

Call for input 2023 - Meaningful engagement of Indigenous Peoples and local communities in Article 6.4 mechanism

Contribution for consideration by the A6.4 Supervisory Body

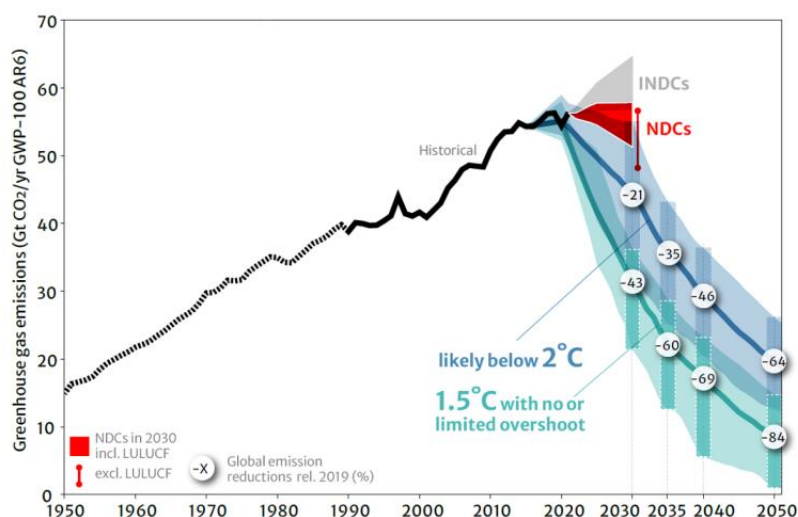
Dear Members of the A6.4 Supervisory Body, dear UNFCCC A6.4 Secretariat Team,

We are glad to submit our suggestions to the call for public inputs on how to encourage and how to meaningfully engage with encourages Indigenous Peoples, local communities, on the work of the Supervisory Body and the A6.4 mechanism.

1 Introductory remarks

We ask initially for your patience to these remarks, we deem them as relevant before answering the questions asked in the public call. We again remember the difference between A6.4 and Kyoto. A6.4 is a market mechanism to **support the National Determined Contributions - NDCs implementation process** towards the carbon neutrality, in a transition from the present status quo (Global Stocktake 2023) towards the global neutrality in the year 2040 to 2050, as Figure 1 clearly indicates.

Figure 1
Historical emissions from 1950, projected emissions in 2030 based on nationally determined contributions, and emission reductions required by the Sixth Assessment Report of the Intergovernmental Panel on Climate Change



		Reductions from 2019 emission levels (%)			
		2030	2035	2040	2050
Limit warming to 1.5°C (>50%) with no or limited overshoot	GHG	43 [34-60]	60 [49-77]	69 [58-90]	84 [73-98]
	CO ₂	48 [36-69]	65 [50-96]	80 [61-109]	99 [79-119]
Limit warming to 2°C (>67%)	GHG	21 [1-42]	35 [22-55]	46 [34-63]	64 [53-77]
	CO ₂	22 [1-44]	37 [21-59]	51 [36-70]	73 [55-90]

Source: 2023 Global Stocktake Synthesis Report. UNFCCC Subsidiary Body, 59th Session.



We also need to recognize that:

every NDC is the aggregation of our individual contributions, progressively taken, from local, provincial, up to the national level (and from there to the global level). We, as members of local communities and indigenous people, are responsible for our NDCs, to the same level that we are responsible for the politicians and national governments that have signed and ratified the Paris Agreement, and for all actions these politicians are taking for climate mitigation, including their economic and monetary decisions and military actions, impacting our GHG emissions and human induced climate forcing.

The A6.4 is a market mechanism authorized and regulated by the DNAs participating in it: DNAs may authorize first transfers of ITMOs ("**A6.4 ERs exportation**") by host countries NDCs and "**A6.4ERs import and use**" by the buyers/users NDCs, or by other users of ITMOs for international mitigation purposes, e.g. the international aviation or shipping carbon offsets programs.

A6.4ERs are thus internationally tradable commodities (certified units) for the demonstration of NDCs achievements by the DNAs or for the private business regulated by them within national or subnational carbon emissions allowances. As any tradable commodity, the exporting and importing countries may raise border adjustments, taxations, tariffs, or shares, therefore the generation of ITMOs may be an opportunity for all levels of governances (starting at **local governance levels**) to generate public or private incomes.

It's very important to distinguish the A6.4 from Kyoto. In the CDM approach the host countries and host communities at the non-annex-I countries did not have own commitment or contribution to climate mitigation and carbon abatement, and the market players (sellers and buyers) were at two opposite sides of the "project wares balcony" or "CERs-pipeline": the CDM ERs were sold to the annex-I to demonstrate their commitments. Now, under Paris Para 6 framework, we are all "payers of a shared bill", which is checked at the end of each NDC implementation period. We are like commensals sharing a table with the limited amounts of emissions allowances. Every 5 years we close a bill for the shared consumption measured at the global stocktakes. Each NDC is our domestic obligation, our homework to be done, and demonstrated by means of the annual national inventories and Biannual Transparency Reports - BTRs. Only what we can achieve beyond our NDC, by being tougher than the minimum contribution we have agreed in the running NDC implementation period, we are able to register and get the authorization for "**lending**" this extra amount to the abroad user by means of the ITMOs issuances. The correct accounting of A6.4ERs is indeed this:



A6.4ERs (and A6.2) ITMOs are borrowed from abroad, not purchased, because they are taken from the overall allowances by the limited global stocks up the long-term neutrality, and discounted from them by means of the “corresponding adjustments” of the host NDC¹.

It is in this context that we need to evaluate the participation of the local communities and indigenous people. The NDCs, built on our individual contributions, are our primordial, obligatory commitment² and the ITMOs generation our prerogative if we adhere to a cooperative approach or A6.4 activity to demonstrate we are more ambitious than our agreed minimum contribution. Or, alternatively, we may use the A6.4ERs procured from ITMOs generated abroad if we are less ambitious than our agreed minimum commitments at the local, national, or corporate boundary.

There is a false expectation that the market mechanisms based on the carbon pricing and carbon offsets will lead the transition to the emissions neutrality. This is not true, if the market is driven by the conventional buying and selling of mitigation outcomes paid in conventional monetary units. The financial assets worldwide (private wealthy and public treasures) have been accumulated without proper consideration of environmental, social and climate externalities. Moreover, the methods used for financial feasibility analysis of economic activities do not cover adequately these externalities. The perverse consequence is straightforward: the money transferred by purchases of ITMOs by the users to the selling host parties or project owners will result (or have a great chance to result) in use of the achieved income by the beneficiary host party/project participants to reinvest or expend this money in activities that will cause emissions that may partly or totally offset the net mitigation caused by the activity that gave rise to the A6.4ERs. The CDM and VCM are very good lesson on this.

However, the Paris framework has created a silver bullet to overcome this gap. The **Katowiche** decision on Modalities, Procedures and Guidelines for the Transparency Framework (the NDC implementation process from the Paris Article 13), together with the **Glasgow** decisions on Guidance on Cooperative Approaches of Article 6.2 and the Rules, Modalities and Procedures for

¹ We thus confirm and reemphasizes our previous indications that the ITMOs may have an expiration date when the authorizations are issued by the host NDCs. At the expiration date the ITMOs are reinserted as domestic NDCs achievements, by reverting the corresponding adjustments initially incurred when they were issued, and the user NDC (or other final users of the ITMOs) will have to replace the expiring ITMOs by means of own domestic achievements, or by procurement of new ITMOs at the market at that point in time. If the host country still has room for not reinternalizing the ITMOs at that point in the future, it may consider reselling or to extend the validity. Therefore, the face value of an ITMOs is bound to its validity period and expiration date. A6.4 ERs for **CO₂ removals** are necessarily and obligatory bound to an expiration date, they are always subject to reversals, for intentional or unintentional CO₂ releases or reemissions. Please refer to our previous contributions to the SB calls for inputs at https://unfccc.int/sites/default/files/resource/SB006_Call_for_input_mechanism_registry_Carbon_Recycling.pdf, https://unfccc.int/sites/default/files/resource/SB007_call_for_input_AS_P_Carbon_Recycling.pdf and https://unfccc.int/sites/default/files/resource/SB007_call_for_input_ACP-P_Carbon_Recycling.pdf.

² the NDC is a national “contribution”, issued by our legal representatives at the COPs, but once the parties have ratified the Agreement, the NDCs become a domestic legal commitment by the country, to be settled down in its regulatory system. The domestic policies are sovereign to determine the way to arrive at the NDC targets, however, national carbon markets based on the disaggregation of the emissions by sectoral/corporative contributions and/or subnational (states, provinces, or local contributions) are the most adequate, especially if they follow the accounting and registry standards settled by the UNFCCC accounting bodies, please refer to our contributions as indicated in the previous footnote.



the Mechanism Established by Article 6.4, and the **Sharm el-Sheykh** decision with the Guidance on the Registries **have created a “climate mitigation monetary unit, expressed in NDCs metrics”**. The UNFCCC and the A6.4 SB are in the role of a **“central bank”** for the registry of the NDCs units and the ITMOs exchanges of **A6.4ERs (emissions reductions and removals)** within the **“race to zero”**.

If the economic transition towards the neutrality follow the rising “marginal abatement costs” (see IPCC WG-III AR6 Report Section 17.2), and if carbon pricing is introduced by the parties (individually, or in climate clubs arrangements, with border adjustments), it is expected that the price for carbon abatement (and the value of A6.4ERs units) will increase over time, since the less costly mitigation outcomes will be implemented firstly.

Therefore, ideally, preferably, or, by option of the participant NDCs, obligatorily, all contractual arrangements for A6.4 activities and A6.2 cooperative approaches, including the transaction costs for design, registration, monitoring, and all fees for project developers and DOEs should be settled down not in USD or EUR or any conventional monetary units, but in A6.4ERs and A6.2ERs units registered at the UNFCCC registry system (the regulated climate mitigation monetary units).

The reason is simple: the face values for these ITMOs units are expected to increase over time, and the asset holders will be inclined to keep these assets in savings accounts, whenever the user NDCs or other mitigation purposes users do not pay the expected prices estimated at the project design. Observe that this rising market values of the A6.4ERs are also caused by the baseline contraction factor of emissions reductions, that tends to increase the scarcity of ITMOs generation potentials over time.

2 Our inputs to the asked questions

With the previous remarks in mind, we may now express our views and suggestions to the questions from the public call.

1) What are the current or anticipated challenges Indigenous Peoples and local communities face in engaging with the Article 6.4 mechanism?

First is to understand that ***all of us, irrespective on which country or city we live, are part of the local communities and indigenous people, and are responsible for the generation and use of A6.4 emissions reductions or A6.4 emissions removals (the A6.4ERs units).***

Unlike CDM, every country (developed and developing) may host A6.4 activities.

We have indicated this previously to the SB in a call for input (available at https://unfccc.int/sites/default/files/resource/Carbon_Recycling.pdf or at our website at https://carbon-recycling.eco/wp-content/uploads/2023/10/19-06-DOTG-MethRequirements_final.pdf). The only condition is that the activities participants can demonstrate their contribution is additional to the NDC and seek the authorization from their



host DNAs to authorize the activity participation and the issuances of ITMOs, instead of registering and seeking the credits at the national level. This situation will probably be more frequent in the **demand side A6.4 Methodologies**. Please consider in the table below some exemplary cases of potential methodologies under this scope.

Table 1: Examples of methodological scopes for demand side emissions reductions for A6.4 activities or A6.2 cooperative approaches, that might be implemented in developed as well as in developing countries to generate ITMOs to the benefits of local communities/individual households or indigenous people. The eligible technologies are listed based on the IPCC Avoid/Shift/Improve approaches. Source: Table 5.1 of the IPCC WG-III AR6 Report.

Service	Emission decomposition factors	Avoid	Shift	Improve
Mobility [passenger-km]	kg CO ₂ = (passenger km)* (MJ pkm ⁻¹)* (kg CO ₂ MJ ⁻¹)	Innovative mobility to reduce passenger-km: Integrate transport & land use planning Smart logistics Tele-working Compact cities Fewer long-haul flights Local holidays	Increased options for mobility MJ pkm⁻¹: Modal shifts, from car to cycling, walking, or public transit from air travel to high speed rail	Innovation in equipment design MJ pkm⁻¹ and CO₂-eq MJ⁻¹: Lightweight vehicles Hydrogen vehicles Electric vehicles Eco-driving
Shelter [Square meters]	kg CO ₂ = (square meters)* (tons material m ⁻²)* (kg CO ₂ ton material ⁻¹)	Innovative dwellings to reduce square meters: Smaller decent dwellings Shared common spaces Multigenerational housing	Material efficient housing tons material m⁻²: Less material-intensive dwelling designs Shift from single-family to multi-family dwellings	Low emission dwelling design kgCO₂ ton⁻¹ material: Use wood as material Use low-carbon production processes for building materials (e.g., cement and steel)
Thermal comfort [indoor temperature]	kg CO ₂ = (Δ°C m ³ to warm or cool) (MJ m ⁻³)* (kg CO ₂ MJ ⁻¹)	Choice of healthy indoor temperature Δ°C m³: Reduce m ² as above Change temperature set-points Change dressing code Change working times	Design options to reduce MJ Δ°C⁻¹ m⁻³: Architectural design (shading, natural ventilation, etc.)	New technologies to reduce MJ Δ°C⁻¹ m⁻³ and kgCO₂/MJ: Solar thermal devices Improved insulation Heat pumps District heating
Goods [units]	kg CO ₂ = product units * (kg material product ⁻¹)* (kg CO ₂ kg material ⁻¹)	More service per product: Reduce consumption quantities Long lasting fabric, appliances Sharing economy	Innovative product design kg material product⁻¹: Materials efficient product designs	Choice of new materials kg CO₂ kg material⁻¹: Use of low carbon materials New manufacturing processes and equipment use
Nutrition [Calories consumed]	kg CO ₂ -eq = (calories consumed)* (calories produced calories)	Reduce calories produced/calories consumed and optimize calories consumed:	Add more variety in food plate to reduce kg CO₂-eq cal⁻¹ produced	Reduce kg CO₂-eq cal⁻¹ produced: Improved agricultural practices



	consumed-1)* (kg CO ₂ -eq calorie produced-1)	Keep calories in line with daily needs and health guidelines Reduce waste in supply chain and after purchase	Dietary shifts from ruminant meat and dairy to other protein sources while maintaining nutritional quality	Energy efficient food processing
Lighting [lumens]	kg CO ₂ = lumens* (kWh lumen-1)* (kg CO ₂ kWh-1)	Minimize artificial lumen demand: Occupancy sensors Lighting controls	Design options to increase natural lumen supply: Architectural designs with maximal daylighting	Demand innovation lighting technologies kWh lumens-1 and power supply kg CO₂ kWh-1: LED lamps

The above table is far from comprehensive, several other opportunities may be found in the IPCC chapters for the different sectoral chapters: energy, AFOLU, settlements, buildings, transport, industry, wastes, cross-sectoral, etc. The above table is also far from pacific and consensual for its proposed methodological scopes but is a good starting point for the discussion. In developing countries, concepts related to **suppressed demand and Decent Living Standards (DLS)**, including the dimensions of nutrition, shelter, living condition, clothing, health care, education, and mobility, shall be considered. In developed and developing countries the distinction between **necessities vs luxuries** should be used to determine thresholds for the final services level for the avoid and shift methodological scopes. As discussed in our previous input above quoted, the concept of **standardized baselines** may be used to determine the baseline emissions in the national and subnational disaggregated context, of course, under consideration of the **baseline contraction factor induced by the NDC implementation process**. The use of **cooperative approaches**, to bind together the individual project participant population and for monitoring of the net effects (baseline, project, leakage) shall be used in the methodologies. The generation and accounting of the ITMOs may be based on the coordinative entities performing the role of **A6.4ERs accounting banks** with the individual participants being account holders in the bank of the cooperative achievements.

The scope for methodologies involving the local communities and indigenous people for the **removals activities** is even more promising. Please refer to our proposed BCCS/Biochar technology with the carbon-recycling principle: the tangible storage of stable and clean carbon-coins for the benefit of future generations, generated by the urban collection of biogenic and plastic wastes (the pyrocarbon route) and the urban and rural generation of purely biogenic carbon-coins (the biocarbon route), resulting in the CO₂ removals, simultaneously with the emissions avoidance of fossil-based CO₂, methane and nitrous oxide.

The carbon-recycling cooperative approach is described in our previously submitted E-book, available at https://unfccc.int/sites/default/files/resource/Carbon_Recycling.pdf and at our website https://carbon-recycling.eco/wp-content/uploads/2023/10/19-06-E_book_carbon-recycling.pdf. It describes the implementation of the mitigation activity based on the contribution of local communities and indigenous people (the primary providers of the feedstock and rewarded for every quantity of recycled carbon obtained as the final output). The reverse carbon flow from the recycling is bound to the income generation universally to all participant communities, households, and economic activities at the rural and urban landscapes, and the biocarbon/pyrocarbon generated assets are stored in tangible and stable



amounts, auditable any time in the future, serving also as refilling substrate for nature conservation and restoration projects.

Now, making a clearer answer to the asked question:

Major challenge to the local communities and indigenous people is to be the protagonists, not the spectators, at both sides of the mechanism.

When the local communities are not the **project owners and ITMOs generators** (like the demand side and the carbon-recycling removals **cooperative approaches** above described), the local communities will be considered in the same way as they have been treated in the traditional CDM and VCM approach: as “**local stakeholders**”. This role has not been very transparently and fairly considered in the implementation of the carbon offset projects under the Kyoto and VCM framework, and there is no expectation that this will be better in the Paris A6.4. On the contrary: the emissions transition towards the “net zero” is expected to cause the **mobilization of vast amounts of resources (renewable and non-renewable)**, to supply the consumption of the myriad of among themselves competing “low carbon” and “green” technologies claiming to achieve the mitigation of GHG emissions while supplying our “needs” for final services and goods.

The environmental and socio-economic impacts on the local and indigenous communities tend to be large, if the transition at the supply side methodologies is driven by the conventional monetary investments based on private corporate enterprises. It is to reinforce: the NDCs are disaggregated not only vertically (from national to local demand side contributions), but also horizontally, into the five sectoral scopes composing the national inventory (i) energy, (ii) industrial processes and products use, (iii) agriculture, forestry, and other land use, (iv) waste, (v) other. All the major players in these sectors are the **incumbents of the status quo** and have strong lobbying influence on the national and subnational governments decision making process, as well as on the financial institutions and monetary authorities. They have been convinced the climate change requires the transition to a net zero emissions scenario (the national governments have ratified the Paris Agreement), but there is not a consensus on the **just transition** concepts, taking care of the interests of the local communities and indigenous people.

Under the A6.4, there is a chance that the SB takes into consideration the side effects on the local communities and indigenous people, but this is not guaranteed, gaps are highly probable. The mechanism follows the same approach as the CDM, both sides of the activities (sellers and buyers) have the same interest of overestimation of the outcomes. The best way the local communities and indigenous people may act regarding these impacts is to establish strong connections among themselves and with the higher levels of climate and environmental regulation (provincial, national, and the SB) to impose the adequate and fair contemplation of their interests. Local communities should be able not only to require their interests are contemplated in the SB decision making (using the tools in place for the SB decision), but also requiring the local, provincial, and national environmental and climate authorities (the DNAs) to make the local interests contemplated in the design and implementation of the A6.4 activities.



Practical tips to question 1:

- Organize governmental and non-governmental climate action groups and entities locally and seek direct contact to A6.4 SB and participation in networks for local climate actions initiatives countrywide and in international level.
- Request the DNA to make the disaggregation of NDCs and national inventories into subnational levels (provincial, municipal, and local/individual contributions), to demonstrate the expected contribution of these levels in the national mitigation outcomes, and to disclose opportunities for the implementation of mitigation activities supported by the NDC (national outcomes, national markets) or that may be able to generate ITMOs in A6.4 activities.
- Take part in cooperative approaches under A6.4 and A6.2 based on Emissions Reductions at demand side, and at Emissions Removals for afforestation and reforestation and green/blue economy at urban and rural activities and biochar/BCCS projects.
- When the local community or the local landscape is affected by the enhanced activities for resources utilizations required by supply side activities (e.g. enhanced mineral extractions for conventional ores or metals required for the renewable energy infrastructure, e.g. cobalt, copper, lithium, and rare earth elements) or when the region is required to be part of the infrastructure for the climate transition (wind, solar, grid, pipelines, etc.) establish the direct contact with the national or international climate authority (A6.4 SB) to request, at least: (i) proper consideration of the local interests in the project design, licensing, installation and operation; (ii) that any enhanced emissions in the local inventory is discounted by corresponding adjustments in the NDC of the country or of the user country NDC to discount the increased emissions of the supplier from the decreased emissions from the consumer (leakage); (iii) that any final product using the primary non-renewable resource extracted from the locality is required to be recycled at the end of its lifetime.

2) What mode of communication could facilitate better dialogue between the Supervisory Body and Indigenous communities?

It is to consider the “**glocal dimension**” of climate change: locals are the major **contributors to causing and therefore also to mitigating** the global impacts of their (our) GHG emissions, and same time the **vulnerable and adaptation demanding side** of the impacts and consequences caused by climate change. Therefore, it is crucial that:

local communities must assume the direct communication local ↔ global, without any renounce to their protagonist role in the national and subnational regulatory systems.

Further:

local communities must establish the direct, open, and intimate cooperation among themselves at local ↔ local relationships, without border restrictions by the national and subnational regulatory systems.

Climate change addressing should be based on cooperative approaches uniting the local communities directly among themselves, under the umbrella of the global governance. We all breathe the same air, and we all share the atmosphere as our global commons. National borders do not belong to the climate mitigation, and national governments are unfortunately not taking the necessary actions to deal with the emergence that cannot be denied any more. Climate is speaking for itself, the daily news, and not the scientists’ warnings, are convincing the local



communities we are in front of a challenging and urgent emergency call from nature, requiring our individual behavioral change to address our joint effect on the planet.

The SB and the UNFCCC deserve our critical confidence and support. The UN sectorial facilities (WHO, UNFCCC, and so many others) are our hope for a just and fair transition to one better world. Unfortunately, the UN security council and the UN general assembly do not reflect this hope, they reflect rather the financial and military lobbies that have created them by the “winners” of the last world war. They will always point towards a “foreign enemy” to justify the predatory exploration of the natural resources and the weaponry accumulation for the next “expected world war”. They are based on the believe of belligerence as the driver for the human behavior, not the cooperative work and scarce resources sharing in peaceful coexistence.

Practical tips to question 2:

- The SB has under its structure and governance the National Authorities as formal members of the A6.4 mechanism. DNAs are responsible for authorizations for project participations and ITMOs authorizations. The SB should also request the National Authorities, when designing national emissions trading mechanisms with interconnection with the A6.4 registry system, that the DNAs also stablish governances with the inclusion of subnational levels (provinces, municipalities, etc.) in the formal decision making for the national mitigation policy and projects accounting.
- Similarly, the SB should stablish a Standard for the recognition of national mitigation policies and national market-based mechanisms with at least the same or more effective instruments for the consultation and participation of the local communities and indigenous people in the design and approval, monitoring, and reporting of the activities outcomes.

3) How would you envision meaningful long-term engagement and active participation from Indigenous Peoples and local communities on the work of the Supervisory Body and the mechanism?

The Paris Agreement long-term goal is the carbon neutrality in the middle of the century. This must also be converted into our individual commitment, applicable and expected as contributions by all local communities and all indigenous and non-indigenous people. We have already reached the most challenging political barrier, which was that the 196 parties and our politicians in charge have ratified the Agreement and are now requested to act and demonstrate the outcomes in the NDC implementation process. The first round is scheduled for 2030. We, altogether, have a bill to pay, based on our historical responsibilities, and on the expected contribution we have agreed to leave for the future generations. Let's now assume this commitment in all levels, and disaggregate the NDCs into provincial, local and individual contributions, and do our homework. The direct connection with the global climate regulatory authority (the SB is part of it, as well as the DNAs that are part of the A6.4 mechanism) is the best way to make the alliance to our local neighbor, which is any one human being, anywhere in this planet, sharing the same climate and breathing the same air.



Practical tips to question 3:

- The long-term goals of the mitigation require that the A6.4 Activities are designed to generate ITMOs not only during one or two NDC implementation periods (2030 to 2035), especially the removal activities should have long-term targets since their conception (three crediting periods of 15 years each are eligible). The A6.4 SB and the local communities should ask for the proper justifications by the activity proponents when a shorter period is proposed at the design.
- The continuation of the activities up to their proposed termination at the end of the crediting period is an expected situation, and the proper measures for the finishing and decommissioning of activities by its regular implementation should be part of the SB methodologies. In the Kyoto and VCM experience, there has been (and still continues to happen) large number of abrupt abandonment and/or interruption of the activities, due to the collapse of the market values of the CERs and VERs. At A6.4 this situation is not expected to occur, because the mechanism itself does not have a termination date (unlike Kyoto). However, markets are always subject to unexpected situations. Therefore, the design of A6.4 activities could require from the participants to have a system for the planned or unplanned interruption or termination of the activity, with the consideration of the consequences this termination may have on the local communities, and with the measures that will be taken to avoid or minimize the negative impacts.

Vitoria, Espirito Santo, Brazil, November 01, 2023

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