ARTICLE 6
IN MONGOLIA

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Introduction

This paper has been prepared for the Government of Mongolia. It sets out the fundamentals of international carbon finance under the Paris Agreement and discusses the goals of participation and key policy considerations. It also provides an outline of the mechanics of operationalising an Article 6 mechanism in Mongolia, and how that system could fit within the Nationally Determined Contribution (NDC) in a Monitoring, Reporting and Verification (MRV) context.

The aim of the paper is to raise awareness and provide a range of options on key decision points necessary for effective participation by Mongolia in Article 6 of the Paris Agreement.

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Executive Summary

The climate emergency continues to unfold with increasingly dire consequences. Under the 2015 Paris Agreement, the global community, including Mongolia, committed to each undertake ambitious efforts to hold the increase in global average temperature to well below 2°C.

In 2020, Mongolia increased the ambition of its Nationally Determined Contribution (NDC) to a 22.7% decrease in emissions below baseline projections. This is a challenging commitment. The Mongolian government recognises that major actions must be taken, and seeks opportunities in international cooperation including Article 6 of the Paris Agreement for “…voluntary cooperation in the implementation of... nationally determined contributions to allow for higher ambition”.

Article 6 offers the potential to:

— facilitate public and private foreign investment in Mongolia and provide international finance for mitigation actions and NDC implementation;
— channel investment into strategic, longer term low-emissions priorities; and
— facilitate transfer of capacity, technology and innovation.

Article 6 comes with requirements to avoid double counting, and Internationally Transferred Mitigation Outcomes (ITMOs) require Corresponding Adjustments to Mongolia’s national emissions inventory. That is: for any exported emissions reductions, the same amount must be added to Mongolia’s inventory to avoid double counting. If Mongolia exports too many ITMOs, it will overshoot its NDC target. This would substantially decrease Mongolia’s diplomatic and investment credibility.

Article 6 also involves higher transaction costs through more rigorous Monitoring, Reporting and Verification (MRV) of emissions, and registration and tracking of ITMOs and Corresponding Adjustments.

This paper informs decisions within the Mongolian government on the use of Article 6, and how best to maximise benefits and minimise risks for Mongolia. While directed to Mongolia, the content and recommendations will be useful for all countries seeking to host activities under Article 6, as well as other actors wishing to better understand and prepare for Article 6 processes and requirements.

Section 1 of this paper briefly describes: the Paris Agreement requirements for use of Article 6; the evolution from Kyoto-era carbon finance mechanisms; the current status of UNFCCC negotiations and initial bilateral agreements between countries that seek to operationalise Article 6.
In Section 2, the paper discusses strategies for use of Article 6 in Mongolia, and sets out 10 key policies to be considered to maximise opportunities and minimise risks from Article 6 participation. Section 3 discusses technical MRV issues and program design considerations.

The paper concludes that Article 6 offers real opportunities to drive mitigation that contributes to achieving the NDC and Mongolia’s strategic sustainable development goals. Carefully designed policies can target and incentivise investment where it is most needed, but ‘rushing-in’ risks unintended consequences and undermining Mongolia’s NDC goals.

In summary, to derive maximum benefit for Mongolia, Article 6 should be proactively approached with clarity of strategic intent, to deliberately drive investment toward Mongolia’s strategic goals.

As next steps, in 2021 Mongolia should identify:

— mitigation actions that most align with strategic development plans;
— and that are challenging for Mongolia to undertake without international investment and assistance.

These actions should then be assessed for mitigation potential, influence on the national inventory and the NDC targets. Engagement with international stakeholders should follow over 2021-2022, to assess interest in investment and potential ITMO issuance, before design of clear Article 6 policies and programs to incentivise international investment in 2022/2023.
This section provides a broad overview of policy considerations under article 6 of the Paris Agreement, including the context and fundamental principles of carbon finance and considerations for Mongolia.

OVERVIEW AND CONTEXT OF ARTICLE 6

1 | ARTICLE 6 OF THE PARIS AGREEMENT

The 2015 Paris Agreement established a new framework for international climate change cooperation. All Parties must communicate and implement Nationally Determined Contributions (‘NDCs’) to collectively achieve the Agreement’s goals to limit temperature increases, adapt to the impacts of climate change & make finance flows consistent with a low-carbon, climate-resilient pathway. This marks a change from the Kyoto Protocol, which placed emissions obligations only on industrialised countries.

Article 4 of the Paris Agreement states that Parties shall pursue domestic mitigation measures with the aim of achieving the objectives of their NDCs. Article 6 complements that by recognising that Parties may choose to cooperate across borders for NDC implementation, including through transfer of ‘mitigation outcomes’ from one Party to another. This can allow for higher ambition in Parties’ mitigation & adaptation actions, as well as promoting sustainable development & environmental integrity.
Article 6 enables Parties to cooperate through market-based mechanisms in delivering their mitigation commitments. The potential advantages include:

- **Cost-efficiency**: The cost of reducing 1tCO2e varies significantly across activities, sectors, and countries. Lower cost abatement is more available in some parts of the world than in others. By allowing Parties to acquire ‘mitigation outcomes’ from the jurisdictions of other Parties, the cost of achieving NDCs can be reduced.

- **Safety net**: International market-based cooperation could also reduce the risk of Parties failing to meet their NDCs if domestic efforts are insufficient. Parties have the option of acquiring mitigation outcomes from other Parties and still contributing the originally committed level of ambition.

- **Ambition**: Countries may wish to take on more ambitious climate targets than they are able to achieve through domestic action alone. The option to acquire mitigation outcomes from other jurisdictions can facilitate this higher ambition and therefore allow for higher overall emission abatement.

- **Finance**: International market-based mechanisms allow finance to flow to countries with lower cost abatement. They provide additional sources of finance, invested in activities that promote economic development and other development benefits, as well as reducing emissions.

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**Market-based mechanisms under the Kyoto Protocol**

There is a history of market-based cooperation in the UNFCCC, which Article 6 builds on. The Kyoto Protocol established 3 routes for market-based cooperation between Parties:

**Joint Implementation (Article 6 of Kyoto Protocol)**: enabled one country with a reduction target to take part in a mitigation project in another country with a target and count the emissions reductions towards its own Kyoto target. This occurred through Emission Reduction Units (ERUs) issued to projects for the emission reductions achieved.

**Clean Development Mechanism (CDM) (Article 12)**: allowed projects in developing countries to be issued Certified Emission Reductions (CERs) for mitigation achieved, which could be traded & used by countries with emission reduction targets. This gave flexibility to industrialised countries in the delivery of their targets, and supported sustainable development and emission reductions in developing countries. Around 8000 projects have been registered in over 100 countries, supporting over US$300bn of investment.

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1. [https://unfccc.int/resource/docs/publications/mechanisms.pdf](https://unfccc.int/resource/docs/publications/mechanisms.pdf)
**International Emissions Trading (Article 17):** This enabled countries with emission reduction targets to acquire emission units from other countries and use these towards their targets. This spurred the creation of the EU Emissions Trading System, which operates in this way.

One important progression from these Kyoto market mechanisms is that all forms of cooperation under Article 6 of the Paris Agreement are available equally to all Parties. Whereas the CDM allowed projects only in developing countries, under Article 6, mitigation outcomes can be generated in any Party and transferred to any other Party.

1.1 | ARTICLE 6 – OPTIONS FOR VOLUNTARY COOPERATION

Article 6 of the Paris Agreement establishes 3 routes by which Parties can cooperate in the achievement of their NDCs:

— **Article 6.2:** outlines broad principles for Parties that voluntarily cooperate on their NDCs through ‘Internationally Transferred Mitigation Outcomes’ (ITMOs). These include ensuring environmental integrity, promoting sustainable development, applying robust accounting, and avoidance of double counting. Parties can define their own approaches to cooperation, for instance through linking emissions trading systems or government-to-government bilateral frameworks within which mitigation outcomes are achieved and transferred.

— **Article 6.4:** This establishes a new ‘mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development’. Broadly, this new mechanism is envisaged to act in a similar way to the CDM, with a central UN supervisory body and governance function that approves methodologies, registers projects and oversees the issuance of units following verification of emission reductions.

— **Article 6.8:** This recognises and defines a framework of non-market approaches to cooperation available to Parties to assist in implementing their NDCs, including through mitigation, adaptation, finance, technology transfer and capacity building. Article 6.8 is less well-developed than Articles 6.2 and 6.4.

These routes are not mutually exclusive. Once fully established, a Party could have bilateral agreements with several buying Parties under Article 6.2, through which they transfer ITMOs generated by policies, projects or sector-wide activities. They could also host projects registered under Article 6.4, which generate emission reduction units that can be sold domestically or internationally. Finally, they could also collaborate on NDC implementation with other Parties through the Article 6.8 non-market framework.
Internationally transferred mitigation outcomes (ITMOs)

Article 6 introduces the term ‘internationally transferred mitigation outcomes’ (ITMOs) to define emission reductions or removals transferred under Article 6.2. The precise definition and conceptualisation of an ITMO has been under discussion between Parties since the adoption of the Paris Agreement. According to the most recent draft version of Article 6.2 guidance, published (but not adopted) at COP25, the characteristics of an ITMO would include:

1. It is real, verified and additional
2. It can include emission reductions and removals, including mitigation co-benefits resulting from adaptation actions and/or economic diversification plans
3. It is measured in metric tonnes of carbon dioxide equivalent (tCO2e) or in another non-greenhouse gas metric determined by participating Parties where this is consistent with the NDCs of the participating Parties
4. It is generated by mitigation from 2021 onwards

The definition notes that: ITMOs are from a cooperative approach that involves their international transfer for use towards an NDC; and ITMOs can include units issued under Article 6.4 when internationally transferred.

It also notes that ITMOs can be authorised for purposes other than achievement of NDCs. This means that ITMOs could be used towards airlines’ obligations under ICAO’s Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), or toward a private entities’ voluntary offsetting claim, when the host government authorizes this.

This definition may evolve during ongoing Article 6 negotiations but nevertheless gives a good basis to understand the nature of an ITMO.

1.2 | ARTICLE 6 DEVELOPMENT AND ISSUES IN NEGOTIATION

Following the adoption of the Paris Agreement in December 2015, an Ad Hoc Working Group on the Paris Agreement was established within the UNFCCC to develop recommendations for the detailed modalities, procedures and guidance that would underpin the Paris Agreement. In other words, it was tasked to provide the detailed instructions for practical implementation of the Paris Agreement.

This process culminated in the adoption of the ‘Katowice Climate Package’ in December 2018, with detailed Modalities, Procedures and Guidance (MPGs) for most elements of the Paris Agreement. However, Parties (i.e. national governments) were not able to reach agreement on Articles 6.2, 6.4, and 6.8. Parties were still unable to agree rules at COP25 in 2019 in Madrid. These negotiations are ongoing, with the aim of reaching agreement at COP26 in Glasgow in November 2021.
Two reasons why it has proved difficult to adopt rules for Article 6 are:

— **Technical complexity**: The nature of the Paris Agreement, where each Party communicates its own NDC within broad parameters, creates challenges for establishing robust accounting. This includes NDCs of different time lengths with a quantified target for the final year of the NDC in most cases; and in some cases, different metrics to tCO2e, such as renewable energy capacity. This technical complexity, when coupled with the sensitive political nature of the UNFCCC, has contributed to delays.

— **Political differences**: There are several issues on which Parties have not been able to reach agreement for political reasons. This includes how and whether Parties engaging in market-based cooperation should, as a condition, contribute to adaptation finance; and whether Certified Emission Reductions (CERs) issued under the Clean Development Mechanism prior to 2020 should be eligible for use towards Parties' NDCs post-2020.

Article 6 negotiations have made substantial progress since 2015, to develop detailed rules, modalities and guidance, find solutions to technical challenges, and bridge political differences. It hoped that Parties will reach agreement at COP26 in 2021, if solutions can be found for outstanding ‘political’ issues.

**The state of Article 6 negotiations**

Parties to the UNFCCC had mandates to adopt Article 6 guidance at both COP24 (2018) and COP25 (2019) but on both occasions did not reach agreement. At the end of COP25, the CMA instead adopted a procedural decision, Decision 9/CMA.2, asking Parties to continue work with a view to agreeing guidance at COP26.

This decision recognised three draft versions of Article 6 guidance which will each have equal standing when negotiations re-commence. Many elements are the same between the three versions, and other elements with which Parties broadly agree were published in the third and final version by the Chilean Presidency at the end of COP25.

Four broad areas of disagreement that remain to be resolved are:

1. **Transition from the CDM**: A significant surplus of Certified Emission Reductions (CERs) has accumulated up to 2020 due to a mismatch between supply & demand. The potential surplus is more than 1 billion tCO2e. While many countries have hosted CDM projects, the surplus is associated with projects in China, India and Brazil, who have generated the majority of CERs. There is disagreement on whether or not these CERs should be used towards Party’s NDCs, and if it is possible, what safeguards should be in place (such as vintage eligibility requirements) to limit ‘carry-over’. As well as the CERs, Parties also need to decide on the transition of CDM-era projects, and other decisions to ensure a smooth transition from the CDM to a new Article 6.4 mechanism.
2. **Accounting for units outside the host country’s NDC:** Parties have disagreed on whether a Corresponding Adjustment must be applied by the host government when an Article 6.4 unit is transferred internationally from outside their NDC scope (but generated within the country). There are two issues:

   — Some Parties believe a Corresponding Adjustment should not be applied for units from sectors and greenhouse gases outside the scope of their NDC, as this would require additional reductions within the NDC to compensate.

   — Some Parties consider ‘outside the NDC’ to refer to any abatement activity that goes beyond the policies and measures the host government takes to implement their NDC, even if this is within the scope of the Party’s NDC in terms of sectoral and greenhouse gas coverage. Other Parties disagree with this notion, concerned there could be double counting of mitigation if Corresponding Adjustments are not required for such instances.

3. **Adaptation finance:** Under the Kyoto Protocol, a ‘share of proceeds’ was applied to the CDM under which 2% of CERs issued to projects would be held back and sold to raise revenue for adaptation projects under the Adaptation Fund. At COP21, Parties agreed a similar share of proceeds would be applied to the Article 6.4 mechanism. However, Parties disagree on the level and application of that share of proceeds, and whether a mandatory requirement to fund adaptation should also be applied to transfers under Article 6.2. Parties are broadly divided on developed/developing country lines, with the latter asking for a mandatory requirement and the former only willing to consider non-obligatory wording.

4. **Overall mitigation in global emissions:** At COP21, Parties agreed that the Article 6.4 mechanism should contribute to Overall Mitigation in Global Emissions (OMGE) but have not yet agreed on how that should be operationalised & whether it should be extended to Article 6.2. Some Parties, in particular the Alliance of Small-Island States (AOSIS), have sought a cancellation or discounting of units, which could not be used by any Party towards their NDC. This would be a means to move market-based cooperation beyond a ‘zero-sum’ game to one that delivers OMGE. Other Parties have resisted this approach, with the view that the requirement to achieve OMGE can be met through setting conservative baselines & other elements of project design.

These are the most significant issues still to be decided, but other issues, such as rules for baseline setting under Article 6.4, establishment and funding of a capacity-building programme to ensure equitable access, and accounting for transfers in non-greenhouse gas metrics, are also priorities for certain Parties within the negotiations.
1.3 | HOW INTERNATIONALLY TRANSFERRED MITIGATION OUTCOMES (ITMOS) WITHIN ARTICLE 6 WORK – CLIMATE FINANCE VS CARBON FINANCE

Market-based cooperation under Article 6 (‘carbon finance’) of the Paris Agreement is distinct from ‘climate finance’ under Article 9, the financial flows from (primarily) developed countries to developing countries to assist with climate mitigation and adaptation. Both offer a route for developing countries to secure financial investment in climate-related activities. The main difference is that ‘climate finance’ mitigation results can be used towards the host country’s NDC, whereas for ‘carbon finance’, the mitigation (or at least an agreed portion) must be transferred and cannot be used towards the host country’s NDC.

Article 6 ensures that mitigation transferred through market-based cooperation is only claimed once via a Corresponding Adjustment: the host country must not account for any transferred mitigation when reporting progress against their NDC, following (still-to-be-agreed) Article 6.2 guidance. Where mitigation is used towards another country’s NDC, that country reflects the acquisition through a ‘corresponding’ adjustment to their reporting. See diagram below.

Corresponding Adjustments can also avoid double claiming in cases where mitigation outcomes are sold to airline operators for use under CORSIA, or to companies seeking to offset their emission footprint voluntarily.

Article 6 creates an opportunity for Mongolia to attract investment into activities that reduce emissions and advance sustainable development goals. The intention of Article 6 is that investment goes to ‘additional’ activities, that is, beyond activities that are already economically viable, or that are planned by the host government. Article 6 therefore brings benefits that would not otherwise happen, or would happen later.

Double-claiming and corresponding adjustments

Double claiming occurs when the same emission reduction is claimed by two different actors. This can occur when a project’s host government claims the outcome towards its NDC and it is also claimed by another country (for their own NDC) or entity (for instance a voluntary offsetting claim or an airline’s offsetting obligations under CORSIA).

This means that an emission reduction is occurring once but being claimed twice. Double claiming could lead to inaccurate claims and higher global emissions. The main safeguard to prevent double claiming under the Paris Agreement is the ‘Corresponding Adjustment’, where a country transferring a mitigation outcome must adjust its emissions reporting to reflect the transfer, and the buying country must make a Corresponding Adjustment to their emissions reporting to reflect the use.

Avoiding double counting requires robust accounting. Gold Standard published a paper in February 2021 that provides more information on Corresponding Adjustments and double counting, as well as links to further reading.

SECTION 2

Applying Article 6: Considerations for Mongolia

2 | CREATING CLEAR OBJECTIVES FOR PARTICIPATION IN ARTICLE 6

2.1 | CONSIDERATIONS WHEN APPLYING ARTICLE 6

Careful consideration should be given when using Article 6, bearing in mind:

1. **NDC achievement**: Any mitigation transferred (ITMOs) out of Mongolia under Article 6 cannot be used towards Mongolia's NDC. Mongolia should not 'over-sell' and risk failing to achieve it's NDC. Mongolia may decide not to allow ITMOs from low-cost abatement opportunities activities that Mongolia can achieve alone. Mongolia can structure bilateral agreements governing ITMOs to ensure a share of mitigation is not transferred and is instead used towards Mongolia's NDC, or that an ITMO buffer is established which can be drawn on in case of domestic under-achievement.

2. **Long-term climate strategy**: Mongolia has a long-term climate strategy and an understanding of abatement needs that are not included in the current NDC. These may have been excluded due to cost, or the availability of skills or technology. Mongolia can encourage Article 6 activities that target these more difficult mitigation options to help reduce costs, foster skill development and introduce technologies. This can help support Mongolia’s long-term climate strategies.

3. **Development goals**: Mongolia can direct Article 6 activities into sectors or geographies that are strategically advantageous for national development goals. For instance, activities could be encouraged in rural areas to promote job creation. Thus, Mongolia transfers ITMOs to another country, but achieves wider development objectives at home.
Given these considerations, hosting activities and transferring ITMOs under Article 6 is very different to hosting CDM projects, and should be treated differently by the Mongolian government. Mongolia should establish Article 6:

— Governance structures;
— Procedures to authorise activities for which Corresponding Adjustments will be made; and
— Policies and plans for how Article 6 participation relates to implementation of the NDC and broader climate and development goals.

**Swiss-Peru bilateral agreement on Article 6 cooperation**

In October 2020, the governments of Switzerland and Peru signed the first ever bilateral agreement between two countries for ITMOs under Article 6.2. Switzerland subsequently signed an agreement with Ghana and is in discussion with other governments.

The Switzerland-Peru agreement reflects Peru’s consideration of Article 6, and states:

1. The Republic of Peru is considering selling emission reductions provided this is not an obstacle to compliance with its Nationally Determined Contribution (NDC)
2. Mitigation outcomes shall originate from activities that:
   a. Are in line with the low emission development strategy of each Party
   b. Foster the transition to low emission development in accordance with net zero carbon emissions by 2050, and
   c. Promote enhanced climate action and safeguard against incentives for low ambition by the Parties involved
3. Mitigation outcomes shall also originate from activities that are in line with sustainable development strategies and policies.

These provisions are included in Switzerland’s other agreements with Ghana and Thailand.

### 2.2 | APPROACHING ARTICLE 6 PROACTIVELY AND WITH STRATEGIC INTENT

It is tempting to see Article 6 as short term, fast finance through markets, but it comes with risks and costs. To derive maximum benefit, Article 6 should be approached with clarity of vision, to intentionally drive investment toward longer term strategic goals.

Article 6 provides mechanisms for Mongolia to seek external finance from other countries or private actors for mitigation, provided Mongolia makes Corresponding Adjustments for ITMOs. In other words, Mongolia must ensure the transferred (exported) mitigation does not contribute to its NDC targets.
Approaching Article 6 with clarity of intent and understanding means pro-actively deciding which activities Mongolia is willing to seek finance and make corresponding adjustments for, before the government commits to these activities. In this way Article 6 avoids ‘giving away’ mitigation that should help to achieve its NDC and becomes more about shared objectives and bringing forward activities not included in the NDC. To help inform this planning, Mongolia’s unconditional NDC actions should have broad implementation plans and related finance in place. Conditional NDC actions, increased ambition actions of strategic value, and/or actions outside the scope of the NDC may be better targets for Article 6.

By approaching Article 6 with intent, Mongolia can avoid difficult decisions involving exporting mitigation that is needed to achieve the NDC. If Mongolia approaches Article 6 reactively, there will likely be multiple investors and developers who see opportunities to create ITMOs under Article 6. Mongolia could then face being overwhelmed with requests and decisions, many of which would entail the difficult position of rejecting near-term investment to protect longer term goals.

Setting Article 6 priorities also represents an opportunity to partner with other countries to target activities suiting Mongolia’s needs in longer-term relationships. For example, Mongolia may wish to expand energy efficiency and modernisation in the mineral processing sector but has not included such actions in its NDC for the period to 2030. Article 6 could represent a way to undertake actions sooner (say the mid-2020s), driving economic growth, export income and job creation. The associated ITMOs would be ‘exported’ to partnering countries. As Mongolia was not intending to carry out these actions under the NDC, any exported ITMOs and Corresponding Adjustments would not prevent Mongolia achieving its NDC targets.

2.3 | HOW CAN MONGOLIA BENEFIT FROM PARTICIPATING IN ARTICLE 6?

The key reasons to engage with Article 6 are to:

— facilitate public and private foreign investment in Mongolia and provide international finance to implement mitigation actions;
— channel investment into strategic, longer term low-emissions priorities;
— facilitate transfer of capacity, technology and innovation;
— finance broader development goals; and
— contribute to financing NDC implementation.

The last point, financing NDC implementation, is dependent on Mongolia’s policies and rules for Article 6 participation. Eligibility of how and which mitigation outcomes can be exported (ITMOs) can be designed so that they also contribute to achieving NDC targets. This is discussed in the Section below.
2.4 | POLICY CONSIDERATIONS

There is no UNFCCC-imposed penalty for failing to meet an NDC target, but significantly overshooting the target will result in investor wariness in future, and a decrease in Mongolia’s diplomatic and investment credibility. Any Article 6 transactions should consider policy instruments\(^4\) that ensure Mongolia meets its NDC target and that the transactions contribute to sustainable development goals.

Some policies and requirements relating to implementation of Article 6.2 and 6.4 will be determined by the UNFCCC, but many rules and decisions will need to be set by Mongolia. The following 10 considerations require decisions prior to implementing Article 6. Several overlap and interact, so they need to be considered individually as well as holistically. For example, if a host country share approach were taken, a longer crediting period, or a less conservative baseline, may be considered.

2.4.1 | ANNUAL VS PERIOD TRUE-UP

If Article 6 is used, Mongolia must monitor and assess annual emissions and removals\(^5\), as well as ITMOs transferred and/or used, and report the annual results in the Biennial Transparency Report (BTR).

The current draft Article 6.2 guidance provides two options for countries with single-year targets like Mongolia (22.7% reduction by 2030) to account for the transfer and use of ITMOs under Article 6. They can either:

1. Provide a multi-year trajectory for the NDC period and annually apply corresponding adjustments for the ITMOs transferred and used each year. The trajectory must be consistent with implementation and achievement of the NDC.
2. Take an ‘averaging’ approach, where they annually calculate the number of ITMOs transferred and divide this by the number of years in the NDC period. For example, if a country has a ten-year NDC period and has sold 200 ITMOs, they would make a corresponding adjustment of 20 ITMOs in their final NDC year (200 ITMOs divided by 10 years).

These options aim to avoid a scenario that increases global emissions, where a government with a single-year target (e.g. 2030) sells ITMOs in the early years of their NDC (e.g. 2023-2028) and none in 2030, and only accounts for the 2030 year to assess whether the NDC has been met or not.

Parties can decide themselves which of these two approaches to take. The first approach requires the creation of a trajectory, with implied targets between 2020 and 2030, that may not have existed when the NDC was communicated. The second requires careful management to ensure the NDC can still be met. Both support using Article 6 with intent, since doing so introduces additional complexity in NDC accounting.

\(^4\) Alongside other considerations relating to Mongolia’s development objectives & interactions with existing policies.

\(^5\) From the MPGs FCCC/PA/CMA/2018/3/Add.2 paragraph 77 (d) (i): The annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC on an annual basis reported biennially.
2.4.2 | ELIGIBILITY/TARGET SECTORS

Mongolia should pro-actively identify which sectors and/or project types are eligible for Article 6 that further Mongolia’s strategic interests without risking the NDC target. These could be actions that Mongolia needs international assistance to execute due to Mongolia lacking:

— Relevant technologies and technology supply chains;
— Capacity (e.g., human expertise &/or support services);
— Available finance, or insufficient finance at favourable terms (e.g., grants or low interest loans) or in hard-currency denomination;
— Other factors identified by the government of Mongolia.

Eligibility criteria need not be exhaustive. Positive and negative lists can be used:

— Positive lists - Encourage project ideas and investment in areas where: there is a known gap in capability in Mongolia; actions are not yet included in the NDC; actions are high ambition; and/or they are difficult mitigation actions.
— Negative lists – Disallow, exclude or discourage projects in sectors where Mongolia can effectively undertake actions without ITMOs (particularly in the unconditional commitments of the NDC); or where corresponding adjustments could threaten Mongolia’s ability to reach the NDC target.

These lists should consider additionality, the principle that emissions reductions would not occur without the carbon finance intervention. This is a requirement under both Articles 6.2 and 6.4, though less defined under Article 6.2. Thus, projects on the positive list should be deemed or shown to be additional.

These lists need not cover every possible project type, but they provide a clear signal to Mongolia’s policy preferences and can help attract investment to priority areas for Mongolia. Project types not on either list would remain uncertain (neither explicitly included or excluded), and proponents may seek guidance from the Government. Thus, the more specific the lists can be made, the lower the transaction costs in dealing with applications and enquiries. This needs to be balanced with leaving some flexibility for market innovations.

Finally, eligibility may be combined with other policies. For example, high technology transfer, or difficult mitigation actions may have fees waived or a lower host country share, while ‘low-hanging fruit’ mitigation may still be eligible, but with a high required net contribution to the Mongolian NDC.
2.4.3 | HOST COUNTRY SHARE AND CONTRIBUTION TO THE MONGOLIAN NDC

The quantified emissions reductions from a project can be used as ITMOs, but it may be mandated by the Mongolian government (for Article 6.4) or agreed bilaterally (for Article 6.2), that some share of the mitigation is not exported. For example, if a project reduces emissions by 1000tCO₂e the Mongolian government authorise 800tCO₂e to be transferred as ITMOs and keeps 200tCO₂e (20%) as a contribution toward Mongolia's NDC. Mongolia then makes a corresponding adjustment for 800 not 1000tCO₂e reduced by the project.

The attribution or sharing of mitigation can vary with project type, over time, or depending on the investor. The more variation, the more flexibility and targeting of incentives, but the greater administrative complexity.

A balance must be made between contributing to the NDC and facilitating investment through Article 6. The higher the Mongolian share, the less benefit attributes to the investor, and therefore the less attractive the investment becomes. The host country share also relies on equivalence between project level and national inventory accounting (see Section 3 below).

2.4.4 | BASELINE SETTING

Baseline setting provides another opportunity to make a net contribution to the Mongolian NDC, though under Article 6.4 some baselines, or requirements on how baselines are established, may be through UNFCCC approved methodologies.

Setting baselines that are conservative – below Business as Usual – results in some share of generated emissions reductions contributing to Mongolia's NDC. For example, a conservative baseline would be using ‘most efficient’ or ‘Best Available Technology’ parameters rather than ‘industry average’.

Conversely, baselines that do not take into account technology development and changes in policy will generate more emissions reductions for a project than would actually occur (i.e., non-conservative baselines). This is attractive to project developers and investors, but may ‘over-issue’, allocating more emissions reductions to the project than is accounted for in the national inventory. This then requires more mitigation elsewhere to make up the shortfall in the NDC.

Baseline setting requires the right balance between conservativeness to ensure environmental integrity and contribution to the NDC; and sufficient incentives for investment in low-emission technologies.
2.4.5 | LEGACY/END DATES

Limiting the crediting period of a project (the time during which ITMOs can be generated) to less than the technology lifetime provides a net contribution to the Mongolian NDC. For example, if the crediting period of a solar project is set at 5 years, and the technology life is 25 years, ITMOs accrue to the project in years 1 to 5, and the mitigation from year 6 to year 25 will accrue to Mongolia.

The shorter the ITMO crediting period, the greater the contribution to the NDC, but the higher risk and lower returns (and hence less attractive the project) to investors. As with other parameters, a balance must be struck between encouraging investment and reaching the NDC target.

2.4.6 | CAPPING ITMOS AND CORRESPONDING ADJUSTMENTS

If Article 6 is to be extensively used, it raises uncertainties for future emissions. Emissions may unexpectedly increase in one sector, while Article 6 projects and ITMO issuances in another sector might overperform, risking overshooting the NDC target.

A cap on maximum Corresponding Adjustments and ITMO issuances (in tCO$_2$e total, or tCO$_2$e/year) per project, per sector, or for Mongolia overall limits this risk. If such caps are included, consideration must be given to implementation of the cap to ensure that the most valuable projects have access to ITMOs. This should be determined at the outset or early in the NDC period. Any Article 6 projects should know their authorised cap (in tCO$_2$e) at approval, rather than a cap being applied after investment approval. This avoids undermining investor confidence and legal challenges, and so should be taken seriously by Mongolia, and all governments.

For example, a wind farm developer proposes ‘up to 50MW’ installed capacity and estimates reductions of 300,000tCO$_2$e/year, or 1.5MtCO$_2$e over 5 years. However, the wind farm produces 450,000tCO$_2$e/year by installing the full 50MW and optimising design for wind conditions. Without a cap, the developer could claim 2.25 million ITMOs over 5 years. Mongolia would then have a Corresponding Adjustment of 750,000tCO$_2$e higher than planned. If those emissions reductions are reflected in the national inventory (number of ITMOs issued = reduced emissions in inventory), this is not a problem for emissions accounting. However, ITMOs are a valuable asset, and the potential ‘extra’ ITMOs issued may result in higher mitigation ambition (install the full 50MW), or they may simply result in a higher profit margin for the investing company: the full 50MW investment was always the optimal and planned investment.

Applying a total upfront cap of 1.5MtCO$_2$e (or 300,000tCO$_2$e/year) for the project still provides a strong incentive to the developer, while giving greater certainty for the Mongolian government. Any emissions reductions beyond 1.5MtCO$_2$e could be a net contribution to the NDC target.
Applying a cap on ITMOs can assist the Mongolian government to manage and direct investments. The Mongolian government could decide on an overall economy-wide cap, then authorise individual projects (e.g. wind farms) that fit within the overall cap. This would be beneficial for mitigation by driving competition and ambition between investments as they vie to claim maximum ITMOs within the cap. To provide project investors with confidence, the application of a cap should be known in advance. The more specific the cap design, the higher the certainty, but an exact numeric ITMO cap may not be necessary provided the broad parameters and policy intent is stated clearly.

2.4.7 | FEES/TAXES

The Mongolian government could consider applying a fee when ITMOs are authorised. Any fees are perceived as a disincentive by project developers and investors, thus any fees must be low enough (or proportionally low compared to the investment) to avoid discouraging investment.

A fee could be fixed, to recoup the administrative costs of processing the application and issuing a letter of authorization. This should be modest and reflect the actual cost incurred (perhaps in the range €1000–€5000 per authorization) and be similar to fees applied by administrators under existing market mechanisms. It is worth noting that, while administrative fees are small relative to project investment costs, they are cash costs incurred at the very start of a project, and generally discourage project developers who have limited budgets during the design phase.

The government could also consider applying a per tCO$_2$e fee or tax, related to the opportunity cost of exported ITMOs, and not using this mitigation towards Mongolia’s NDC. If the fee is set at a level such that the overall cost of mitigation for the buyer is still lower in Mongolia than in their own country, it may not deter investment. To illustrate: if in Mongolia the cost of mitigation from a project is €4/tCO$_2$e & the licence fee is €6/tCO$_2$e (i.e.: €10/tCO$_2$e total for the buyer); and the cost of mitigation for a buyer in Europe is €20/tCO$_2$e, the investment may still be attractive.

This model may suit certain uses of Article 6 more than others: i.e. a national government directly procuring ITMOs for use towards its NDC may be willing to pay such a fee, but for mitigation outcomes sold more competitively, such as those used by airlines under CORSIA, such a fee may make Mongolian mitigation uncompetitive and therefore deter investment.

The intention of Article 6 is to bring forward and transfer mitigation that is outside the NDC scope (that is, not planned or needed to meet the NDC target). Well directed Article 6 ITMOs should therefore not entail an opportunity cost for NDC achievement, but rather should support mitigation activities above and beyond the NDC, to deliver extra reductions towards the NDC target through a host country share.

In reality, some actions and projects will cross the blurred lines of whether or not they are
needed to achieve the NDC. Actions may partly contribute to the NDC, and partly go beyond the NDC. In such cases, the use of fee proceeds is an important consideration. When ITMOs with Corresponding Adjustments are authorised this mitigation cannot be used towards Mongolia's NDC. Therefore, Mongolia could consider a model where the revenue gained from fees is targeted to be equal to (or more than) the cost of actions to achieve required mitigation, to ensure it can still meet its NDC. This could enable the implementation of Mongolia's NDC and draw in additional climate finance while avoiding the risk of missing the NDC target. This is the case in the illustrative example above where the fee (€6/tCO₂e) > cost of mitigation (€4/tCO₂e).

Transparent and professional management of any revenues beyond covering administrative costs (such as through an independent Climate Fund, potentially managed by accredited financial organisations), with pre-determined use of revenues would provide confidence to investors. Revenues may be used to support further mitigation, or for other purposes, such as adaptation, just transition of effected populations, or for longer term investment in infrastructure (such as rail, or grid upgrades) that facilitate broader mitigation and development benefits. Fees directed to the government’s general tax base revenue could discourage investors.

2.4.8 | EXISTING PROJECT PORTFOLIO TRANSITION: JCM, CDM

Mongolia hosts three CDM projects and six JCM projects.

Subject to decisions still to be made in the UNFCCC, the CDM projects may seek to register under Article 6.4, with some transition period and caveats. Where these projects continue to contribute to Mongolia's NDC and continue to need carbon finance for financial viability – that is, they are ‘vulnerable’ projects – Mongolia may choose to approve the transfer of ITMOs from these projects. On the other hand, if the projects have already reached financial stability and can continue to operate successfully without carbon finance, or where issuing ITMOs undermines the NDC (by claiming more emissions reductions than the national inventory counts), Mongolia may choose not to agree to make a corresponding adjustment for their units.

CDM projects may switch to the voluntary carbon market (e.g.: Gold Standard or Verra) to sell to different buyers such as corporates with voluntary targets. These projects may still seek a corresponding adjustment, so their units are eligible for purposes that require a unique claim, such as use by airlines under CORSIA, or towards corporate offset claims in the future.

The voluntary carbon market is similar to the CDM (it is for instance project based, uses established methodologies, and requires independent verification) and has the same considerations of whether projects are ‘vulnerable’, and some standards are developing processes to assess and identify units that have corresponding adjustments. However, voluntary carbon markets are generally more flexible, faster moving and less regulated. This has the benefits of allowing carbon finance to be more rapidly deployed making it more attractive to private sector entrepreneurs.
Historically, many governments have had little interaction (and often little awareness) of voluntary market projects within their jurisdictions. Now that Mongolia has an NDC, it may want – or need – to give more consideration to voluntary market projects, in particular if these seek corresponding adjustments for their emission reduction units.

The JCM project approvals include some attribution of emissions reductions between Japan, Mongolia, and (in some cases) the implementing project partner. The attribution is not an authorization of ITMOs, but there may be some expectation from counterparties to receive ITMOs. Since the JCM projects attribute a host country share to Mongolia, there is some contribution to the NDC. However, any mitigation prior to 2021 (i.e., outside the NDC accounting period) will not contribute to the NDC, and any ITMOs authorized for pre-2021 mitigation will require extra mitigation elsewhere to achieve the NDC. Thus, it is not to Mongolia’s advantage to authorize ITMOs for pre-2021 JCM mitigation, and it also may not be possible under emerging Article 6.2 guidance within the UNFCCC.

2.4.9 | DEMAND SIDE: BUYER APPETITE AND CONDITIONS

As illustrated in the ‘Swiss-Peru’ text box above, bilateral exchanges under Article 6.2 require approval from both seller and buyer. In initial Article 6 transactions, buyers are likely to be cautious, and include their own criteria to protect environmental integrity, such as the “…safeguard against incentives for low ambition…” of the Swiss-Peru agreement. It is in Mongolia’s interest to be able to show that any ITMOs do not undermine achieving the NDC target.

Beyond bilateral exchanges, ‘buyer’s clubs’ may emerge that consider UNFCCC to be minimum requirements\(^6\) and impose additional requirements to ensure high integrity ITMOs. An early indication of this is the formulation of the ‘San Jose principles’ supported by 32 buyer and seller countries in Madrid in 2019. These principles are not intended to establish a ‘club’, but rather to advocate for higher-integrity provisions within Article 6 guidance. Signatories and other countries that have endorsed these principles may still use them as the basis of their Article 6 cooperation, even if agreed Article 6 guidance is less stringent. The San Jose Principles are included in Annex 1.

CORSIA transactions will require corresponding adjustments under Article 6 for mitigation outcomes achieved from 2021 onwards, and already have some project requirements, such as the start of the project’s first crediting period after 1 January 2016. CORSIA recognizes several certification schemes (such as CDM, Gold Standard and Verra) that meet its eligibility criteria. Before authorizing mitigation outcomes to be used for CORSIA transactions, and agreeing to make a corresponding adjustment, Mongolia will need to understand the project methodology, and whether the mitigation quantification contributes to its NDC or not (e.g., considering how

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\(^6\) Similar to how the EU set additional criteria for importing CERs into the European Emissions Trading System.
ARTICLE 6 IN MONGOLIA

From that assessment, Mongolia may agree to make a corresponding adjustment, potentially including conditions such as a host country share. Similar considerations will be needed for any voluntary carbon market transactions for voluntary corporates offsetting commitments.

2.4.10 | HOLISTIC CONSIDERATION

Several of the above policy instruments overlap and should be considered holistically as well as individually. Some overlap in technical quantification (e.g., baseline and crediting period), while others overlap in how much they take from a project’s benefits, and hence attractiveness to investors (e.g., fees and host country share). Overlapping policies are acceptable provided their combined effects are understood and clearly communicated.

Other countries will be competing to attract Article 6 investments from finite ITMO demand. A complex approval process with high costs and a large portion of benefits being retained by Mongolia will discourage investors. Conversely, a simple approval process without sufficient safeguards may attract a lot of investment but result in Mongolia missing its NDC target.

With the development of Mongolia’s NDC Action Plan(s) it will be clearer where there are implementation gaps, and hence where Article 6 will be most needed. Policy decisions can then be made to focus on relevant sectors and strike the balance between NDC contribution and attracting investment.
Programme: Operationalising Article 6 in Mongolia

This section provides an overview of the considerations for implementing and operationalising Article 6 in Mongolia.

3 | QUANTIFICATION AND MRV

3.1.1 | ARTICLE 6 QUANTIFICATION CONSISTENT WITH NATIONAL INVENTORY

When project-based emissions reductions quantification is commensurate with national inventory compilation, any exported ITMOs reflect the reduction in the inventory. That is, when there is a Corresponding Adjustment for a project that claims a 1000tCO₂e ITMO, the inventory also ‘sees’ a decrease of 1000tCO₂e.

Conversely, when project-based emissions reductions use a different quantification approach to the national inventory, the calculated ITMOs may be more (or less) than those reflected in the national inventory, leading to falling short (or beating) the NDC target. This may arise:

— Inadvertently by different approaches that are both valid leading to different results, for example top-down assessment of land use sequestration compared to bottom-up assessments that are more site-specific;

— The used methodology not being calibrated to Mongolian circumstances, or it being non-conservative for other reasons;

— Over time, as circumstances change during NDC implementation. For example, an on-
grid solar PV project calculating emissions reduction by the accepted approach of (MWh delivered x Emissions Factor in tCO$_2$e/MWh) may establish an accurate grid Emission Factor of 1.0tCO$_2$e/MWh when it begins in 2020. As the NDC is implemented and renewable energy penetration approaches 30% in 2030, the grid Emission Factor might decrease from 1.0 to 0.8tCO$_2$e/MWh. If the Emission Factor is fixed ex-ante (that is, it is not updated over time), the ITMOs will be overestimated by 20%.

It is therefore important that any project or program emissions reductions calculation methodologies intended for ITMO approvals are compared with the national inventory calculation method. Differences can be resolved by: changing the project or (more difficult) national inventory quantification methods; including conservative project baseline or other parameters; or by including an overall adjustment, such as a host country share contribution.

It is in Mongolia's interest that projects use conservative baselines and quantification parameters to avoid overselling ITMOs and not achieving the NDC targets. Mongolia has an interest in taking a role in deciding (or at least modifying for use in Mongolia) any baselines that will be used within their jurisdiction under Article 6, in accordance with UNFCCC Article 6 guidance. Mongolia will have more discretion under Article 6.2 than Article 6.4, though even under Article 6.4, the most recent draft guidance establishes an option for the host country to specify baseline approaches and methodological requirements, under supervision of the Article 6.4 Supervisory Body. This provides Mongolia with greater control than was possible under the CDM.

3.1.2 | LIMITS TO ACCURATE MONITORING, REPORTING AND VERIFICATION

Not all interventions lend themselves easily to quantification, and others are difficult to verify. While land use change and nature-based interventions have much support and many benefits, they raise challenges. There may be variation over space and time, and sampling may not capture sufficiently representative data for accurate quantification, resulting in systemic bias. Further, biological sequestration is a slow process, that may include intermittent reversals that are beyond the control of the project developer (such as fire or drought) and beyond the NDC reporting period – creating problems for the future.

Interventions where outcomes are affected by many factors are difficult to verify. For example, energy efficiency in buildings: a project may be able to demonstrate an annual reduction in energy use in a building, but it may be difficult to verify that the reduction is due to the project. Other factors may have contributed to reductions: reduced occupancy, an increase in energy prices, annual climate variation, or efficiency measures taken by other actors (not the project). Well-designed projects, averaged over a portfolio of comparable buildings, can overcome these challenges, but monitoring and verification is complex and relatively expensive.
For cases where accurate or efficient MRV cannot readily be undertaken but the interventions are known to mitigate emissions and have multiple other benefits (related to energy security, poverty reduction, biodiversity, air quality etc.) an alternate approach can be considered. Drawing from Results Based Financing in the development sector\(^7\), the approach would be to provide an agreed and known set payment for completing a defined action. In the Article 6 context: to transfer a set number of ITMOs for completing defined mitigation actions. This could deliver large transaction cost savings and provided the issued ITMOs are conservative (and there is a net contribution to the NDC), be appropriate for certain sectors. There is likely to be more flexibility for this model under Article 6.2 than Article 6.4.

3.2 | PROCESSES

Operationalising Article 6 requires careful consideration of the above policy and program design elements. Consideration is also needed for the practical processes of operation. The more intentional (that is, targeted and specific) Mongolian policies are toward Article 6, the more streamlined and effective the processes of operation can be made.

3.2.1 | APPROVING PROJECTS AND METHODOLOGIES

For Article 6.2 (bilateral), Mongolia may plan for several structured agreements, with major trading partners &/or countries expressing interest in buying ITMOs under 6.2. This currently includes Japan, Sweden and Switzerland. Mongolia could undertake many bilateral agreements for transfers under Article 6.2 but would be better served to undertake 1-3 larger agreements to focus resources. Article 6.2 transactions are more likely to be sectoral and programmatic rather than project based. They may directly calculate emissions reductions or may be a broader estimate and undertaken on a ‘Results Based’ basis as noted above. This will be bilaterally negotiated with the partner country.

For Article 6.4 (project based) a larger number (>10) of relatively smaller, more directed projects may be expected, likely with private sector investment. Once the scope and scale of such projects is targeted, initial market testing (for example, inviting expressions of interest or pre-qualification) will help estimate the likely deal-flow. With an estimate of the expected number of transactions, processes can be better designed. For example, if the deal-flow is <10 over the NDC period, the process may be relatively manual, deal-by-deal. If deal flow expected is >20, processes should design in greater digitization and automation. In either case, process design should be transparent and allow for flexibility as the market evolves and expands.

\(^7\) For example, a World Bank education program: [https://www.worldbank.org/en/programs/reach#:~:text=Results%2Dbased%20financing%20is%20an(results%20are%20achieved%20and%20verified)&text=RBF%20interventions%20have%20been%20used%20in%20institutions%20within%20the%20education%20sector](https://www.worldbank.org/en/programs/reach#:~:text=Results%2Dbased%20financing%20is%20an(results%20are%20achieved%20and%20verified)&text=RBF%20interventions%20have%20been%20used%20in%20institutions%20within%20the%20education%20sector)
To maximise investment, processes should avoid any retrospective changes and have grace periods to phase in any necessary developments. They should transparently show:

- clear steps in project approvals, from initial engagement to issuance of ITMOs;
- clear timelines in process steps, with mandated maximum times for government action (e.g.: a maximum of 90 days from submission to notification of approval or rejection);
- the methodology(ies) applicable, including any recommended or fixed parameters or mandated data sources to be used;
- process for approving any variations or changes (for Mongolian circumstances) from UNFCCC approved methodologies;
- any fees applicable, on what basis they are calculated, payment times and requirements (currency, method of transfer);
- the Monitoring, Reporting and Verification (MRV) requirements. Most of these will be included in an approved methodology, but reporting frequency and format, as well as certification requirements for Verification should be specified;
- the government’s bases for decision making (what are the decision criteria? Under what circumstances might a project be rejected? Is there a legal basis for the government’s Article 6 engagement?);
- other project requirements, such as Environmental Impact Statements, land acquisitions, approvals of different Ministries, etc.;
- any other reporting information beyond the methodology, such as stakeholder engagement, contribution to SDGs or government strategies etc.

It may not be possible to specify all these elements at the outset. Where process points are undefined, it should be identified how, when, and under what circumstances, the processes may change. Mongolia can learn from other project approval processes, such as the CDM, Gold Standard and Verra, to see the sort of processes project developers would expect to see. The clearer the process, the more attractive it is to investors.

The same process could also be adopted for projects seeking authorization and corresponding adjustments to sell emissions reductions to airlines under CORSIA, or organisations seeking to make offsetting claims within the voluntary carbon market. These projects may be registering under Article 6.4 but could also register with independent standards such as Gold Standard or Verra. If Mongolia intends to host projects generating mitigation outcomes for these uses, it is also recommended that they use the same well-designed, transparent processes as described above.
3.2.2 | TRACKING, REPORTING AND REGISTRIES

If Mongolia participates in Article 6, quantification and MRV will need to be sufficient to satisfy the requirements of buyers and sellers, i.e. Mongolia and the buyer of ITMOs, whether that is a country or organisation. Mongolia will also need to follow any recording, reporting and registry requirements adopted under the UNFCCC, which are still under negotiation.

All ITMOs must be tracked and reported in BTRs to demonstrate there is no double-counting. Paris Agreement Article 6.1 states:

“Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of [ITMOs]... shall apply robust accounting to ensure... the avoidance of double counting...”

Mongolia will need the capacity to report:

- An initial report (before first transfer of ITMOs) to demonstrate meeting the requirements to use Article 6, the quantified NDC and communicating how corresponding adjustments will be detailed.

- Annual information on ITMO authorizations, transfers, acquisitions, holdings and specific uses of ITMOs by:
  - year in which the emission reduction took place (i.e.: vintage);
  - project type (especially if nature-based where there may be non-permanence concerns);
  - implementing organisation and project;
  - destination (exported to who?)

- In its BTR the annual information (above) on ITMOs as well as the cumulative quantity of ITMOs authorized, transferred and used.

This information is subject to an independent ‘technical expert review team’, who will check its consistency with Article 6.2 requirements.

ITMOs are akin to the ‘export’ of emissions reductions, and avoiding double counting through Corresponding Adjustments is required. Tracking this process must be transparent, traceable and exact. Therefore, Mongolia needs to have, or have access to, a registry to track ITMOs. This needs to track authorizations of ITMOs, their transfer, their use and their cancellation. The UNFCCC will set up an international registry with the necessary functionality, which Mongolia could choose to use.

Mongolia would also need to report any ITMOs transferred from projects registered under Article 6.4. It is expected that the new crediting mechanism under Article 6.4 will have its own registry, just as the CDM has.
An example of Registry reporting functions is shown below.

The diagram illustrates that:

Article 6.4 projects must conform to UNFCCC requirements (methodologies), and be independently Verified by an accredited entity. These projects will also be listed in the Article 6.4 mechanism registry housed in the UNFCCC central platform, in which Mongolia can request an account.

The ITMOs from Article 6.4 emissions reductions transferred internationally must be tracked in the Mongolian registry (or a Mongolian account in the international registry within the UNFCCC platform).

ITMOs generated through Article 6.2 projects, programs and policies need not interact with UNFCCC directly, but must be tracked in the Mongolian registry (or a Mongolian account in the international registry within the UNFCCC platform);

The Mongolian Registry communicates information (on vintage, project type, number of tCO₂e) to the buyer country &/or organisation;

The Mongolian Registry communicates with the UNFCCC ‘Article 6 database’ to provide information on ITMOs transferred, acquired, held, cancelled and/or used; including the vintage of emissions reductions, activity type and sector;

The Mongolian Registry provides information on the amount and vintage of emissions reductions (and hence Corresponding Adjustments) required in the National Inventory;
An international technical expert review team checks the consistency of information reported by Mongolia relating to ITMOs and notifies Mongolia of any inconsistencies; and to the Article 6 technical expert review team to undertake periodic evaluations.

The function of the Mongolian Registry is thus a depository of information, which contributes to the international depository of information: an Article 6 database, as part of a centralized accounting and reporting platform. It has four reporting recipients (Article 6.2 buyers, which could include airlines and companies as well as national governments), Article 6.4 buyers, the UNFCCC and the Mongolian National Inventory) that each require consistent and timely information.

Article 6.6 of the Paris Agreement requires:

“...that a share of the proceeds from activities under [6.4]...is used to cover administrative expenses as well as to assist developing countries...to meet the costs of adaptation”.

The exact amount and mechanism, and whether this should also apply to Article 6.2 activities, has not yet been agreed, but is expected to be automatically on the central Article 6.4 mechanism Registry.

This set of functions may initially seem complex, but actually the Registry need not be very elaborate. To guarantee traceability (and hence build investor confidence) a digitised registry should be planned, possibly with the use of distributed ledger technology (ie: blockchain), if Mongolia envisages Article 6 to include several projects in several sectors over several years (for example, >20 projects &/or programs across 2-3 sectors over >5 years). However, if only 1-2 programs are envisaged under 6.2, existing commercial software (such as excel, google docs, docusign, and locked pdf output documents) in the hands of capable individuals, can be sufficient and consistent with Article 6.2 requirements. Mongolia also has the option not to establish its own registry but instead to use the international registry established by the UNFCCC.

An appropriate balance between transaction cost and robustness needs to be struck. Any Mongolian Registry should benefit from donor support to build capacity and facilitate technology transfer.

3.2.3 | PROCESS OF CORRESPONDING ADJUSTMENTS

When Mongolia exports an ITMO\(^8\), it must make a Corresponding Adjustment to its national inventory:

- For each 1tCO\(_2\)e emission reduction ITMO exported...
- ...1tCO\(_2\)e must be added to Mongolia’s National Inventory.

\(^8\) That is, when a mitigation outcome generated in Mongolia is used by another country towards its NDC, or by another entity (such as an airline) for an authorised use.
The issuance of an ITMO with corresponding adjustment (with reference to a unique serial number) is important to project developers, as this represents the realized commercial value of the emissions reductions. Hence, promptness of issuance is important for project developers, as are transparency, clear processes and authorisation structures.

Corresponding Adjustments are made to the Mongolian inventory, and the inventory of the receiving country\(^9\). When using Article 6, buyer and seller countries must track annual information on ITMOs that have been authorized and transferred. Biennial Transparency Reports (BTRs) must include annual information, including demonstrating the application of corresponding adjustments to their emission balance, based on their national inventory. Thus, the compilation, approval and information on Corresponding Adjustments from the Registry must align with the annual reporting period.

Exact submission time to the UNFCCC has not (yet) been stated, but it should not be more than a year after the emissions reductions take place. For example, emissions reductions taking place during 2022 should be reported and logged on the Registry by early 2023, and ITMOs issued. The required Corresponding Adjustment information should be transferred to the Mongolian National Inventory and buyer inventory as soon as possible, but not later than mid-2023. This allows sufficient time for the compilation, QA/QC and approval of inventories before submission to the UNFCCC (and inclusion in the UNFCCC Article 6 database) within 2023.

3.2.4 | IMPLICATIONS OF PROCESSES AND TRANSACTION COSTS FOR GOVERNMENT AND PARTICIPANTS

One of the learnings from Kyoto-era project mechanisms is that complex methodologies and long process times are a material deterrent to investment. These can be streamlined and optimized, but the cost of establishing approval processes, MRV Systems, governance and a Registry is non-negligible.

If the intended use of Article 6 is well targeted by the Mongolian government, transaction costs and times can be minimized. Mongolia should actively seek and expect international assistance in setting up and building capacity for any Article 6 processes, especially if entering into bilateral agreements with buying governments. Nonetheless, Mongolia must be confident of uptake (through market research and stakeholder consultations) and that sufficient investment will be forthcoming to warrant the resources required.

Participation in Article 6 is unlikely to be worthwhile for 1 or 2 medium-sized projects, but transaction costs can be immaterial for larger scale or a larger number of targeted interventions, in particular if international support can be drawn on.

\(^9\) Where ITMOs are used by organisations for compliance under CORSIA, or in the voluntary carbon market, the Corresponding Adjustment is made to the Mongolian inventory, but not to another national inventory.
EXTRACTS FROM STATEMENTS OF SAN JOSE PRINCIPLES\textsuperscript{10} FOR HIGH AMBITION & INTEGRITY IN INTERNATIONAL CARBON MARKETS

Signatory Parties are of the view that the implementation of the Paris Agreement must be firmly grounded in what the best available science tells us is necessary to deliver on the long-term temperature goal of the Agreement: the highest possible ambition in mitigation and adaptation.

There is an urgent need for clarity with regard to the future international framework for use of market-based approaches towards international climate goals.

These Parties seek to deliver the following principles, through an Article 6 rule book that at minimum:

— Ensures environmental integrity & enables the highest possible mitigation ambition

— Delivers an overall mitigation in global emissions, moving beyond zero-sum offsetting approaches to help accelerate the reduction of global greenhouse gas emissions

— Prohibits the use of pre-2020 units, Kyoto units and allowances, and any underlying reductions toward Paris Agreement and other international goals

— Ensures that double counting is avoided and that all use of markets toward international climate goals is subject to corresponding adjustments.

— Avoids locking in levels of emissions, technologies or carbon-intensive practices incompatible with the achievement of the Paris Agreement’s long-term temperature goal.

— Applies allocation methodologies and baseline methodologies that support domestic NDC achievement and contribute to achievement of the Paris Agreement’s long-term temperature goal

— Uses CO2-equivalence in reporting and accounting for emissions and removals, fully applying the principles of transparency, accuracy, consistency, comparability and completeness

— Uses centrally and publicly accessible infrastructure and systems to collect, track, and share the information necessary for robust and transparent accounting

— Ensures incentives to progression and supports all Parties in moving toward economy-wide emission targets.

— Contributes to quantifiable and predictable financial resources to be used by developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation

— Recognizes the importance of capacity building to enable the widest possible participation by Parties under Article 6

They invited other countries, multi-national and sub-national entities and multinational institutions to join us in the full operationalization of all the above principles, to support the highest possible ambition and environmental integrity.