



Application Form

PCCC-JICA Mentoring Service for the Public and Private Collaboration for Climate-Resilient Pacific

Note for applicants
<ul style="list-style-type: none"> Applicants must include information about a project under development by filling each item on the application form. The total number of pages for the application should be minimum 5 pages and maximum 10 pages (excluding supplemental materials). An application for the Mentoring Service must be sent to the PCCC-ISPPCC (agnesw.ext@sprep.org and taiji.ext@sprep.org) by 06 August 2025.

1. Information of applicant

Date of submission	04/08/2025
Country	Papua New Guinea
Organization	Macxs Designers
Department/ Division	
Name of contact person	Paul Mwapua
Position in organization	Director/Owner
Contact information	E-mail: mailto:gregorymwapua@gmail.com Phone: (675) 7909 3445, (675) 7750 4138
PCCC training programs or capacity building programs which you attended	<input type="checkbox"/> Climate Science – Observed Climate Change and Future Climate Projections (Sep 2020) <input type="checkbox"/> Understanding Access to Climate Finance, Part 1: Essential Aspects for Access to Climate Finance (Nov 2020) <input type="checkbox"/> Understanding Access to Climate Finance, Part 2: Gender, Social Inclusion and Safeguards (Nov – Dec 2020) <input type="checkbox"/> Climate Change Adaptation and Disaster Risk Reduction through Structural Approaches (Mar 2021) <input type="checkbox"/> Ecosystem-Based Adaptation and Mitigation (Jun – Jul 2021) <input type="checkbox"/> Climate Resilience and Food Production Systems – Agriculture and Coastal Fisheries (Sep – Oct 2021) <input type="checkbox"/> Enhancing Climate Resilience in Tourism in The Pacific (Jan – Feb 2022) <input type="checkbox"/> Enhancing Climate Resilience and Safe Water Access in Rural Areas in the Pacific (May 2022) <input type="checkbox"/> Health Systems and Climate Change: Enhancing Resilient and Low-carbon Development in the Pacific (Sep – Oct 2022) <input type="checkbox"/> Climate change impacts and innovative solutions in the Pacific (Sep 2024) <input checked="" type="checkbox"/> Others (please specify the name of the PCCC training course or capacity building program) Climate Resilience for Business Sustainability – UN in collaboration with University of South Pacific (2023)

2. Information of a project under development

1. Project Title	Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products.
2. Themes	<input checked="" type="checkbox"/> Energy <input type="checkbox"/> Agriculture and fishery <input type="checkbox"/> Tourism <input type="checkbox"/> Water <input type="checkbox"/> Urban resilience
3. Country(ies)	Papua New Guinea & Pacific
4. Project objectives and project components	<p>Research Phase – 1 Survey</p> <ol style="list-style-type: none"> 1) Identify all Combustible Oil & Gas and Lubrication Oil products within the Market, document and create Product Profile and Register Detail Data. 2) Identify and register all Importers, wholesalers, retailers, resellers or dealership of all Combustible Oil & Gas and Lubrication Oil Products within Papua New Guinea and Pacific. 3) Identify and Register all Services Stations, Workshops and Auto Parts outlets doing vehicle services, for all Planes - Maintenance Hangers and Plane Service Workshops, Generator Maintenance Firms/Companies or Heavy Equipment Workshops heavy equipment operators/companies, Mining Equipments/Companies, Shipyard or Ships Operators and Boats and Small Craft Operators. Power Plant Operators and register all Vehicles, plants & Equipments, All Ships and small Craft and Planes. 4) Identify other combustion (<i>Wood Burning Fermentry/Wood Burning Klin Dryers/Rubbish Dump Sites</i>) plant/equipment/facility that contribute to carbon release through combustion. <p>Research Phase 2 Cataloging</p> <ol style="list-style-type: none"> 1) Review and catalogue all plant, equipment, vehicles, planes, ships, boats etc which uses/consumes Fuel Oil, Gas and Lubrication Oil nationwide. 2) Catalogue above item 1 to match fuel/Gas type emission rating and type of Lubrication & Volume for each Unit type/model. 3) Calculate Emissions for each of the above including deterioration cycle and its adjusted emissions. <p>Policy Formulation Phase 3</p> <ol style="list-style-type: none"> 1) Nationwide Consultation Dialogue with National Energy Authority, Dept. Of Petroleum, Climate Change Development Authority, Chamber of Commerce & Trade regarding the formulation of Policy - Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products. 2) Nationwide Stakeholder Consultation and Awareness to inform Suppliers, Operators and Users on the Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products.

- 3) Nationwide Consultation with Stakeholder Regulators (MVIL, Registered Vehicle Safety Inspection, NMSA (National Maritime Safety Authority) Dept. Of Transport and Civil Aviation, Mineral Resource Authority).
- 4) Formulate Draft Policy for Submission and Submit for Approval with conditions for further review and amendments.

Regulation & Implementation Plan Phase 4

- 1) Dialogue with SPREP, CCDA and relevant Climate Change Bodies/Agencies regarding the rates and charges to be passed for Carbon Emission Tax as per Policy and who's responsible for collecting, managing and administering the Tax monies collected, its breakup, uses etc. and the process and its mechanism.
- 2) Identify and Formulate Roles & Duties and Regulatory Jurisdiction for each enforcement Agencies for Implement.
- 3) Development of Draft National Regulation and Implementation Plan for Carbon Emission Tax Regulation and obtain approval with conditions for review.
- 4) National/Regional Information Awareness to inform the Public on the:
 - a) Effective Date of the Carbon Emission Tax Collection Regulation Enforcement
 - b) Enforcement Agencies (MVIL, National Road Safety Authority, Traffic, etc)
 - c) Effective Date for Waste Oil & Lubrication Disposal Charges Regulation Charges and Management.
 - d) Violations and the Penalties for improper Waste Oil & Lubrication Disposal.
 - e) Violation and the Penalties for Carbon Fuel Tax negligence.
- 5) Identify and formulate regulations or MoU National Energy Authority and Department of Petroleum for data sharing/collection from All Importers Reporting Annual Hydrocarbon imports for Accountability.
- 6) Identify and formulate regulations or MoU with National Energy Authority and Department of Petroleum for data sharing/collection from All Exporters and Processing Plants to Report Annual Hydrocarbon Exports including waste combusted during production for Accountability.

Implementation Phase 5

- 1) National/Regional Implementation:
 - a) Implementation of Carbon Emission Tax collection from Vehicle Registration alongside Vehicle Safety Sticker, Similarly for Vessels and Aircrafts through NMSA and Civil Aviation.
 - b) Implementation of Waste Oil and Lubrication Collection/Collection Points and fines.
 - c) Implementation of Fuel Oil Tax for Fuel Outlets and Retailers or Bulk fuel importers to implement charging to end users
 - d) Implement Money Collection schedules and Administration & Management.
 - e) Implement Roads Safety Checks alongside National Roads Safety Authority and Traffic, coordinate inspections for other setup including Plant/equipment/power station/vessels/aircraft, etc.
 - f) Establishment of funds usage mechanism (National/Regional Climate Change Project Fund)

5. Alignment with national and sectoral policies and strategies

- 1) PNG - MTDP IV _ SPA 01 DIP 1.2.2 Petroleum – [PNG FA Policy & Development Plan and Climate Change Policy](#)
 - a) Strategy 5 - Promote REDD+ Program in compliance to the climate change initiatives of the country
- 2) PNG - MTDP IV _ SPA 01 DIP 1.4 Forestry – [PNG FA Policy & Development Plan and Climate Change Policy](#)
 - b) Strategy 5 - Promote REDD+ Program in compliance to the climate change initiatives of the country
- 3) PNG – MTDP IV _ SPA 01 DIP 1.8 Trade & Investment – [National Trade Policy 2017-2032](#)
 - a) Strategy 3 - Support and encourage large-scale investment in renewable sectors.
- 4) PNG MTDP IV _ SPA 10 DIP 10.1 Climate Change Mitigation & Adaptation - [PNG Enhanced National Determined Contribution 2020-2030 and Reducing Emission from Deforestation and Degradation \(REDD+\) 2017-2027.](#)
 - a) Strategy 1 – (Mitigation) - Improved Reporting and Monitoring of CO2 emission.
 - b) Strategy 2 (Mitigation) - Effective framework mechanisms for climate governance, monitoring and reporting.
 - c) Strategy 5 (Adaptation) - Establish an effective Carbon Trade Regulation.
 - d) Strategy 6 (Adaptation) - Promote Climate Change Resilient Infrastructure.
 - e) Strategy 8 (Adaptation) - Mainstream climate change and environment education.
- 5) PNG MTDP IV _ SPA 10 DIP 10.2 Environmental Protection - [Climate Change and Environment Act](#)
 - a) Strategy 2 - Utilise innovative methods used for waste management.
 - b) Strategy 3 - Develop payment of ecosystem services guidelines.
 - c) Strategy 5 - Promotion of environment and biodiversity rehabilitation.
- 6) PNG MTDP IV – SPA 12 DIP 12.1 Foreign Relations - [DFAIT Corporate Plan](#)
 - a) Strategy 3 - Strengthen key strategic partnerships with regional organisations including PIF, ASEAN, ACP-EU and others to enhance trade and economic relations
- 7) PNG MTDP IV – SPA 12 DIP 12.2 Development & Economic Partnership - [PNG Development Cooperation Policy \(PNG DCP\).](#)
 - a) Strategy 5 - Ensure Development Partner programs are aligned to the development priorities of government.
 - b) Strategy 6 - Ensure government leadership in the coordination and management of development partner program.
 - c) Strategy 7 - Increase mobilisation of DP resources towards economic enabling infrastructure.
 - d) Strategy 8 - Increase mobilisation and allocation of DP resources towards activities focusing on trade and investment.
 - e) Strategy 10 - Mobilise private sector resources towards energy infrastructure and development.

- f) Strategy 11 - Strengthen relationship and coordination with all development partners.
- g) Strategy 12 - Strengthen relationship and coordination with NGOs, civil society, philanthropic organisations.
- h) Strategy 14 - Ensure counterpart funding is allocated to loan financed programs.

8) PNG MTDP IV – SPA 12 DIP 12.3 Private Sector - [PNG Development Cooperation Policy \(PNG DCP\)](#).

- a) Strategy 15 - Create awareness on the Public Private Partnership modality.
- b) Strategy 17 - Undertake reforms to create a conducive environment for private sector to operate.
- c) Strategy 18 - Dialogue with the private sector on an annual basis consistent with DCP.

6. Justification of climate rationale (mitigation and/ or adaptation)

The Project – Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products is to regulate Waste Oil and Lubrication Oil Disposal and collect Carbon Emission Tax from All Motor Engines & Equipments/Facilities that emits carbon into the atmosphere/environment. The Projects Goal is to setup a mechanism that regulates all forms of carbon emissions and collect carbon emission fees from the responsible emitters.

Adaptation

- a) The Project will ensure hydrocarbon end-users emitting Carbon Dioxide and other forms of Carbon Emissions to responsible pay their Carbon Emission Tax.
- b) The Project will enable end-users to innovate sustainable ways to reduce carbon waste and sustainably Operate.

Mitigation

- a) Implementation of the Project will mitigate Environmental Protection in terms Waste Oil & Lubrication regulated Collection and Disposal.
- b) Implementation of the Project will ensure End-users to maintain their Vehicle engines or other motor engines to proper/acceptable emissions standards.
- c) Implementation of the Project will subsidies reforestation projects or forest protection from deforestation.
- d) Contribute towards other Climate Change Projects from the National Climate Funds managed and Administered through its policy.

7. Draft theory of change [OPTIONAL]

Charging Carbon Emission Tax to End-users shall mitigate “*pay for your carbon pollution*” thus mitigate responsibility amongst end-users, on the other hand plays a vital role in compensating with financing Climate Change Projects (recharging projects, revitalizing Projects or other vital mainstream Climate Change projects that will balance Carbon/Oxygen production or vital mitigation and adaptation strategies. It will also facilitate adaptation of the policy implementation and enforcement Nationally and thus Adaptation if Policy Implementation throughout the Pacific.

8. Describe how the project promotes collaboration between public and private sector, and describe the name of the private company/ state-owned enterprise or another private sector actor that are/ can be involved in project financing or implementation.

PCCC

- 1) SPREP through the PCCC shall assist with the project through/with:
 - a) Mentorship support and advice.
 - b) Monitoring & Evaluation _Overall Project Proposal Progress until submission.
 - c) Facilitate Project implementation within other Pacific Island Producing Countries (Carbon Emission Tax Policy).
 - d) Facilitate/Solicit Climate funding for the Project.
- 2) JICA through the PCCC shall assist with the project through/with:
 - a) Mentorship Support and Technical Advice.
 - b) Monitor & Evaluation on the Project Proposal progress until submission.
 - c) Assist facilitate project implementation through PCCC and SPREP to other Pacific Island Countries Carbon Emission Tax Implementation Projects/programs.
 - d) Assist Facilitate or Solicit Climate Funding for the Project.
 - e) Provide mentorship advice in connecting with other private sector business for implementation.

Public Sector

- 1) Government Ministry/Department (National Energy Authority, Dept. of Petroleum, CCDA) – Will be Administering the Policy & Regulations and Counter Funding relating to the implementation of the Project;
 - a) Project/program Policy Development Collaboration with Macxs,
 - b) Allocate funding through MTDP IV for Project/Program Implementation.
 - c) Solicit GoPNG funding to implement project under Sectoral Programs – Sectoral Budget Formulation inclusion.
- 2) State Owner Enterprises/Bodies (MVIL, National Road Safety Authority, Traffic, NMSA) will be;
 - a) Monitoring and Regulating the Implementation of New Policy - Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products.
 - b) Introducing, Maintaining and Enforcing Pricing & Regulation - Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products.
 - c) Introducing & Issuing Carbon Emission Tax Compliance Certification/Stickers to End-users,
 - d) Coordinating Regular Inspections and Monitoring and Maintaining Carbon Emission Tax Compliance.
 - e) Coordinating Testing upon renewal of Carbon Emission Tax Compliance Certificates/Stickers.

Private Sector – Macxs Designers

- 1) Formulate & Develop Policies to be approved by the Government;
 - a) Waste & Lubrication Oil Tax – Waste Oil Collection & Disposable Tax
 - b) Fuel Oil Carbon Emission Tax – Carbon Emission Tax.
- 2) Formulate & Develop Implementation Plans and Regulation to be approved by the Government;
 - c) Waste & Lubrication Oil Tax – Waste Oil Collection & Disposable Tax

<p>d) Fuel Oil Carbon Emission Tax – Carbon Emission Tax.</p> <p>3) Develop the Compliance Certification and Monitoring Process.</p> <p>4) Develop the Inspections & Testing and Monitoring Process.</p> <p>5) Provide Awareness and Information to Public/End-users.</p> <p>6) Provide Training and Manuals for the Regulatory Authority Staffs/Employees.</p> <p>7) Provide Supervision and Monitoring for the transition.</p> <p>8) Develop and Establish and Waste Oil Collection and Storage Facilities.</p> <p>9) Review Policy and Implementation Plan.</p>
<p>Private Sector – Bulk Importer & Exporters, Producers and their Distributors/Resellers</p> <p>1) ExxonMobil, Puma Energy, Oil Search, Total Energy, Islands Petroleum, Origin Energy, BOC and their Resellers or Retailers will enforce new pricing adjustment to all Fuel Oil/Oil Products and remit the Tax to the authority.</p> <p>Private Sector – Services Stations and Workshops</p> <p>1) All services stations and workshops will implement Waste Oil & Lubrication Oil Regulation to all their serviced Vehicles/Plants. Aircraft, Vessels and Powerplants shall do similar.</p>
<p>9. History of stakeholder consultation and communication with the relevant ministries including climate change focal point agency</p>
<p>Talks with National Energy Authority has begun and CCDA is coming on board from NEA correspondence.</p> <p>We have Advised and provided Technical assistance on some projects including BRCC and REDD+, IEIP (National Rural Electrification Roll-out Program) TEIP (Town Electrification/Energy Improvement Project) with Design, Planning and Implementation.</p>
<p>10. Targeted climate financial sources if any (e.g. GCF, Adaptation Fund, bilateral donors, multilateral development banks)</p>
<p>1) GCF – Policy and Regulation Component.</p> <p>2) AF – Counter Fund _ Implementation.</p>
<p>11. Human or financial support currently receiving for project formulation and implementation</p>
<p>Nil</p>
<p>12. Description of institutional set-up for project formation</p>
<p>Phase 1a) MACXS has Policy Formulation and Research 4x consultants/specialists to undertake and develop policy for the project including facilitation and implementation Research, Project Awareness alongside relevant agencies (National Energy Authority, Dept. of Petroleum, CCDA) Policy consultation with relevant agency for approval and instrumenting an MoU/TOR and</p>

MoA/Agreement with relevant Agencies for Macxs to undertake the Project - *Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products*. JICA and SPREP will be partners of the MOU/MOA shall be mentoring, advising and overseeing policy formulation alongside National/Regional or International Agencies in compliance with existing Climate Changes Policy Regulations & Guidelines.

Phase 1b) MACXS will coordinate awareness to all stakeholders before carrying out consultation, Macxs has the capacity and the resources to coordinate research – Survey, Information Gathering & Data Collection and Cataloging. Macxs Designers will engage JASP Impact Consultancy & ASAPH Realty (*sister companies*) for additional Capacity support to ease workload and meet timeframes and deadline.

Phase 2a) With the Research Data on hand, Macxs will consult with relevant agencies and consult relevant policies while developing the new policy - *Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products*. Drafts will be presented to relevant Authorities for approval before passing it through Parliament for Gazette.

Phase 2b) With the Draft Policy on hand, Macxs will consult with relevant agencies and develop Implementation Plan for - *Carbon Emission Tax Policy for All Combustion Oil & Gas and Lubrication Oils Products*.

- a) Waste oil and Lubrication Regulations
- b) Motor Fuel Oil Emission Tax Regulation

Drafts will be presented to relevant Authorities for approval before passing it through Parliament for Gazette.

Phase 3) MACXS alongside relevant National Agencies will provide Training & Induction, awareness to relevant Implementing Agencies for inclusion part of their roles and responsibilities to implement:

- a) Waste oil and Lubrication Regulations
- b) Motor Fuel Oil Emission Tax Regulation

As part of their permanent annual implementation programs. Macxs will assist with supervision and guidance for smooth operation for the new regulations' implementation.

Phase 4) MACXS with relevant Agencies, JICA and SPREP will Review all Policies with stakeholder consultation on a five (5) year term.

13. Expected schedule for project formulation and implementation

Phase 1a) – 3-6 months per Country
Phase 1b) – 6-8 months
Phase 2b) – 6-8 months
Phase 3) – 12 months
Phase 4) – 1 month (Review term)

14. References for existing feasibility studies, and projects/experience on which the proposal is based, etc.

The Proposal is based on urgency due to unavailability of relevant policies and regulations managing and administering Carbon Waste Emission Regulation Management within Papua New Guinea and Pacific which results:

- 1) Waste Engine Oil & Waste Lubrication Oil disposed/discharges unsafely into the environment without consequences users.
- 2) Fuel Oil End-Users are not paying for the Carbon Emission they are producing daily from the use of the plants/equipment/vehicles/vessels/aircrafts/others.
- 3) In the Our Proposal being put forward for MACXS to facilitate the Policy & Regulation for Carbon Emission Tax and Waste Oil/Lubrication Oil Tax to be collected from End-users responsible.

Our fact finding has come to realize that we ourselves in the Pacific are also contributing towards carbon emission through the above item 1 & 2 without considering the consequences due to lack of the proposed Policy & Regulations, and that its impact contributes towards Climate Change Disaster in the pacific.

In Papua New Guinea, the impact is obscure due to the fact that we have huge forest lands that absorbs the Carbon Emission produces by ourselves, but the impact will be devastating soon as the forestry's ongoing logging and deforestation operation continues, it's also a fact that the government needs money from forestry for its services delivery whilst logging is unlikely to stop within the country and will lead us to disaster.

The Proposed Policy will Mitigate this by:

- 1) Substituting Forestry Income by collecting Carbon Emission Tax.
- 2) Carbon Emission Tax shall finance and will facilitate reforestation & afforestation projects to reforest impacted lands and fund other climate impacted projects.
- 3) Safely collecting and discharging waste oil and lubricant oil from the end-users.
- 4) Ensuring all vehicles (land, sea & air) are maintained and serviced to standard operation before used in public roads, waters, air.

Implementation of the Policy will Facilitate formulation of a Pacific Islands Countries Climate Fund which can be accessed by all pacific Islands country locally for local Climate Change Projects when implemented throughout the pacific region or nationally if each country wants to manage its own funds nationally.

15. Other related projects being implemented, under formulation, or under the approval process, if any.

- 1) **Solar Induction Dryer** – [Under Formulation through this initiative \(Submitted\)](#)
- 2) **Magnetic Motor Generator** – Under this Initiative, Macxs would like to develop the technology with a developed country, from connection established from this mentorship under JICA and PCCC & SPREP to use its existing manufacturing infrastructure &



technologies to develop the Magnetic Motor Generator Technology and bring it out to the market.