

Case Study
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BILATERAL AGREEMENTS

The key purpose of bilateral agreement is to provide a legal framework for voluntary bilateral cooperation as per Art.6.2, e.g. on performing corresponding adjustments for ITMO transfers. Bilateral agreements take many different forms. This document introduces various case studies to gather insights on the various forms of bilateral cooperation a country can envisage as part of their Article 6 engagement.

Japan's Joint Crediting Mechanism

[Japan's Joint Crediting Mechanism](#) (JCM) is a project-based bilateral offset crediting mechanism that has been operational since 2013 and stands as a frontrunner for cooperative approaches. Notably, many of the requisites were established during the Kyoto Protocol era, predating the Paris Agreement, and are embedded into the JCM's Rules and Guidelines. The core focus of the bilateral cooperation model revolves around the exchange of technology, empowering partner nations to employ the JCM as a platform for introducing, testing, and showcasing low-carbon technologies.

Contents of bilateral agreements

The JCM established multiple documents (e.g. rules, guidelines, methodologies) to define its requirements for cooperative approaches. Parties engaging in the JCM commit to complying with these requirements by signing a bilateral document, typically referred to as a bilateral agreement. This agreement serves as a formal commitment from the involved Parties to adhere to the stipulated rules and guidelines outlined by the JCM, ensuring a standardised and transparent approach to cooperative initiatives within the mechanism.



Environmental integrity

Japan sets the following requirements to ensure environmental integrity¹:

- Baselines must be set below business-as-usual (BAU) levels, a long-standing practice under the JCM. The application of conservative default factors is also encouraged.
- For additionality assessment, the most likely baseline emission level/trajectory is estimated. In this context, additionality is defined as a scenario where the project's emissions are lower than that reference level.
- Identification of all greenhouse gas (GHG) emissions significantly and reasonably attributable to JCM projects. Even if extending beyond the project boundary, accounting for leakage is required.
- A discount rate for reversals, along with detailed requirements for MRV must be applied.
- Parties are prohibited from using JCM registered mitigation projects for any other international climate mitigation mechanisms.
- Contributions toward sustainable development are also mandated from JCM projects, aligning with sustainable development goals.

Eligible activities

Within the JCM framework, a [variety of activities](#) are presently considered eligible, including renewable energy, energy efficiency, waste management, transportation, efforts to reduce emissions from deforestation and forest degradation, and the conservation, sustainable management, and enhancement of forest carbon stocks in developing countries (REDD+), as well as the recovery and destruction of F-gases.

Eligible methodologies

For each partnership under the JCM, a joint committee is established, comprising of representatives from both sides of the bilateral agreement, responsible for the operation and management of the cooperation under the mechanism. To initiate the registration of a JCM project, first a project idea note must be submitted to Joint Committee by the project participant. Following the confirmation of no objection by the Joint Committee, the proposed methodology can be submitted. Noteworthy is the fact that JCM methodologies differ from other international carbon market mechanisms as they have jurisdiction limited to a single country. They must be approved by the Joint Committee, whose membership includes representatives from both the host country and Japan. These methodologies intricately outline the specific eligibility criteria tailored to the project.

¹ ADB (2021): [Article 6 of the Paris Agreement - Drawing Lessons from the Joint Crediting Mechanism Version II](#).



Switzerland's acquisition of ITMOs through the KliK-Foundation

Switzerland has been actively promoting Article 6.2 piloting efforts. To establish an activity portfolio from which to purchase ITMOs, [the Foundation for Climate Protection and Carbon Offset](#) (KliK) was founded. Through [KliK](#), Switzerland intends to purchase over 40 million tons of CO₂e in the current decade.

Contents of bilateral agreements

[Switzerland's bilateral agreements](#) delineate the governance structure, minimum environmental integrity criteria, and guidance on processes such as authorisation, recognition and transfer, and the implementation of CAs in a detailed manner.

Environmental integrity

Switzerland establishes the following requirements to ensure environmental integrity:

- Conservative baselines must be established, considering the lower end of projected emission development.
- Additionality is a mandatory criterion.
- Carbon leakage risks must be effectively mitigated.
- Permanence and providing appropriate compensation for reversals must be ensured. Attestations shall be issued only if the permanence of the carbon capture is clearly demonstrated and reliably ensured for a minimum of 30 years after it begins to take effect.
- Double counting with international climate finance is not allowed unless agreed upon by the Parties (in compliance with Article 13 - Enhanced Transparency Framework - of the Paris Agreement).
- CAs are required for sectors covered by NDCs, with additional requirements for single-year and multi-year NDC targets.
- Alignment of activities with sustainable development objectives, related strategies and policies, LT-LEDS, national and international environmental regulations, and prevention of negative environmental and social impacts as well as human rights violations is required.
- Elaboration of detailed authorisation processes, publication of authorisations, consistency reviews, updates or changes, and authorisation forms are required.
- ITMOs must be real, verified, additional, permanent, and achieved starting from 2021.
- Activities that result in increased global greenhouse gas emissions are ineligible, and all activities must promote enhanced climate action and ambition by Parties.
- Safeguards against incentives for low ambition by the Parties must be ensured, and other factors to incentivise enhanced climate action by the Parties have to be considered as well.



- All existing and planned national policies and legislation must be considered.
- Alignment with the zero/low emission development strategy or climate change policy of each Party is required.
- Transition to zero/low emission development, in accordance with the goal of achieving net-zero carbon emissions by 2050, must be fostered.
- Attribution of mitigation outcomes to the sources of finance must be applied, where appropriate.
- Detailed requirements for MRV including transparency, objections timeframe, examination criteria, and confirmation of criteria fulfilment timeframe, must be adhered to.
- Comprehensive requirements for transfer notification and recognition are stipulated.
- Agreements have unlimited duration, mandating both annual and biennial reporting.

Eligible activities

The following project types have been deemed eligible by the Swiss Compensation Office and the KliK Foundation, according to their [eligibility criteria](#):

- Implementation of energy-efficient practices and the utilisation of renewable energy sources in households.
- Promotion of electric mobility.
- Integration of renewable energy solutions in industrial processes.
- Initiatives aimed at reducing methane emissions in agriculture.

On [Klik's website](#), other project types including green cooling and low-carbon cement, are listed among the approved mitigation activities.

According to the [ordinance to the CO2 Act](#), the following activities are ineligible:

- Investments related to the use of fossil thermal or motor fuels for energy production, or the extraction of fossil energy sources.
- Nuclear energy
- Hydro-power plants exceeding 20 MW in capacity.
- Projects within large industrial facilities that do not align with the state-of-the-art technologies available in the global market.
- Activities in the waste management sector that do not involve material or energy utilisation or waste reduction.
- Biological CO2 sequestration projects.
- Reduction of deforestation and forest degradation.
- Abandonment of fossil fuel extraction.
- Activities that are inconsistent with environmental or human rights conventions ratified by Switzerland,
- Activities that cause significant adverse social or environmental impacts,
- Activities that contradict the objectives of Switzerland's foreign or development policy.



Eligible methodologies

No specific methodologies have been deemed eligible by Switzerland. The decision on which methodologies can be utilised relies on the adherence to the listed requirements and agreement between both Parties.

Singapore's Memoranda of Understanding to provide flexibility for the national carbon tax

The Singaporean government has [announced](#) that commencing in 2024, regulated entities in the nation can satisfy up to 5% of their carbon tax obligations by utilising high-quality international carbon credits. These credits will be subject to CAs as per Article 6 and ITMOs generated through bilateral agreements with the country can contribute to the achievement of both countries' NDCs². The majority of carbon market activities generating eligible certificates will not rely on public-private partnerships but will be predominantly driven by private sector engagement, without direct government involvement from either of the Parties.

Contents of bilateral agreements

Singapore has signed multiple MoUs with host countries, signalling both Parties' intent to collaborate under Article 6.2. Furthermore, the country has signed legally binding Implementation Agreements (IAs) with several countries, including Bhutan, Chile, Ghana, Paraguay, Papua New Guinea, Peru, Rwanda, Vietnam, Mongolia and Thailand, which establish the framework for the international transfer of ITMOs. IAs are the key mode for bilateral agreements, due to their legal and advanced status: Each Implementation Agreement sets up a Joint Committee responsible for developing the rules and guidelines governing project applications and participation. This includes the creation of an Eligibility List—a compilation of pre-approved crediting programmes and methodologies. The list is developed with reference to internationally recognised carbon crediting standards to uphold environmental integrity. It is mutually agreed upon by Singapore and the respective host country, tailored to national circumstances, and subject to regular reviews and updates to ensure continued relevance.

The corresponding Eligibility Lists primarily draw on methodologies from major carbon crediting programmes such as the Verified Carbon Standard (VCS), Gold Standard for the Global Goals (GS4GG), American Carbon Registry (ACR), Global Carbon Council (GCC), and Architecture for REDD+ Transactions (ART).

² Government of Singapore (2023): [Singapore Sets Out Eligibility Criteria For International Carbon Credits Under The Carbon Tax Regime](#).



Environmental integrity

Singapore envisions that the mitigation outcomes resulting from their IAs must adhere to the [following criteria](#):

- Be additional, real, measurable, verifiable, and permanent.
- Exhibit additionality compared to emissions reductions or removals mandated by legislation or policy, or those that would naturally occur in a Business-As-Usual (BAU) scenario.
- Be generated post-2020, within the same NDC period, and in alignment with a nested or jurisdictional baseline (for forestry credits).
- Include the assessment and mitigation of carbon leakage risks as necessary.
- Prevent double counting, which encompasses avoiding both double claiming and double issuance.
- Ensure that the outcomes do not result in a net negative impact (i.e. no net harm).

Eligible activities

Singapore does not stipulate a general list of eligible activities. Instead, the country specifies a list of eligible project types and methodologies, customised for each host country. However, the government stated in an [interview](#) that the following activities would not be eligible:

- Enhanced oil recovery
- Coal-fired electricity generation
- Direct air capture (DAC)
- High forest, low deforestation (HFLD) credits from countries with large forest areas

Regarding LULUCF, the country stated that only countries applying deforestation safeguards would be eligible to supply credits to Singapore. In addition, forest conservation credits must stem from countries with national reforestation programmes (not project level) and countries must be part of the Reducing Emissions from Deforestation and Forest Degradation (REDD+) Framework.

Eligible methodologies

Singapore has published the individual lists of eligible programmes and methodologies for each implementation agreement on their [Carbon Markets cooperation website](#).

For instance, under the Singapore–Ghana Implementation Agreement, the [Eligibility List](#) comprises: (i) all active GS4GG methodologies published before 31 March 2023, except those in the Land Use and Forestry & Agriculture category; and (ii) all active VCS methodologies published before 31 March 2023, excluding those under Sectoral Scope 14, with certain exceptions, including VM0012, VM0017, VM0021, VM0022, VM0024, VM0026 (and VMD0040), VM0032, VM0033,



VM0036, VM0041, VM0042, and Scenarios 2a and 3 of the VCS Jurisdictional and Nested REDD+ (JNR) framework. Inclusion of the latter is contingent upon project participants demonstrating sustainable development contributions or co-benefits by submitting a verification report under SD Standards recognized by the VCS.

Due to the heterogeneity of eligible programmes and methodologies among partner countries, environmental integrity criteria, beyond those mandated by Singapore, will align with the criteria specified by the respective crediting programmes, which vary significantly.

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