

Refining Country Readiness towards NDC Implementation

JICA's empirical perspective to consolidate domestic
preparations for NDC planning and readiness

Hiroshi Enomoto

Senior Assistant Director,
Global Environmental Department, JICA

Koji Fukuda

Chief Technical Advisor,
JICA SPI-NAMA Project

Key Messages

- There are observed common enablers for building NDC readiness, and fulfilling them will effectively facilitate the country's smooth transition towards implementation.
- Climate mainstreaming remains crucial to anchor NDC into the national developmental priority agenda while connecting it with the responsibilities of stakeholders and national budget appropriation.
- Genuine engagement of sectoral stakeholders for NDC implementation depends on how well they could nurture and embrace the perception that NDCs are an effective avenue to achieve the sectoral development goal.
- Strategizing resource mobilization is the key to ensure financial sustainability, including country efforts to prioritize the allocation of resources and diversification of the resource base.
- Scientific scenario analysis is one of the most powerful tools to demonstrate the paths to achieve the NDC target. Establishing a science and policy nexus is critical to form an evidence-based NDC.

1. Background

The successful entry into force of the Paris Agreement on 4 November, 2016 has set the next few years until 2020 as the critical transitional period for all Parties to the post-2020 climate regime. Following the current global momentum, the domestic preparatory processes to translate paper-based pledges of country NDCs into an action-based, robust plan for implementation are duly anticipated by all Parties to the UNFCCC.

NDCs, however, constitute a new agenda for all countries, and there is an observed appetite, especially among developing country Parties, to absorb as much early country efforts, expertise and lessons as possible to refine the country approach to the domestic NDC readiness process towards implementation.

Against this backdrop, this Brief aims to provide operational insights into how country readiness for NDC can be best pursued to enable successful transition to the Paris regime; drawing on the experiences and lessons of the selected climate support of Japan International Cooperation Agency (JICA); focusing particularly on Southeast Asia.

The Asian region was selected for this Brief for its high mitigation potential¹ and vulnerability to the adverse impacts of climate change, as exemplified by tropical cyclones and drought which impact the local economy and livelihoods (World Bank 2011, IPCC 2014), making it a good illustration of the holistic approach required to design and implement country NDCs.

2. Enablers to Drive NDC Readiness

A previous study suggests that top key capacity development needs expressed by developing countries for NDC implementation include, inter alia, (1) resource mobilization, (2) implementation plan development, (3) an information base and monitoring system and (4) institutional infrastructure and coordination mechanism (UNDP 2016).

Those identified priority needs clearly suggest that unlike the emerging concept of NDCs, fundamental challenges associated with NDCs evolve little from those recurrently expressed in the past for climate support. Such universality of support needs matches JICA's observation based on ongoing and previous climate support experiences. It is inferred that there are common "enablers" to address fundamental challenges, and in transition to the implementation phase of NDCs from initial planning phase, fulfilling those enablers is an effective approach to meet the identified needs for NDCs and helps refine overall NDC readiness.

Figure 1 shows common enablers (mainstreaming NDC, institutional infrastructure and coordination, resource mobilization, and integration of science) and components of these enablers observed by JICA project implementation.

This Brief explores along these enablers and components as the driving force of NDC readiness; mainly based on JICA's experiences and lessons learned.

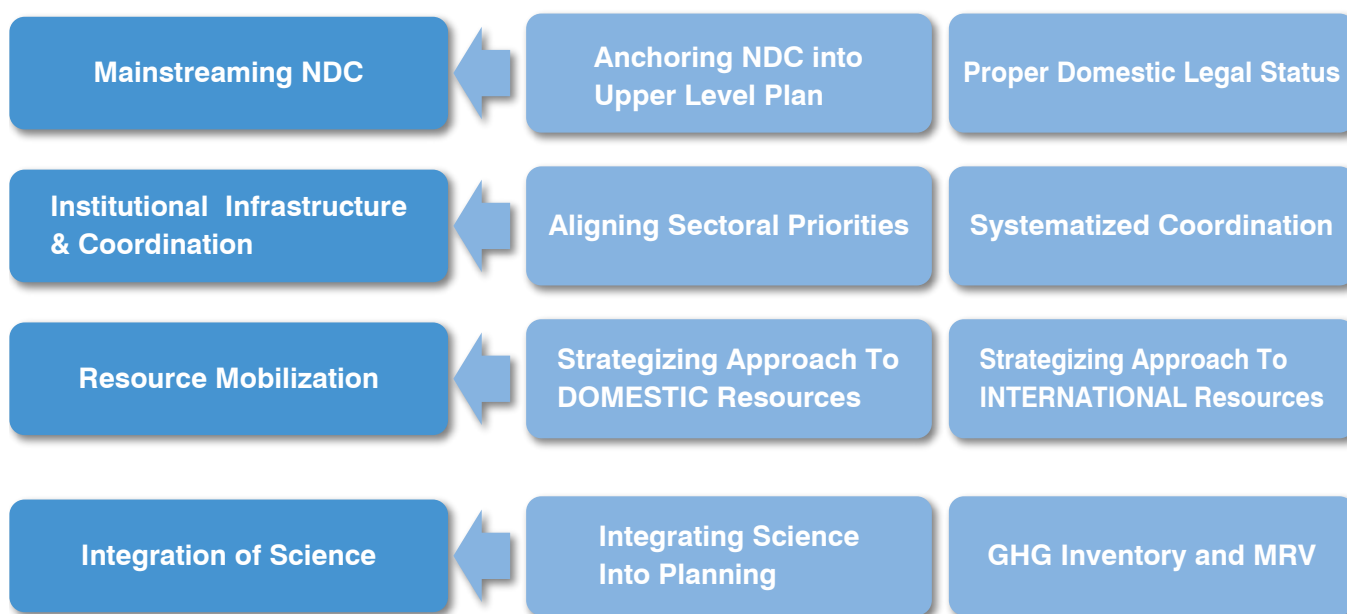


Figure1. Common Enablers for NDC Readiness identified by JICA's experiences

¹ Asia as a region represents the second largest CO₂ emission (excluding China) from energy combustion (IEA 2016)

2.1 Mainstreaming NDC

2.1.1 Mainstreaming NDC into National and Sub-national Socioeconomic Development Plan

Climate mainstreaming remains an essential domestic process to properly recognize and anchor the envisaged climate actions expressed in NDCs into the country's developmental priority agenda, and connecting actions with national budget appropriation. Acquiring such a national status is indispensable to ensure NDC sustainability, and to avoid the risk of leaving NDC as a stand-alone document recognized only by the climate circle. Given the observed evolution of the developing country's scope setting for NDCs to adopt an economy-wide target rather than a list of sector-based actions, mainstreaming is also a critical approach to encourage acceptance by a wider range of stakeholders.

Technical assistance for Indonesia² epitomizes JICA's support for this domain, where mainstreaming climate components into both the National Development Plan and National Spatial Planning was supported by delivering 'The Strategy for Mainstreaming Adaptation into National Development Planning' and 14 sectoral background studies to formulate RPJMN (Medium Term National Development Plan 2015-2019).

2.1.2 Giving NDC a proper domestic legal status

Anchoring NDC into the domestic legal framework in the most durable form is yet another critical milestone to consolidate the "status" of NDC – it connects the pledged contents of NDC with the mandates of domestic stakeholders, particularly those overseeing sectors/sub-sectors. Meaningful engagement for various stages of NDC planning and implementation can only be achieved when domestic stakeholders properly recognize NDC as part of their responsibilities and are fully committed to delivering the contents as pledged.

This legalization process is particularly important at this critical juncture to the Paris regime. Previously, international pledges made by countries were often disconnected from domestic discourse, since they lacked legal status or a sufficient binding effect. Robust legal grounds and a monitoring framework may not have been necessary in the pre-2020 climate regime, where actions by developing country parties were driven by the principle of voluntary efforts. However, as the Paris regime anticipates the steady implementation of NDCs, a corresponding domestic legal status must be properly established.

Such a process also helps address the risk of overrating the numerical pledge expressed in NDC per se, despite the lack of

evidence of how to achieve it. Legalization also helps close the appetite gap among domestic players, e.g. between those at the sharp edge of climate change and the relevant agencies.

Efforts to anchor NDC into the domestic legal system are already evident – for instance, Viet Nam is in the process of formulating its Government Decree on the Roadmap for GHG Emission Reduction to connect the contents of NDC with the responsibilities of stakeholders.

In Indonesia's case, the National Action Plan for GHG Emission Reduction (RAD-GRK), reflecting the mitigation target of NAMAs, is stipulated as a presidential regulation, along with organizing the national system for GHG inventories³.

The practical challenge observed in this process is how to best accommodate the "evolving" nature of NDC into the static domestic legal system. While no uniform solution could be applied to countries with different legal systems, various approaches seem possible, including anchoring partial NDCs by disregarding numerical figures (e.g. % emission reduction targets), or anchoring the entire contents of NDC, including numbers and leaving the same to be amended following the update cycle.

2.2 Institutional Infrastructure and Coordination

2.2.1 Aligning with Sectoral Developmental Priorities

The mainstreaming effort, however, should be treated carefully as it presents practical challenges. As mainstreaming advances, countries face emerging trade-offs among priority policies and measures among sectors as well as a gradual convergence between climate- and traditional sector-based support.

Priority setting for land use sparks competition and resource allocation among REDD+ as a mitigation measure, agricultural land expansion as an adaptation measure and food security, and economic promotion measures such as palm tree plantation to produce and export palm oils to maximize national revenue. While the values for each policy and measure can be equally justified, political consensus is needed to set national priorities. Accordingly, harnessing tools such as objective criteria to determine national priorities and demonstrating country ownership through political leaders' commitment to lead, coordinate, reconcile and reach consensus among domestic stakeholders with diverse value propositions and priorities remains indispensable to navigate this process.

Regardless of the current maturity level of NDCs, all countries are expected to disaggregate the pledged aspirations (WHAT to do)

2 JICA "Project of Capacity Development for Climate Change in Indonesia" (2010-2015)

3 JICA "Capacity Development for Developing National GHG inventories" (2011-15)

into implementable actions (HOW). Such a step presents a crucial testing ground for domestic stakeholders, particularly providing sectoral oversight and implementing entities, to demonstrate its planning and coordination capacity to bridge to implementation. Successful disaggregation provides a clear signal to investors.

To secure and keep sector-based stakeholders fully engaged and proactive for climate actions, however, designing and aligning the actions expressed in NDCs with the sectoral Development Plan is imperative. Empirical evidence clearly suggests achieving sectoral development goal remains the ultimate priority from the sectoral perspective, while climate-benefits attached to actions (e.g. as expressed in GHG emission reduction amount and/or adaptation benefits) represent the secondary objective. To achieve this NDC-sectoral alignment, winning sectoral perception that NDCs is an effective avenue to achieve sectoral development goal is the key, rather than anticipating sectoral stakeholders taking new actions simply for the sake of NDCs.

Viet Nam, through the Ministry of Natural Resources and Environment (MONRE), has been tackling both disaggregation and sectoral alignment by embarking on assessment work⁴ to identify means of implementation for NDCs - exploring low-carbon technology options suitable for all mitigation menus presented in NDCs. Such exercise has engaged all relevant sectors (Energy, Transport, Agriculture, LULUCF, Waste) to screen the contents of NDCs to see if they truly fit sectoral priorities and needs, while offering an internal coordination space to discuss practical challenges to be addressed in deploying such technologies for NDCs. Potential mitigation options beyond the current scope were also voiced throughout sector-based dialogues, which directly informed the update process by contributing to technical discussions surrounding the level of ambition.

2.2.2 Systematizing Domestic Coordination

While stakeholder coordination is encouraged, the concept is often elusive given the lack of specificity on what constitutes coordination for NDC readiness in real terms. Coordination is particularly challenging for climate change for three observed reasons; firstly climate change is a relatively new developmental agenda item, and domestic stakeholders remain in the process of consolidating the demarcation of roles, including who shall take the lead, their placement, and identifying a niche to engage in the agenda while securing access to resources. Full-fledged coordination remains extremely difficult while such process is still evolving.

Secondly, the effectiveness of coordination depends on the presence and resource capacity of a designated domestic entity assuming such

role. In case of Indonesia, the coordination secretariat within the Ministry of National Development Agency (BAPPENAS) served as a multi-stakeholder platform for coordination, which played an instrumental role in formulating and implementing a National Action Plan for GHG Emission Reduction (RAN-GRK) and Local Action Plan for GHG Emission Reduction (RAD-GRK). Its setup, operationalization, staff arrangement and data collection scheme were supported by collective international support; including these from JICA, GIZ and AusAid.

Thirdly, coordination is usually multi-faceted – cross-sectoral, sector-specific and among development partners – hence requires mutual effort among domestic players of developing countries and donors.

Sector-Specific Coordination: Stating the obvious, the contents of NDCs must be owned and embraced by relevant sectors engaging in its implementation. Winning support from the department within the line ministry/agency providing oversight to sub-sectors (e.g. power generation, crop production, irrigation, landfill management) remains the key. In practice, those departments often differ from the designated climate change focal point within the same organization, and they are seldom fully aware of what NDC is or its real relevance to daily operations.

One commonly observed challenge when engaging in this type of coordination involves falling into a state where domestic climate discussions and information sharing are confined within the sphere of climate circle, and do not propagate beyond to reach key sub-sectors.

It is clear that the effectiveness of NDC readiness depends on the inter-departmental coordination capacity and frequent, systematic internal communication effort of the climate change focal point department to inform, update and agree on priority measures within the sector for NDCs, with the departments in charge of sub-sectors. Such internal communication requires a careful yet tenacious approach, to facilitate understanding of the cross-cutting nature of climate change and how climate actions benefit or inform sub-sectors' core priorities and needs.

Cross-Sectoral Coordination – Inter-ministerial, multi-sectoral coordination is also deemed indispensable on a national level to mutually agree on the pledged contents of NDC, but such coordination also fills the role of dispute resolution for potential overlaps of jurisdictional functions across different agencies, which hampers effective implementation. The same careful yet tenacious communication approach applies to cross-sectoral coordination, as suggested for inter-sectoral coordination.

4 Low Carbon Technology Assessment under JICA “Support the Planning and Implementation of NAMAs in a MRV Manner (SPI-NAMA)” (2015–Present)

Donor-Coordination – Although donor coordination is supported as a general rule, in reality, it epitomizes the saying “easier said than done”, due to the intricacy of different interests, perspectives and appetite level by the agencies involved. In the context of NDCs, donor coordination seems effective provided such effort reduces the overall transaction cost of support operations or avoids potential overlaps.

Empirical evidence also suggests that mutually updating support operations or exchanging over specific themes helps identify common operational challenges or areas of potential collaboration and grasp the current support landscape, although the way systematic such coordination meetings are organized varies across countries.

Another observation is the scope for more streamlining of donor coordination, if the recipient country could assess the comparative advantages of different development partners (support scheme, expertise etc.) and external opportunities first, and effectively communicate to match their priority needs (short-, mid- and long-term) while taking the overall absorptive capacity into account. Such effective communication is an essential part of the coordination skill, and the absence of those elements would risk the NDC process becoming more donor-driven in nature.

The partnership approach to NDCs could also present a new avenue to facilitate donor support for NDCs and/or serve as an alternative means of enhancing mutual coordination, provided it serves as a provider of public goods such as universally accessible support information.

Given that global partnerships and initiatives are often political products of new leadership in the donor country and numbers tend to accumulate over time, a careful approach must be taken to avoid functional confusions and congestion with existing relevant partnerships and platforms (numerous initiatives surrounding mitigation, NAMAs, MRV, Adaptation etc.), while also minimizing the potential risk of oligopoly among founding members.

2.3 Resource Mobilization

2.3.1 Approach to domestic resources

Resource mobilization remains a traditional, universal issue applicable to all climate actions beyond NDCs. Empirical evidence suggests a perpetual scarcity of resource volume compared to the magnitude of needs expressed. Accordingly, a prioritization effort by recipients is critical in enabling optimum resource allocation, such as through a comprehensive needs assessment beyond quick, patchy assessment, against relevance (with developmental agenda), time (immediate, long-term), nature (institutional, technical) and resource requirements (cost-effectiveness).

As for NDCs, provided most of the developing country parties' NDCs present tiered, conditional target setting (differentiated GHG emission reduction targets according to resource type (domestic, and international support)), strategizing resource mobilization according to resource type is also required. The observed common approach for differentiated resource mobilization involves the option of harvesting low hanging fruit (low-cost, options with domestic expertise/experience) covered by domestic resources, whereas costlier options involving higher technical requirements are set aside for international support.

While domestic interests inevitably skew towards maximizing the international support to be received, it is rather more important to clarify how to realize the target and actions to be supported by in-house resources in the first place, as those rely mostly on appropriating a government budget, which is directly related to the stake of domestic taxpayers.

Maximizing the budgetary appropriation to country NDC may require a combination of efforts and arrangements;

- 1) Proper mainstreaming of NDC in a form of concrete actions/measures, into a Development Plan cycle starting 2021 or its nearest time range to coincide with the NDC timeframe. This requires apriori actions to strategically inform budget planning of such Development Plan;
- 2) Anchoring action-based measures under NDC into ongoing or planned relevant National Programs or Measures already operationalized and or earmarked by the national budget for implementation; and
- 3) Proper legal status of country NDCs as an additional avenue to ensure domestic budget appropriation.

2.3.2 Strategizing Approach to International Resources

Strategizing the approach to international resources can take the form of diversifying the resource base, refining the country approach for resource acquisition and adopting a step-wise strategy over external funding opportunities.

Diversifying the Resource Base: Private Investment Private investment: is one form of achieving resource diversification. While a separate and more in-depth discussion is required to determine how ODA could best contribute to preparing and implementing developing country NDCs, in the mitigation context, it is imperative for policymakers of recipient countries to depart from the traditional mindset that ODA resources will be ever-present, in the form of grants, projects and capacity-building. It is universally understood that a resource base for mitigation should gradually shift from ODA to private resources and designing existing strategy to enable such transition while harnessing ODA resources as a catalyst, must also be thought through by policymakers.

Private investors' perspective remains clear throughout - they call for enabling investment environment while minimizing the perceived risks to ensure investment returns. This implies more effort by recipient countries' policymakers is required to understand different types of investment schemes and where investors see "risks" and commit to improving enabling structural and a policy environment.

The market mechanism and associated carbon credit also offer an additional opportunity for finance. As part of the recent rise in alternative market mechanisms responding to criticism on the Clean Development Mechanism (CDM), the Joint Crediting Mechanism (JCM), initiated by the Japanese Government and key partner countries, intends to offer a simpler and more flexible crediting scheme. The recent study identifies a lack of access to finance as the largest barrier, followed by insufficient domestic policies, knowledge and capacities. Eliminating the financial barrier requires further measures such as new loan schemes, sensitizing local financial institutions and streamlining domestic policies (Ichihara and Uchida 2016)

Refining the Country Approach to International Support: While the country effort to maximize the influx of international support to NDCs is respected, countries beyond middle-income status are anticipated to demonstrate their capacity to adopt a selective approach to meet specific needs, with specific partners possessing appropriate expertise. Such a selective approach, as opposed to an omnidirectional approach to invite any support offered, will minimize the risk of overlap and unnecessary competition.

Strategizing Access to External Opportunities: Maximizing resource mobilization requires a more proactive approach to tap into external funding opportunities for NDCs, which goes beyond simply awaiting opportunities. This requires multi-faceted efforts and thorough preparation, including, inter alia, exhaustive resource mapping, analysis of different due requirements for access to funds (e.g. eligibility criteria, forms, procedures, timeline) and the ideal composition of a project portfolio country envisaged for those funds, as epitomized by the Green Climate Fund (GCF). Access modality should also be fully taken into account to maximize resource mobilization by effectively harnessing multilateral implementing entities, while also time empowering national implementing entities to nurture enhanced autonomy in the long run.

2.4 Integration of Science

2.4.1 Integrating Science to Planning

Scientific analysis based on robust data ensures priority setting, transparency and public support for NDC planning and

implementation. This Policy Brief is focused on the planning process while MRV and GHGs inventory are covered by another policy brief. Scientific scenario analysis is one powerful tool to show the paths to achieve the NDC target. In reality, planning in developing countries tend to be constrained to simple mitigation analysis and cost benefit analysis, and bridging science and policy remains a challenge for the NDC planning and implementation process.

Establishing science and policy nexus and the ultimate political endorsement of its contents, has been observed in Malaysia⁵, where the Iskandar Regional Development Agency (IRDA) and research community, Malaysian and Japanese, joined forces to develop a methodology for formulating Iskandar's future Low-Carbon City Scenarios, along with a breakdown of LCS measures with GHG emission reduction potential in a manner that had local stakeholders fully engaged. (HO et al., 2016) This effort was crystallized as the Low-Carbon Society Blueprint for Iskandar Malaysia 2025 and endorsed by the Malaysian Prime Minister in 2012.

The Malaysian experience infers essential drivers to bridging science-based planning to policy development;

- 1) Local incentives, including self-awareness of the need for sustainable development by authorities;
- 2) The presence and collaborative spirit of stakeholders, both local and international, to understand the technical requirements of such scenario work;
- 3) Sufficient political will to develop a policy based on the scenario to make it a reality.

Optimally supporting the above process also depends on adopting a progressive roadmap for scientific planning and tools. Given that most projection models and simulation expertise are developed and accumulated outside, the process tends to be donor-driven. Accordingly, a step-wise approach to nurturing domestic capacity by starting with simple models with open source data with proxies, to gradually shift towards more sophisticated static models, then dynamic models with more input data and higher technical requirements, is highly recommended.

Meanwhile, practice to run a simultaneous simulation using different projection models, fixing input data and assumptions, could provide a targeted 'range' by different modeling results and thus facilitate balanced decision-making. Such practice reduces the over-reliance risk on building national planning on the numerical result of a single projection model.

5 JICA-JST joint research on the Development of a Low Carbon Society Scenarios for Asian Region in Malaysia (2011-16)

However, the current observed needs for projection in developing countries tend to be limited to the short- or mid-term time frame to cope with immediate needs such as NDC formulation or serving its update. The strength of modeling lies in its ability to provide a long-term scenario based on a national vision over what low-carbon climate-resilient development should look like. This makes it highly advisable to develop a long-term scenario, anchor NDC into such long-term pathways and set it as a means to achieve a national vision.

3. Ways Forward

This Policy Brief aims to provide operational insights as to how identified needs surrounding the NDC readiness of developing countries can be best approached in practice by fulfilling underlying enablers, drawing on JICA's experiences and lessons of the selected climate support, focusing on Southeast Asia in particular.

All identified enablers for NDC readiness present emerging developmental challenges inherent with climate actions. In this context, country ownership and self-effort remain the basis for advancing and fulfilling enablers which international support cannot fill in.

Real transformative value over NDC readiness process lies within the country effort to innovate and a sophisticated approach to tackling those developmental challenges and harness NDC to shift its gear towards the envisaged low carbon, climate-resilient and sustainable development pathway. Such effort has to be coupled with concerted engagement on the part of development partners to continue enhancing the capacity to navigate the process effectively.



References

- BAPPENAS (Ministry of National Development Agency) (2012) the Strategy for Mainstreaming Adaptation into National Development Planning. BAPPENAS, Jakarta.
- C.S. Ho et al. (2016) 'Science to Action' of the Sustainable Low Carbon City-region in Enabling Asia to Stabilizes the Climate, Springer, Singapore.
- J. Ichihara and T. Uchida (2016) Evaluating Barriers to Implementing Joint Crediting Mechanism in Indonesia Journal of Environmental Information Science, pp. 44-45
- IEA (2016) CO₂ Emission from Energy Combustion Highlight.
- IPCC (2014) Climate Change 2014 Impact, Adaptation, and Vulnerability Summary of Policymakers. IEA, Paris.
- JICA (2017). JICA SPI-NAMA Low Carbon Technology Assessment to Elaborate Viet Nam's NDCs: Updates of the Progress JICA, Tokyo.
- OECD (2009) Integrating Climate Change Adaptation into Development Co-operation. OECD, Paris.
- UNDP (2016) Developing Country Needs for the Implementation of Nationally Determined Contributions (NDCs). UNDP, New York.
- UTM-Asia Research Centre (2014). Low Carbon Society Blueprint for Iskandar Malaysia 2025: Summary for Policymakers. UTM, Johor Bahru.
- World Bank (2011) The Impact of Climate Change on Global Tropical Storm Damages. World Bank, Washington D.C.

This Policy Brief was prepared by Hiroshi Enomoto and Koji Fukuda, with comments and suggestions from Masato Kawanishi (JICA Senior Advisor), Jun Ichihara (Chief Advisor, Capacity Development Assistance for Low Carbon Development in Indonesia)

The views and opinions expressed in this Policy Brief do not necessarily represent the official position of JICA.



**Nibancho Center Building 5-25, Niban-cho, Chiyoda-ku,
Tokyo 102-8012 Japan**

https://www.jica.go.jp/english/our_work/climate_change/index.html

e-mail: gegoc@jica.go.jp