action can help underpin MoF engagement on the climate agenda, avoiding a situation where action is needed by the MoF, but initiative is fully delegated to other ministries. Governance reforms require a high level of commitment—but can support mainstreaming climate action into MoF work and facilitate cooperation between ministries on the climate agenda.

A *‘whole-of-government’* approach has been recognized as key to achieving climate results. Countries where climate action has been robust have typically exhibited strong leadership from the Head of State/Prime Minister and key ministries. MoF’s role in a whole-of-government approach can be critical as sectoral ministries rely on budgetary resources to be aligned with climate action. However, MoFs are only one hub for climate action. At the center should be the Prime Minister’s office, which sets the pace, while other ministries coordinate their actions, strategies, and implementation plans. Moreover, MoFs should be strongly involved in the design of Long-Term Strategies, Nationally Determined Commitments (NDCs), and key economic policies supporting climate action. Other agencies such as central banks and debt offices also need to be involved.

To strengthen their institutional and legal basis, countries can learn from peers where climate action is moving forward on how to position the Head of State or Prime Minister’s office and MoF’s role in a whole-of-government approach. Capacity-building and institutional reforms are fundamentally a cross-cutting agenda. It is not only about MoFs, but how they work together with sectoral ministries, sub-national entities and broader society. There is no quick-fix as climate action is a medium- and long-term agenda with time horizons of more than 10 years.

Government structures and operations are traditionally geared to respond to existing challenges rather than tackling new and potential future challenges of a complex and uncertain nature, such as climate change. Classic government steering mechanisms often respond to narrow sectoral exigencies, have difficulty in managing the complexity and interdependence of policy issues, and focus on immediate needs, which constrains the exploration of future challenges and potential opportunities. The Coalition's work under HP2 seeks to help Members address these issues for more effective responses on the climate change agenda. These efforts could benefit from the OECD's work on [Anticipatory Innovation Governance](#), which they define as:

*"...the broad-based capacity to actively explore possibilities, experiment and continuously learn as part of a broader governance system. This governance model is still developing, growing and evolving as case-based research continues around the world. The model works with mechanisms in the area of agency and authorizing environment to help enable future-oriented innovation and remove barriers that prevent anticipation from happening."*²

Governments need new structures, tools, and skills to tackle the challenges created by a changing environment. Governments may benefit from: 1) trying to be as forward looking as possible; 2) considering alternatives and seeking inputs from citizens; 3) realigning strategic, budgetary, and legal steering systems to enable the exploration of policy alternatives and complex problems; 4) countering tendencies to work in silos; 5) adopting new anticipatory innovation approaches and tools, and; 6) allowing for cross-government exploration of issues to preserve continuity of reforms while creating space for iterative and experimental approaches.

1.2.3 Capacity and Skills

Since systemic change is required to make meaningful progress, MoFs need to focus on building capacity. This requires more than hiring new experts. MoFs and other ministries could step-up both individual and institutional capacities on the climate change agenda. While personal expertise and skills can be strengthened through training, developing institutional capacities requires more profound actions. It is also important to ensure that climate-related skills required by the government are available in the labor market.

Capacities to enhance climate action can be built through: 1) increasing the use of new tools on the macro-critical risks of climate change relating to fiscal and trade imbalances, financial sector instability, and low and inequitable growth; 2) developing specific skills regarding economic climate change modelling, benchmarking tools, and green growth principles; 3) operationalizing green budgeting and expenditure tagging manuals; 4) improving public financial management, which helps ensure the integrity of the process from planning and budgeting to implementation, evaluation, and accountability; and 5) mainstreaming NDCs into national public financial management systems to ensure economic and fiscal externalities of the climate agenda are factored into growth and development strategies. These topics can all be addressed with the help of local universities and training institutes to create not only personal capacity but also long-term institutional capacities.

²<https://oecd-opsi.org/building-global-anticipatory-innovation-governance-capacity/> (accessed November 1, 2021)

1.2.4 Academia and Research

Members indicate that timely and relevant research on climate mainstreaming is needed to ensure a sound evidence base and adequate knowledge for economic policy. Many countries have high-level research institutes, but due to administrative constraints or limited traditions or practices of research-based advisory, research is often focused on one-time, discrete efforts instead of the continuous and interdisciplinary knowledge that is required for complex and longer-term agendas like climate economics.

MoFs need to be specific about the kinds of research and evidence they need, and then discuss with the research community how this can be generated. New initiatives may be needed if the information and analysis does not exist. In fact, new research institutes or programs might need to be established to cater specifically for MoF needs.

Research institutes and universities can support climate informed economic policy planning, especially with concise and multidisciplinary analysis. For example, in designing carbon pricing reforms, policymakers need both technical models and information about social conditions and a wide range of potential economic impacts. International research collaboration can produce global and regional insights, but national circumstances often require local understanding and the development of tailored policy options. Also, climate finance is a new policy area with an increasing demand for knowhow and research to support policy makers. Though researchers have their own networks, the Coalition could help facilitate the sharing of country experiences and expansion of networks in the area of economic and financial policies.

1.3 Country Cases: Experiences and Good Practices

The Coalition reviewed experiences from Members in order to identify good practices in the area of climate mainstreaming. The case studies below aim to: a) describe overall objectives and context, b) identify workable solutions and challenges, and c) outline areas for improvement. The countries in the sample represent different socioeconomic levels and climate challenges, as well as both adaptation and mitigation perspectives.

Box 1. Finland: Considering Ways to Mainstream Climate Change into the Functions of the MoF

Finland is currently reviewing its climate law, which is expected to clarify the institutional basis of the MoF's positioning on climate issues. At the same time, the MoF is examining how to bring climate and biodiversity objectives into its strategy. One aspect of the discussion is the MoF's role as "a sustainability ministry".

The latest government program (2019) includes a commitment to knowledge-based policymaking and deeper engagement with the scientific community to promote horizontal knowledge and the use of reliable information to back up policies. The government's commitment to connecting with academia is moving forward steadily, including: 1) establishing a climate panel to give the government advice in climate change matters (not specialized in economic and financial issues); 2) linking the government's

“Analysis, Assessment and Research Activities” to themes of its program; and 3) enhancing existing MoF collaboration with national research institutes, mainly on individual research projects. More horizontal and interdisciplinary coordination is needed to strengthen knowledge-based policymaking.

To support climate mainstreaming in the MoF, possibilities to better utilize top-class research have been discussed. As part of this work, a stocktaking of skills and the availability of knowledge and research capacity was assessed, as well as the positioning of different actors and research around economic policy preparation. However, the institutional bases and strategy of MoF need to be clarified before this initiative can proceed.

Box 2. Ireland: Policy Research Relevant to Climate Mainstreaming

Ireland’s objective is to reduce economy-wide greenhouse gas emissions by 51% by 2030. This objective is supported by various research practices and ongoing practical work of both the Irish Finance Ministry and Ministry for Public Expenditure. Two key practices are an ongoing Joint Research Programme with an independent economic research institute and an annual budgetary climate tax policy paper. These activities assist with integrating evidence-based climate policy research into economic policy design, creating elements for an ecosystem supporting climate policy work at the Irish Ministry of Finance.

The Joint Research Programme between the Department of Finance and the Economic and Social Research Institute has been in place since 2015. Examples of research relevant to climate policy include:

- In 2019, the impact of increasing the carbon tax to €80 per tonne by 2030 was examined. Findings included that carbon tax increases alone are not sufficient to fully decouple emissions from economic growth, and that the regressive nature of the carbon tax can be offset through redistribution of carbon tax revenues.
- In 2020, the Economic and Social Research Institute examined in more detail how the impact of carbon tax increases could be made progressive through tax and welfare changes. This research informed budgetary decision making in the 2021 budget, where the carbon tax was increased by €7.50 per ton. It resulted in a progressive budget in which most benefits accrued to households with the lowest 40% of income due to targeted increases in social welfare payments for retirees, families with children, and adults living alone. A similar progressive pattern was followed for the 2022 budget.

Another standing process incorporating evidence-based research is the annual Tax Strategy Group (TSG). The group discusses papers on options for tax policy changes in the forthcoming budget. Engagement takes place with key stakeholders and parliament, and the papers are published to facilitate informed discussion in advance of the Budget. A TSG Climate Action Paper is included in this process, collating all climate-related tax policy options – for example, options for taxing auto fuels.

Other important research activities enhancing climate mainstreaming are:

- Ongoing policy research by the Irish Government Economic and Evaluation Service – for example, policy papers on electric vehicles and the shadow price of carbon.
- Green Budgeting has been introduced in recent years for expenditure, tracking climate-related measures. In 2021, green budgeting practices have been incorporated into tax policy analysis for the first time.

Box 3. Jamaica: Organizing Planning in MoF

The Planning Institute of Jamaica (PIOJ) is the public service planning arm of the Jamaican MoF and it initiates and coordinates planning for the economic, financial, social, cultural, and physical development of Jamaica. In addition, the Institute provides guidance on climate issues (disaster impacts on GDP, lives, and livelihoods; coping strategies; population distribution and shifts; and reviews of legislative and institutional frameworks). The Institute works on institutional capacity-building (personnel, systems, tools, equipment), awareness raising (national campaigns, communications strategies, and action plans), knowledge management, donor coordination around climate priorities, and policy reviews (scanning the environment for policy gaps, promoting coherence, and setting the agenda). In addition, the Institute works with academia in shaping and implementing its work program, including by having representatives of academia on its Board.

The PIOJ also identifies the following challenges to work on going forward: creating more coordinated and integrated planning, enhancing expertise in climate analysis, and developing more “easy to use” analytical tools. While the role of academia is integrated into the PIOJ, the Institute believes there is a need to enhance curriculums, improve the use of big data, and focus more on the policy/science interface and innovation.

Box 4. Korea: Green New Deal

The Korean economy relies heavily on manufacturing, energy-intensive industries, trade, and coal. To make progress on the climate change agenda, Korea launched a Green New Deal comprised of four main elements.

- 1) “Green Transition of Infrastructure”, including actions such as turning public facilities into zero-energy buildings; restoring terrestrial, marine, and urban ecosystems; and enhancing management systems for clean and safe water.
- 2) “Reinforcement of Carbon-Neutral Infrastructure”, including actions such as establishing the foundation for reducing GHG emissions; activating the net-zero economy and expanding carbon absorption sources; and raising awareness of carbon neutrality.

- 3) “Expansion of low-carbon and distributed energy”, including actions like setting a foundation to promote renewable energy; building smart grids and efficient energy management systems; and expanding the supply of green mobility.
- 4) “Innovation in the Green Industry”, including actions like supporting businesses in green industries and laying the foundation for green innovation via R&D and the financial sector.

Korea has also founded a Climate Response Fund (2.5 trillion won) aimed at the efficient implementation of projects toward a net-zero society.

In all these efforts, a high level of engagement and leadership initiatives were seen as critical to ensure efficient coordination between the government and the legislature. Public finance can also be mobilized for sustainable choices through green elements in the budget process.

Box 5. Malaysia: Coordination Framework Involving the MoF

The concept of holistic, inclusive, and sustainable development is not new in Malaysia. Therefore, institutionalizing the Sustainable Development Goals (SDGs) into existing government priorities was relatively easy. Malaysia has a national SDG council (chaired by the Prime Minister), a steering committee, and working committees under those bodies. The Malaysian Minister of Finance joined as Chair of the working committee on finance in April 2021. Working committee members include representatives from UN agencies, the private sector, NGOs, and academia.

Malaysia has achieved significant progress on the social-related SDGs, but still has work to do with respect to the environment-related SDGs. Current challenges include: the legal framework (the division of responsibility between the central and state governments), the administrative framework (horizontal challenges), public will (growth vs. sustainability), and resource constraints (priorities and lack of expertise in the MoF). Initiatives have been undertaken by the MoF and its finance agencies, and endeavors to move beyond silos and enhance coordination with other parts of government to ensure a comprehensive, consistent, and holistic framework for addressing climate change.

Box 6. Uganda: MoF Involvement Necessary as Climate Change Begins to Affect Economy and Finances

The motivation for Uganda’s MoF to work on climate-related issues is concrete: climate change will affect the economy deeply, especially since the country relies on rain-based agriculture and natural resources. One example of the intensification of these effects is droughts. The MoF works on climate change issues together with the National Planning Authority and the Ministry of Water and Environment, for example, to prepare NDCs and green growth strategies. The MoF has a designated authority for climate financing in Uganda, and climate concerns are included in development projects. The MoF has also started work on

including climate change parameters into micro- and macroeconomic modelling to support budget planning and expenditure tagging.

Uganda sees five major challenges going forward: 1) limited capacity and awareness within the MoF about climate change issues; 2) limited emphasis on climate change financing during the monitoring and evaluation of projects; 3) lack of consideration of social and political issues when it comes to carbon taxation and other environment levies; 4) an outdated belief that climate change and environmental issues are only related to the Ministry of Water and Environment; and 5) high interest in physical outcomes as opposed to nonphysical outcomes, which might be highly oriented to climate change mitigation.

Uganda has identified four possible solutions: 1) increased capacity-building, especially regarding economic climate change modelling and green growth principles; 2) operationalizing budget and expenditure tagging manuals; 3) awareness raising in all the different directorates of the MoF and other financial institutions like the central bank; and 4) continued support from Coalition IPs and development partners.

Box 7. United Kingdom: Climate Strategy Embedded in MoF Functions and Resourcing

Reports commissioned by the UK government such as the Stern and Dasgupta Reviews are well known examples of the utilization of research in the planning and design of climate and economic policies. The UK Treasury has a wide mandate as the economic and finance ministry, and therefore climate and environment issues are seen as directly part of the Treasury's function. The UK also has a strong legislative framework on climate issues.

The UK passed the Climate Change Act in 2008, which sets long-term goals and a system of carbon budget targets that are at the core of the UK's climate strategy. The Act also established the Committee on Climate Change, which advises the government, but does not make policy decisions. The Paris Agreement spurred the mainstreaming of climate objectives in the Treasury, and the UK set its target for net zero emissions by 2050 based on advice from the Committee on Climate Change. The Committee also advised the MoF to undertake a review of how the transition will be funded and where the costs will fall. This led to the establishment of the Net Zero Review team within the Treasury.

Other drivers of progress have been the "super year for climate 2021" and the COP26 Presidency. The resources and capacity of the MoF have grown rapidly. Ten years ago, the MoF had the equivalent of 20 people working on climate-related issues. Now that number is closer to 120, and many are working on climate on a full-time basis. Looking ahead, new functions are being planned in the Treasury. There is no "one-size-fits-all" solution, and every country has to find their own way. For the UK, the key drivers have been political, institutional, and legislative approaches.

2) Concrete Actions to Support Mainstreaming

2.1 Institutions' Roles in Supporting MoFs

The sections above describe how MoFs in many countries need support to enhance their capacities at both the individual (civil servants) and institutional level (MoF). Engagements under HP2 make clear that not only developing but also developed countries need to build up skills and capacities. While developing countries must be supported through technical assistance and capacity-building programs, all countries would benefit from stepped-up technical work and training. The Coalition is well placed to coordinate and enable collective action, avoid duplication of work, and convene networks of experts.

Many Coalition IPs have capacity-building programs available or under development. The following boxes take stock of such capacity-building activities and programs to assist Members in drawing on IP support efficiently, as well as helping identify and fill possible gaps.

Box 8. Financial Management Institute of Southern and Eastern Africa (MEFMI): Mainstreaming Climate into Policies

MEFMI provides regional capacity-building and policy advice in macroeconomic and financial management. In doing so, it seeks to build sustainable human and institutional capacity and fosters best practices for central banks, MoFs, Ministries of Planning, and other relevant institutions, with the objective of supporting economic growth and stability in Southern and Eastern Africa.

Mainstreaming climate change into core areas of MEFMI's work on macroeconomic, financial, and sovereign debt management, and capacity-building policy design is a major focus. In addition, MEFMI has launched collaborative projects such as the Joint MEFMI/IMF-AFS virtual seminar on building resilience to natural disasters and climate change in the Southern-Africa West Indian Ocean Region, and joint MEFMI/World Bank regional workshops on smart fiscal policy for climate action.

Box 9. Grantham Research Institute (GRI): Experience in Research-based Policy Advice

GRI presented insights on the role of the research community in providing evidence-based policy advice to MoFs. The presentation was divided into three parts:

- 1) Constraints on collaboration between government and academia (such as timing mismatches), high complexity of academic research, and different research priorities of academia and policymakers. As a consequence, much academic (and sometimes applied) research has limited policy impact.

- 2) Cases where MoFs can work well with academia (such as deep dives and thought leadership pieces like the Stern Review, LSE Growth Commission, and Dasgupta Review), and where IPs, think tanks, and other research institutes might be more suitable partners (including applied empirical research, or research on urgent policy questions like the Coalition’s 2020 report, *Better Recovery, Better World*).
- 3) Efforts to improve collaboration on evidence-based policy advice. To initiate collaboration with researchers, governments can publish areas of research interests online, set up advisory committees, or establish secondment schemes. When working together, it is key to set clear expectations and timeframes, as well as ensure regular communication between parties. Non-written outputs like workshops and brainstorms can also be helpful to overcome time constraints.

Ways forward include collaborating with IPs and setting up dialogues between MoFs and the research community to achieve a better mutual understanding of research needs and capabilities.

Box 10. International Monetary Fund (IMF): Building Capacity in Climate

The IMF Institute for Capacity Development can offer learning resources and advice to the Coalition in three areas. The first is technical assistance to member countries on macro-economic frameworks focusing on growth, macro-stability, and debt sustainability. The institute is currently working on incorporating climate change shocks, as well as mitigation and adaptation policies, into these frameworks. This area of work aims to help country authorities establish their own climate change policy scenario analysis.

Second, the Institute offers external training programs related to climate. For example, the Inclusive Growth online course (“IGx”) includes a climate module available to country authorities and members of the public. A Climate 101 course has recently been launched for IMF economists, but it could later be adapted for external training.

Third, the Institute can share its expertise and experience in designing training programs, including in virtual and blended environments—paying attention to learning experiences and teaching methods to find the best ways for learners to absorb information.

Box 11. NDC Partnership: Integrating NDCs in the Work of MoFs

The NDC Partnership supports MoFs in integrating NDCs into national planning, budgets, and revenue streams. As a criterion for membership in the NDC Partnership, countries are requested to appoint focal points in ministries responsible for addressing both climate change and economic development, typically the Ministry of Environment on one hand and the Ministry of Finance or Planning on the other hand. Through the Partnership’s country-driven, member-led model, member countries request support for

NDC implementation and enhancement from the Partnership and are matched with partners from the global network who can provide the needed support.

Examples of requests from countries to develop MoF capacities include training of MoF staff to integrate climate change into macro-economic and macro-fiscal modelling, budget tracking and reporting on climate change financing, mainstreaming climate change into public financial management and investment programs, and resource mobilization for climate action. Currently, over 40 NDC Partnership members are supporting MoFs in more than 50 countries to align economic development with the climate and sustainable development agenda.

The NDC Partnership also works to strengthen coordination between Ministries of Environment and Finance through embedded in-country facilitators. These facilitators support coordination for NDC implementation, reporting, and resource mobilization. In response to the COVID-19 pandemic, the NDC Partnership launched the Economic Advisory initiative to support governments in preparing climate-resilient economic recovery plans by embedding economic advisors into relevant ministries. To date, the Partnership has deployed 45 economic advisors in 30 countries.

Box 12. OECD: Leveraging Multidisciplinary and Long-standing Experience in Evidence-based Analysis

The OECD's Paris Collaborative on Green Budgeting is working in close partnership with governments and experts to support the development of practical and pragmatic approaches. It aims to design new, innovative tools to assess and drive improvements in the alignment of national expenditure and revenue processes with climate and other environmental goals. In doing so, it provides a cooperative platform for its members and partners. The international workstreams include environmental policy and climate change, budgeting and tax policy, green accounting, and inclusive sustainable growth. Green budgeting is likely to increase in practice as countries consider ways to integrate green dimensions in budgetary processes (OECD, Forthcoming).

The work aims to develop agreed definitions and methodologies that can support national approaches to green budgeting and develop outputs that can improve coordinated national and international policy design. It seeks to build upon and support established international reporting practices rather than develop duplicative approaches. The OECD has identified priorities and areas for improvement for enhanced cooperation: 1) sharing best available data, expertise, and information to advance policy-relevant research and implementation; 2) facilitating alignment of national and international budget policy design; 3) introducing a coherent narrative across what would otherwise be disparate research outputs; 4) communicating results to raise awareness and signal support for action and accountability on environmental policy imperatives, and 5) developing cross-national indicators of progress against various international environmental goals.

The OECD has developed a Green Budgeting Framework based on the approaches that countries have implemented. The framework is organized around four building blocks: 1) strong strategic frameworks; 2) methods and tools; 3) reporting processes to enhance transparency and accountability; and 4) a supportive enabling environment to sustain practice over time. The OECD develops guidance and

instruments—such as green tagging (OECD, 2020) or green spending reviews (OECD, Forthcoming)—to support countries as they integrate climate and environmental considerations into their budgetary processes.

A more recent initiative by the OECD was the May 2021 launch of the International Programme for Action on Climate (IPAC), which supports country progress towards net zero emissions and a more resilient economy by 2050. These complement and support the UNFCCC and the Paris Agreement monitoring frameworks. IPAC helps countries strengthen and coordinate their climate action through regular monitoring, policy evaluation, and feedback on results and good practices. IPAC consists of four core components: 1) a Dashboard of Climate Indicators; 2) the Climate Action Monitor provides an annual digest of countries' progress toward climate objectives, building on the indicators from the Dashboard; 3) Country Notes that assess progress toward climate goals while taking into account countries' specific circumstances; and 4) a dedicated web portal that provides an interactive platform for mutual learning and dialogue.

IPAC builds on the OECD's unique multidisciplinary and long-standing experience in evidence-based analysis. It utilizes existing data and indicators, policy tools, and advice developed by the OECD, the International Energy Agency, the International Transport Forum, and the Nuclear Energy Agency.

Box 13. SITRA: A Training Course Combining Theory and Experiential Learning

SITRA has organized the “Leadership Training for Sustainable Economic Policy” program in Finland since 1977. In the early years, the focus was on economic and fiscal policy, but today the focus is on *sustainable* economic policy.

The course, which runs over seven days, consists of an orientation to the subject and field trips for experiential learning. The program is targeted toward high-level experts, decision makers, and officials in charge of policy preparations, and is oriented around three horizontal themes: 1) leadership, 2) strategic government programs, and 3) communication and influencing.

The training adopts a wide range of teaching methods based on defining the shared objective, participants, content, methods and other practical arrangements. The training is structured as a role play, with participants asked to design an overarching vision, a strategic plan for the next government, and a budget plan. The course contains a mixture of competitive and cooperative elements, combining both theory and practice. For example, it uses real data and experts from the MoF. The framework of the program shows how important it is to understand sustainable economics from different perspectives.

Box 14. United Nations Development Program: Strengthening Governance of Climate Change Finance

For the last decade, the United Nations Development Program (UNDP) has been working with MoFs on strengthening governance of climate change finance in the Asia Pacific region. Augmenting capacity of MoFs has been at the core of this support, with the goal of building a solid foundation for climate change integration in public financial management systems. As a result, several countries, like Bangladesh, Indonesia, and Nepal, have successfully undertaken significant reforms for embedding climate change into budgeting systems and processes. In order to ensure depth and sustainability of reforms, UNDP has taken a holistic capacity-building approach that caters across economic ministries and encompasses sectoral ministries and different tiers of government.

UNDP has organized trainings at both regional and country levels on climate change-aligned planning and budgeting, including climate change financing frameworks, climate budgeting, climate budget tagging, and institutionalization of reporting on climate finance. Government representatives from Bangladesh, Cambodia, Fiji, Indonesia, Nepal, Pakistan, Thailand, Tonga, and Vanuatu have participated in these trainings. At the national level, UNDP has worked with national institutes like the Economy and Finance Institute Cambodia, helping countries to institutionalize reporting on climate change expenditures. At the regional level, it has organized trainings with partners like the International Centre for Climate Change and Development, the United Nations Institute for Training and Research, and the Climate Bonds Initiative. This has been complemented by South-South exchange on Indonesia's Green Sukkuk, Nepal's Climate Citizen Budget, and Pakistan's Climate Budget Tagging.

UNDP has strengthened the capacity of governments and other stakeholders by developing methodological approaches and guidance notes for the development of an enabling framework and implementation of climate finance reforms. This includes methodologies for developing Climate Change Financing Frameworks, Climate Public Expenditure and Institutional Reviews, guidance notes for Climate Budget Tagging, Climate Cost Benefit Analysis, and a Handbook for Parliamentarians on Budget Scrutiny.

UNDP is in the process of putting in place a Climate Finance Network which will cover 14 countries in the Asia Pacific region. This will be a strong platform to build on the experiences of different countries and share knowledge and experience for accelerating the implementation of the climate finance agenda. It will also bring in development partners, research entities, and national institutes. Through its regional and global outreach component, it will also influence the climate finance portfolio beyond these 14 countries.

Box 15. World Bank Group: Training and Support for Tailoring MoFs' Structures and Operations

The World Bank is committed to supporting Green, Resilient, and Inclusive Development in client countries, with climate a key priority focused on: 1) mobilizing financing for climate change mitigation and adaptation efforts; 2) integrating climate into all country diagnostics and country strategies; 3) supporting countries with their NDCs and long-term low-carbon development plans; 4) supporting key green growth-related systemic transformations; and 5) addressing the big challenges and opportunities

for economics, finance, and development under the climate agenda. Most climate-related capacity-building and training programs at the WBG focus on these priorities.

The WBG offers myriad trainings on climate change across various Global Practices, which are typically sector and project specific. Currently, most of these offerings are tailored for an internal WBG audience, but country teams could invite country clients to avail of training via capacity-building project components. Some of the trainings that may align with the Coalition and HP2 priorities are as follows:

- The WBG Climate Change Group (CCG) prepares, presents, and curates the majority of learning offerings on climate change at the WBG. Some of the training and capacity-building is conducted through climate Change Operational Trainings (co-benefits, climate mainstreaming, climate indicators, climate corporate commitments, climate change 101). Another initiative that may have potential to target MoFs is a Senior Executive ‘boot camp’ on climate change, which is currently under preparation to be launched in early 2022. This boot camp is a high-level training for WBG senior-level management that would cover adaptation, mitigation, macro impacts, and other broad topics. There is also a plethora of capacity-building and training being conducted through CCG sub-groups on topics such as climate investment funds, climate markets and innovation, and climate funds management.
- The Equitable Growth, Finance and Institutions Global Practice is currently preparing a training course on mainstreaming climate. The program would be targeted at WBG country economists and is to be launched in Spring 2022. In addition, the Climate Macro 101 bootcamp is an example of a training program that focuses on issues such as the climate-macro-fiscal nexus, article 4 surveillance, and public expenditure reviews, complimented by a seminar series on climate macroeconomics.
- The Mainstreaming Climate Change in Governance program has run an eleven-session training program for Governance Global Practice staff on the fundamentals of climate change governance. Externally, the program supports the design and implementation of climate-informed institutional and policy reforms for center-of-government, planning, and finance agencies. To date, the program has developed specialized training modules to train Community Driven Development Committees in Kenya. A total of 60 community members have been trained thus far. In addition, a total of 96 county technical staff have been trained in all 24 counties where the Bank’s Kenya Climate Smart Agriculture Project is being implemented. In Ukraine, the Governance program organized a high-level webinar, bringing together 85 participants from the government and stakeholders from the private sector to introduce the new green public procurement methodology. A training workshop also was organized in Zimbabwe with the Ministry of Finance and Economic Development in April 2021 to improve awareness of climate change issues. Planning for additional training activities is underway, and workshops will be organized once engagements in other countries near completion.

At present, most of these offerings are targeted at an internal audience, but the potential for customization and scaling-up for external audiences could be explored further. The WBG can explore creating training and other capacity-building activities that address the focus areas of the Helsinki Principles, targeted at Members (in addition to non-member and WBG client countries).

Box 16. World Resources Institute: Resilience and Adaptation Mainstreaming Program for Developing Country MoFs

The Resilience and Adaptation Mainstreaming Program (RAMP) is a long-term capacity-building program (more than 3 years) for government central ministries (finance, planning, economics) based on a core curriculum designed around the macro-critical aspects of climate change (see Table 2 below for details). It is supported by a network of technical partners, including the IMF, World Bank, NDC Partnership, UNDP, the Global Resilience Partnership, and the Coalition for Climate Resilient Investment. A fundamental feature of RAMP is that it is implemented with and through local universities, since they can help improve content quality, ensure the local context is reflected, and underpin program sustainability. Participating universities will become part of the University Network for Strengthening Macro-financial Resilience to Climate and Environmental Change, which is led by the School of Oriental & African Studies, University of London, in collaboration with the University of Oxford.

RAMP's theory of change is that by improving core knowledge and planning, governments will be better able to align economic development with climate change risks and scale up climate finance. The absence of improved MoF understanding of issues such as physical and transition risks, macro-critical impacts, policy options, and priority investments, complicates effective climate-related decisions-making. It will also be hard to gain access to increasingly competitive climate finance, since climate finance will flow more easily to countries that are better informed and prepared.

RAMP is a collaborative program. It will start in a few pilot countries that are interested in going beyond "one-off" technical assistance activities such as an assessment of a carbon price or support to an NDC. It is designed around countries and universities entering into long-term capacity-building Memorandums of Understanding.

2.2 Training Programs – Design and Launch

2.2.1 Key Focus Areas and Structuring of Training Activities

Training needs are strongly linked to institutional capacity-building, especially in low- and middle-income countries. As such, the development of skills and knowhow through training is an essential component of HP2's work. While there is no one-size-fits-all solution for capacity-building, there is strong demand for training in the core areas of climate economics and climate finance, covering regional and national aspects.

Academia and numerous IPs already support capacity-building in Member countries, necessitating a stocktaking exercise as a first step in order to avoid duplication. Moreover, coordination between other Helsinki Principle workstreams is necessary to ensure that training is tailored to the specific needs of Members. Collaborating with local universities—with the IPs acting as focal points (for example, the Inter-American Development Bank (IDB) in Latin America)—would be a cost-effective way to increase local

expertise and ensure continuity of education and updated knowledge. There is also a need for greater attention to the policy-science interface. For effective progress, the same level of knowledge is needed in MoFs and IPs; figuratively speaking, the same language needs to be spoken at MoFs and IPs.

Training and capacity-building programs organized by IPs will be utilized to the maximum extent, coupled with the events organized by the Coalition. Additionally, the Coalition could organize specific training programs in core areas. The Coalition’s work on training and capacity-building can be effectively structured into three modules (taking into account the work of IPs and academia):

Module 1: Economic Policy and Finance

This module covers the core areas of economic policy and finance of the Helsinki Principles. The training is to be targeted to MoF officials to aid their understanding of the broad economic and financial context, climate-related risks and economic impacts, and the use of tools like economic forecasting, public financial management and green budgeting, carbon pricing, regulatory developments, green finance instruments, and greening of financial systems.

Module 2: Sectoral Aspects

This module takes into account the need for enhanced understanding of sectoral aspects of climate change and their interlinkages to economic and financial policies. These cover energy, transportation, food systems, land use, and construction, as well as biodiversity and trade policy links.

Module 3: Governance

This module covers potential institutional changes within MoFs that would enable climate mainstreaming—such as changes to administration, governance, and management practices—and the boosting of climate-related competencies and skills.

These key training and capacity-building modules are to be addressed via six modalities listed in Table 1.

Table 1. Modalities of Capacity-Building

Modality (1) New Training Courses or Programs	Modality (2) Sharing of Existing Training Courses or Programs	Modality (3) Workshops and Webinars
<p>Training programs could be established focusing on core areas of the Helsinki Principles targeted to MoF officials (and IPs) to improve the understanding of broad economic and financial tools, such as green budgeting, carbon pricing, taxonomies, and green bonds.</p>	<p>Joint efforts could be developed with IPs and Members to ensure the availability of relevant (existing or planned) training programs organized by IPs for Members, with due reciprocity.</p>	<p>IPs and leading experts could be invited to present and discuss relevant themes— involving policymakers of Members—with a view to developing common tools and practices. These events will benefit from the combination of academic work and research-based evidence and the experiences of policymakers in developing tools, and learning from IPs and Members with specialized skills and knowhow.</p>
Modality (4) Creation of Research Networks	Modality (5) Internships, Exchange Programs and Networks of Experts	Modality (6) Information Management - Member Portal
<p>Local universities and think tanks could be invited to join a research network supporting Member efforts towards climate mainstreaming.</p>	<p>The Coalition could act as a hub and focal point to facilitate co-operation bilaterally and collectively through the workstreams. Concrete support is envisaged for bilateral exchanges of experts and trainees among MOFs, administrations and tips to enhance know-how and mutual build-up of expertise.</p>	<p>Information could be curated, including management of relevant information, reports, and recordings in a self-learning section for Members and relevant materials that support mainstreaming and building up competencies.</p>

Key tools for MoFs include forecasting, impact assessment, and analysis, as well as planning tools for budgetary management and longer-term sustainability of public finances. Moreover, MoFs need to build a deeper understanding of risks, key developments, and mega-trends affecting the main areas of economic policy. The table below outlines the main curriculum regarding MoF’s climate aspects.

Table 2. Proposed Core Curriculum for Ministries of Finance Under Module 1

Theme	Learning Goals
Financial markets and instruments	Knowledge of finance tools and requirements for greening financial systems, as well as an understanding of transmission channels of climate change-related risks into the economy.
Macroeconomic analysis	Identifying the potential pathways through which climate change acts as a macro-critical risk for economic growth and shaping responses consistent with low-carbon and resilient development.
Fiscal policy	Designing fiscal incentives that encourage climate change mitigation and adaptation, including investments for the transition to clean energy and to increase resilience.
Budget planning and reporting	Identifying spending and execution rates of public investments that strengthen climate resilience.
Economic and financial appraisal	Ensuring that major capital spending programs are ‘climate-proofed’ at the investment stage.
Evaluation	Bringing a consideration of climate change impacts into the evaluation stage of public financial management.
Public procurement	Ensuring procurement systems factor in climate-related externalities in their costs and are responsive to climate change events over the procurement cycle.

Source: WRI

2.2.2 Mapping of Existing Training

Institutional Partners and Organizations

The starting point for designing the Coalition’s own training program is to avoid duplication. Many IPs, MoFs, and Members organize training for their staff as part of their mainstreaming efforts. Through this mapping exercise, and in cooperation with IPs, the Coalition aims to create new content to benefit Members via a virtual platform, which can be more flexible and effective than in-person trainings. In addition, many of the Coalition’s events already provide interactive training, especially the workshops and stakeholder dialogues.

There is much existing training in the areas of sustainable and climate financing, inclusive and green growth, carbon taxation, and emission trading systems. There are also courses on different policy instruments for green transition, including fiscal and industrial policies. Many of these courses are not designed specifically for MoFs, but include MoF employees as part of their target audience. A non-exhaustive list of training courses provided by IPs and other organizations can be found in Appendix A.

Box 17. Climate Training Alliance

The Climate Training Alliance (CTA) is coordinated under the COP26 agenda and is an open collaborative platform between the Bank for International Settlements, the International Association of Insurance Supervisors, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), and the UN-convened Sustainable Insurance Forum.

It aims to enhance the availability of training resources for authorities responding to climate risks. In doing so, it brings together authorities at the cutting-edge of climate risk management to share their experience and promulgate best practices with the rest of the central banking and supervisory community around the world, including Emerging Markets and Developing Economies (EMDEs), to support an equitable transition. It will help build capacity in central banks, improving the efficiency, effectiveness and accessibility of climate risk training and knowledge sharing for these institutions.

CTA has set up a dedicated online portal for global training on climate risks (physical risks and risks associated with the transition to net-zero) and climate scenario analysis for central banks and supervisors alike on topics including banking and insurance supervision, scenario analysis, monetary policy, and portfolio management. The concrete outputs of CTA are the training materials, which provide practical support for the authorities implementing the above approaches. This will be coupled with access to peer-to-peer training resources, including offering region-specific and cutting-edge training.

Academia and Universities

The Coalition's internal mapping exercise summarized the executive training courses offered on climate economics by academic institutions. A non-exhaustive list of training courses provided by universities can be found in Appendix B. Most providers are offering courses around the themes of sustainable finance, climate-related financial risks, energy policy and taxation. These courses are geared towards a wide audience consisting of professionals working in financial institutions, practitioners and leaders from government, academia, NGOs and the private sector.

Despite the quality and wealth of training material available for Members, gaps still exist, and materials need to be tailored to MoFs to enhance effectiveness. In addition, the majority of courses offered are designed and offered in advanced countries. Therefore, to ensure the consistency and deepening of training activities, more collaboration between academia and MoFs, including in EMDEs, could deliver large benefits to countries across the board.

3) Findings and Recommendations

3.1 Actions by MoFs

MoFs play a central role in developing economic and financial policies that shape incentives. For this reason, MoFs need tools and embedded capacity to guide markets towards the green transition. Mainstreaming climate change and biodiversity loss considerations into concrete economic and financial policies requires proactively embedding them into the work of MoFs. Examples of successful MoF transformations in this regard already exist, but experiences also indicate that multiple challenges must be overcome. The Coalition provides a forum where Members can learn from the experiences of others on this shared journey. MoFs could advance the climate mainstreaming agenda by considering some of the following actions:

1. Raise Awareness

- Raise awareness of climate change and biodiversity issues inside the MoF through educating and training internal teams and units, and exploring the use of new climate-related policies and tools. Since climate change science and assessments of economic impacts are constantly changing, the need for awareness-raising is continuous.
- Inform MoF experts working on the climate agenda about the opportunities provided by the Coalition and engage with them in their ongoing work.

2. Invest in Expertise, Capacity-Building, and Research Networks

- Build institutional capacities by partnering with IPs and local universities to boost expertise and broaden skillsets within MoFs on the climate agenda.
- Take account of climate mainstreaming in MoF strategies and resource planning to develop in-house expertise on critical areas of economic policies adequately covering climate concerns.
- Utilize existing networks and the advisory roles of the research community and IPs at the national and global levels through relevant research partners and the Coalition's work on mainstreaming.

3. Ensure an Appropriate Institutional Framework, Strategies, and Practices

- As part of a 'whole-of-government' approach, build a strong institutional basis for MoFs engagement in climate work, for example by stating the MoF's role in relevant formal documentation, and having procedures, and even legislation (such as a climate law) in place. Legislative positioning can be important to enable structural changes and timely action.
- Include climate and environmental considerations in MoF strategies and annual planning.
- Take initiative to enhance the role of research to support economic policy design, such as ensuring that research institutes and universities have sufficient resources and mandates to support MoFs.
- Ensure the commitment of political leaders and civil servants, including high- and mid-level management, on mainstreaming the climate agenda.
- Support practices that bring economic and financial perspectives into governments' climate work with long-term strategies and NDCs—national roadmaps provide a good starting point for promoting growth and development objectives on the climate agenda.

3.2 Role of the Coalition

The Coalition can support Members by reflecting their needs in the HP2 annual work programme and facilitating future research and discourse on identified priorities. Additionally, the Coalition can also act as an active platform for discussion and knowledge sharing, thereby helping Members in the following ways:

1. **Enabling the sharing of experiences and best practices** on mainstreaming key areas related to strategies, governance, resources, capacity-building, research, and frameworks.
2. **Facilitating capacity-building** through the support of IPs by: a) building on existing programs and practices under the various Helsinki Principle workstreams and identified country needs, and b) supporting the availability of technical assistance in tandem with development partners.
3. **Organizing training courses** in collaboration with IPs on identified priority areas through a broad set of training modules, building on what is already available.
4. **Enhancing cooperation with IPs** by actively encouraging deeper collaboration between IPs and Members in developing climate-related expertise.
5. **Supporting expertise of officials** by designing skill sharing activities (such as secondment/intern programs, bilaterally and with IPs), and engaging new MoF officials in Helsinki Principle workstreams at an early stage and facilitating their networking with leading experts.
6. **Promoting joint research projects** between Member countries and IPs to support an evidence-based approach to climate policy and elicit the proactive involvement of research community.
7. **Supporting networks of research institutions** to ensure that existing knowledge and evidence-based research is utilized, and that new research projects can support Member priorities.
8. **Identifying best practices in utilizing research in economic policy making** by organizing deep dives for shared learning opportunities based on survey outcomes on how countries and organizations utilize research. This could help in enabling research partnerships.
9. **Tailoring Coalition work to Members' needs** by putting Member priorities front and center in annual work programme planning.
10. **Building political awareness** by ensuring that Ministers and senior officials are informed about the challenges and progress being made on mainstreaming.

Appendix A:

Training Courses Provided by IPs and Other Organizations

Provider	Course Title	Audience
<i>Frankfurt School & UNEP</i>	The Climate & Sustainable Energy Finance Academy	International public and private sector practitioners.
<i>GIZ & NAP-GSP</i>	Climate Finance Training for Sector Experts – CliFit4SE	Sector experts who have an interest in exploring climate finance options. This may include: sector experts in ministries for the environment, finance and planning, and relevant line ministries; representatives of public and private entities engaging in supplying public goods; private sector entities, donors, implementing entities, and other governmental and non-governmental bodies interested in climate finance.
<i>IDB</i>	National Adaptation Plan (NAP) Process Country-Level Training	Includes decision makers and politicians responsible for the overall launch and steering of the NAP process; experts and officials involved in sector planning, including planning, finance, environment, infrastructure development, economic development, agriculture, meteorology and many others; NGOs and stakeholder groups involved in the NAP process; and technical experts from government entities in charge of capacity development of administrative staff.
<i>IDB</i>	INDES Program: Water and Climate Change	Professionals in the public, private, and/or academic sector with professional, practical, or research experience in at least one of the topics offered within the program's courses.
<i>IMF</i>	Online Course on Inclusive Growth (IGx)	Mid- to senior-level officials involved in economic and strategic planning; monitoring and evaluating policy strategies for reducing poverty and inequality; and promoting job creation.
<i>NDC Partnership</i>	In-country Engagement	Not specified
<i>Sitra</i>	Leadership Training for Sustainable Economic Policy	Decision makers from different segments of society.
<i>UN CC: Learn</i>	Green Fiscal Policy	Interested participants from government, business and civil society.
<i>UN CC: Learn</i>	Green Industrial Policy: Promoting Competitiveness	1. Training institutions and universities, e.g. entities educating the current and next generation of

	and Structural Transformation	decision makers in the public and private sectors; 2. policymakers and planners; e.g. those working on the design, implementation and/or evaluation of contemporary industrial policy; and 3. civil society, e.g. non-governmental organizations, advocacy groups and industrial associations.
<i>UN CC:Learn</i>	Fundamentals on REDD+ e-course	REDD+ decision makers in economic and policy areas, in sectors such as agriculture, energy, mining, finance, and development planning. Other REDD+ stakeholders, such as civil society and academia, will also find useful information in the two courses.
<i>UN CC:Learn</i>	Carbon taxation	Not specified
<i>UN CC:Learn</i>	Indicators for inclusive green economy	Not specified
<i>UN CC:Learn</i>	Climate Policy and Public Finance	Not specified
<i>UN CC:Learn & EU4Environment</i>	Enabling a Green Transition in Eastern Partnership Countries	Mid- and senior-level civil servants of the EU's Eastern Partnership countries who are directly involved in the process of developing, implementing, and evaluating policies supporting the transition towards a greener and more circular economy. The list of nominated participants is compiled upon recommendation from the Ministries of Environment and Economy in each of the six EU4Environment countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine).
<i>World Bank</i>	Emission's Trading Systems: Using Markets to Promote Low Emissions Development	Not specified
<i>World Bank</i>	Policy Instruments for Low Emissions Development: from Design to Implementation	Not specified
<i>World Bank</i>	E-Course on Carbon Taxation	Not specified
<i>World Resources Institute</i>	New Climate Economy.net	Ministries of Finance, Planning and Environment in Indonesia, India, Brazil, Colombia, Ethiopia, and the US. Through rigorous modelling, analysis, and capacity-building, NCE builds the evidence base to demonstrate that climate action is both complementary to and essential for economic development.

Appendix B:

Training Courses Provided by Universities

Provider	Course Title	Audience
<i>University of Oxford</i>	Sustainable Finance Foundation Course	For professionals working in a range of sectors, for example: executives working in financial institutions that need to understand how sustainability, the environment, and climate change relates to finance and investment; civil servants, regulators, and central bankers working to develop policies that can foster the development of sustainable finance; staff at environmental NGOs who would like to help the global financial system create better environmental outcomes; philanthropic funders looking to navigate sustainable finance topics so as to support the most impactful activities; and trustees and company directors that want to understand how sustainable finance relates to their fiduciary duties.
<i>University of Oxford</i>	Climate-related Financial Risk Course	Risk officers in financial institutions, analysts and portfolio managers, corporate risk managers and strategists, financial regulators supervising or considering how to supervise firms in relation to climate-related risk, government officials integrating climate-related risk into government decision making and policy, and NGOs working on climate-related financial risks.
<i>Harvard Kennedy School</i>	Climate Change Policy: Economics and Politics	Managers, analysts, and leaders from government, corporations, and non-governmental organizations.
<i>Harvard Kennedy School</i>	Climate Change and Energy: Policymaking for the Long Term	Policymakers and corporate leaders.
<i>Harvard Kennedy School</i>	Comparative Tax Policy and Administration	High-level practitioners from government, academia, and the private sector.
<i>Cambridge Institute for Sustainability Leadership</i>	Sustainability Practitioner Programme	Mid- to senior-level managers in organizations from the private or public sector.
<i>Cambridge Institute for Sustainability Leadership</i>	Sustainable Finance online short course	Mid- to senior-level managers in organizations from the private or public sectors, as well as professionals in the finance sector, and others interested in harnessing sustainable finance

		initiatives to bring about positive change.
<i>Yale Center for Business and the Environment</i>	Financing and Deploying Clean Energy Certificate Program	Working professionals who are passionate about clean energy and want to advance their careers by gaining new skills in finance, technology, and policy, and the mitigation of climate change.
<i>Lomonosov Moscow State University Faculty (School) of Public Administration (SPA)</i>	SPA Executive Education Program on Environmental Assessment	Not specified