

Submission by ICOMOS on behalf of the Heritage Adapts to Climate Alliance (HACA) Coordinated by Preserving Legacies for the Climate Heritage Network

This Submission is made in response to the following Call for Submissions:

Issue: Global Goal on Adaptation UAE-Belem Work programme on Indicators UAE Framework for Global Climate Resilience

Title: Parties and non-Party stakeholders, including relevant constituted bodies, United Nations organizations and specialized agencies, and other relevant organizations from all geographical regions, to submit information on existing indicators for measuring progress towards the targets referred to in paragraphs 9–10 of decision 2/CMA.5 in use at the local, national, regional and global level, including, if available, information on associated methodologies and data readiness for such indicators, as well as identified gaps and areas for which the development of new indicators may be needed.

Session Name: SBI 61

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1. Introduction

- 1.1. Decision 2/CMA5 adopted a framework for the Global Goal on Adaptation known as the United Arab Emirates Framework for Global Climate Resilience ("UFGCR").
- 1.2. Paragraph 39 of 2/CMA5 established a two-year work programme on indicators for measuring progress achieved towards the targets referred to in paragraphs 9–10 of decision 2/CMA5 with a view to identifying and, as needed, developing indicators and potential quantified elements for those targets.
- 1.3. The Subsidiary Body on Implementation and the Subsidiary Body on Science and Technological Advice invited Parties and non-Party stakeholders, including relevant constituted bodies, United Nations organizations and specialized agencies, and other relevant organizations from all geographical regions, to submit via the submission portal by 31 July 2024 information on existing indicators for measuring progress towards the targets referred to in paragraphs 9–10 of decision 2/CMA.5 in use at the local, national, regional and global level, including, if available, information on associated methodologies and data readiness for such

indicators, as well as identified gaps and areas for which the development of new indicators may be needed, as stated in paragraph 9 of decision FCCC/SB/2024/L.6 (Draft conclusions proposed by the Chairs on Matters relating to the global goal on adaptation).

- 1.4. Paragraph 10 of that decision also requests the Chairs to prepare, with the support of the secretariat, in collaboration with relevant United Nations organizations and specialized agencies, and with contributions from relevant constituted bodies, a compilation and mapping of existing indicators relevant to measuring progress towards the targets referred to in paragraphs 9–10 of decision 2/CMA.5, including information on areas potentially not covered by existing indicators, in advance of the workshop referred to in paragraph 22 of the decision, taking into account the submissions referred to in paragraph 9 referenced above.
- 1.5. Heritage Adapts to Climate Alliance (HACA) collaborators appreciate the opportunity to share views on these matters pertaining to cultural and natural heritage, and the linked concepts of traditional knowledge, Indigenous Peoples' Knowledge, and local knowledge systems.
- 1.6. The field of cultural heritage represents a gap in adaptation policy and planning in many areas and sectors. Existing cultural heritage-related indicators tend to touch on matters like disaster risk reduction or economic impact (e.g. tourism) but lack specific relevance to climate adaptation.
- 1.7. Moreover, existing indicators generally do not address the multiple elements of the thematic target of 2/CMA.5 on cultural heritage (paragraph 9g) which covers adaptive strategies for heritage sites and adaptive strategies for cultural practices, as well as guiding the design of climate-resilient infrastructure by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems.
- 1.8. There is also a need to include indicators for measuring progress towards the dimensional targets referred to in paragraph 10 of decision 2/CMA.5 that address key cross-cutting matters highlighted elsewhere in decision 2/CMA.5, including (a) ethical and equitable engagement with Indigenous Peoples and local communities (UFGCR paragraph 22); (b) application of traditional knowledge, the knowledge, wisdom and values of Indigenous Peoples, and local knowledge systems in implementing the framework for the global goal on adaptation (UFGCR paragraph 14 and 22); and (c) climate education and empowering people, in particular children and youth, with the knowledge, skills, values and attitudes necessary for active action to combat climate change (UFGCR paragraph 23).
- 1.9. HACA collaborators consider that many of these aspects of cultural heritage are identified gaps and thus areas for which the development of new indicators is needed, drawing in some cases on relevant, existing indicators.

This submission builds on the <u>submission dated 30 March 2024</u>¹ of the Heritage Adapts to Climate Alliance (HACA) regarding the UAE – Belém work programme.

HACA was founded by the **Climate Heritage Network**² (CHN) to advocate for cultural heritage in the Global Goal on Adaptation including the elaboration of UFGCR thematic target 9(g) on the protection of cultural heritage. The HACA Secretariat is hosted by the **Preserving Legacies**³ project in partnership with the International Council on Monuments and Sites (ICOMOS) with support from the National Geographic Society.

¹ https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202403300618---Cultural%20Heritage%20Submission%20UAE%20to%20Belem%20WP%20GGA.pdf

https://www.climateheritage.org/

³ <u>https://preserving-legacies.webflow.io/.</u>

CHN is a global network whose members are committed to unlocking the power of culture, from arts to heritage, to help people imagine and realize low-carbon, just, climate-resilient futures and to support communities in achieving the ambitions of the Paris Agreement. The intersection of culture and heritage and adaptation and resilience is a key issue area under the CHN 2022-24 Action Plan.⁴

The International Council on Monuments and Sites (ICOMOS)⁵ is an international non-governmental organization which works for the conservation of monuments and sites around the world. It has over 11,000 members in 132 countries and is an organization with observer status before the UNFCCC and is making this submission on behalf of and for HACA.

2. Cultural Heritage in the Global Goal on Adaptation Framework

The UFGCR addresses both the need to protect cultural heritage from the impacts of climate-related risks and the role of cultural heritage and the linked concepts of traditional knowledge, Indigenous Peoples' Knowledge, and local knowledge systems as an enabler of climate adaptation. Together, these provisions represent a breakthrough in efforts to mainstream cultural heritage into climate policymaking.

2.1. Protecting cultural heritage from the impacts of climate-related risks

Paragraph 9(g) of the UFGCR reads as follows:

Urges Parties and invites non-Party stakeholders to pursue the objectives outlined in paragraph 8 above and to increase ambition and enhance adaptation action and support, in order to accelerate swift action at scale and at all levels, from local to global, in alignment with other global frameworks, towards the achievement of, inter alia, the following targets by 2030, and progressively beyond ...:

- (g) Protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving cultural practices and heritage sites and by designing climate-resilient infrastructure guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems;
- 2.2. Cultural and natural heritage, and the linked concepts of traditional knowledge, Indigenous Peoples' Knowledge, and local knowledge systems as enablers of adaptation

While UFGCR Paragraph 9(g) focuses on protecting cultural heritage, three additional UFGCR provisions speak to the roles of culture and traditional knowledge, Indigenous Peoples' knowledge, and local knowledge systems as enablers of broader societal adaptation.

In Paragraph 14, the UFGCR:

Emphasizes that adaptation action should be continuous, iterative and progressive and be based on and guided by the best available science, including through use of science-based indicators, metrics and targets, as appropriate, **traditional knowledge, Indigenous Peoples' knowledge, local knowledge systems**, ecosystem-based adaptation, nature-based solutions, **locally led and community-based adaptation**, disaster risk reduction, intersectional approaches, private sector engagement, maladaptation avoidance, recognition of adaptation co-benefits and sustainable development.

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⁴ https://www.climateheritage.org/actionplan.

⁵ https://www.icomos.org/fr.

Equally importantly, UFGCR Paragraph 22

Recognizes the leadership of Indigenous Peoples and local communities as stewards of nature and encourages the ethical and equitable engagement with Indigenous Peoples and local communities and application of traditional knowledge, the knowledge, wisdom and values of Indigenous Peoples, and local knowledge systems in implementing the framework for the global goal on adaptation.

Finally, UFGCR paragraph 23

encourages efforts by Parties to broaden climate education and to empower people, in particular children and youth, with the **knowledge**, **skills**, **values and attitudes** necessary for active action to combat climate change.

3. Views of HACA Collaborators

- 3.1. Information on **existing indicators** for measuring progress towards the targets referred to in paragraphs 9–10 of decision 2/CMA.5 (i.e. the UFGCR) in use at the local, national, regional and global level, including, if available, information on associated methodologies and data readiness for such indicators.
- 3.1.1. Information on existing indicators for measuring progress towards the target provided for in paragraphs 9g of decision 2/CMA.5 on protection of cultural heritage

As discussed below in Section 3.2 of this Submission, HACA collaborators are not aware of any existing indicator that measures progress towards all the elements of the target provided for in paragraph 9g. Accordingly, HACA is suggesting two new indicators. HACA collaborators are, however, aware of some existing indicators that address aspects of the matters covered by paragraph 9g. The following information is provided on these, in particular to help inform the discussion of new indicators in Section 3.2.

Context/Scale of Use

Ireland's Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage is one of nine sectoral plans published in 2019 under Ireland's National Adaptation Framework. It outlines five adaptation goals for built and archaeological heritage in Ireland and maps them onto an action plan of specific actions to be implemented.

Existing Indicator

Ireland Climate Change Advisory Council has developed a "Scorecard" to measure the progress of sectoral and local adaptation plans and to monitor implementation of the NAF itself, including the Built and Archaeological Heritage sectoral plan.⁶ The Scorecard uses a questionnaire methodology. Our understanding is that key elements of the 2024 Scorecard will include:

- Governance structure(s) in place for climate change adaptation
- Financial resources for adaptation activities
- Human resources for climate change adaptation actions
- Training skills and capacity development within climate adaptation
- How adaptation was mainstreamed or integrated into policies, plans, programmes or

https://www.climatecouncil.ie/councilpublications/otherpublications/Final%20Scorecard%20Workshop%20Report.pdf

⁶ See

regulations

- Actions undertaken in the past year to address the most significant risks posed by climate change
- Research initiated or been involved in to overcome identified gaps in knowledge relating to climate change adaptation

The UNESCO Thematic Indicators for Culture in the 2030 Agenda (UNESCO Culture|2030 Indicators)⁷ is a framework of thematic indicators whose purpose is to measure and monitor the progress of culture's enabling contribution to the national and local implementation of the Goals and Targets of the 2030 Agenda for Sustainable Development. Under the heading of "Climate Adaptation & Resilience" it includes indicators that aim to assess measures taken to foster climate change adaptation and enhance reliance through sustainable safeguarding and management of tangible and intangible cultural heritage as well as natural heritage.

The UNESCO Thematic Indicators for Culture and Climate Adaptation and Resilience consists of a 10-item checklist, which contains both numeric and Yes/No Items. The majority of items are likely to be national rather than local initiatives.

Sustainable Development Goal 11.4 addresses making cities and human settlements inclusive, safe, resilient and sustainable through strengthening efforts to protect and safeguard the world's cultural and natural heritage. The indicator for this SDG target is coordinated by the UNESCO Institute for Statistics (UIS). The indicator looks at total amount per capita each country spends to protect their cultural and natural heritage.⁸

The GIZ Repository of Adaptation Indicators: Real Case Examples from National Monitoring and Evaluation Systems⁹ also includes in other contexts similar indicators for measuring adaptation progress (e.g. "Total sum of investments in programmes for the protection of livestock").

Target 3 of the Global Biodiversity Framework¹⁰ recognises that Indigenous peoples and local communities often own, occupy and/or manage areas with unique and significant heritage and that any decisions regarding these areas must recognize and respect the rights of indigenous

To develop this indicator, UIS worked with countries and partners to develop a new methodology for this indicator, resulting in its simplification and reclassification as Tier II. More specifically, Indicator 11.4.1 now measures: "Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)."

Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure) SDG Indicator 1.4.2; GBF Target 3, complementary indicator (Extent of indigenous

5

⁷ https://unesdoc.unesco.org/ark:/48223/pf0000371562

⁸ https://<u>uis.unesco.org/en/topic/sustainable-development-goal-11-4</u>.

⁹ https://www.cakex.org/documents/repository-adaptation-indicators-real-case-examples-national-monitoring-and-evaluation-systems

¹⁰ https://www.cbd.int/gbf/targets/3

peoples and local communities over them and including obtaining free, prior and informed consent. The indicator developed in this context could provide an important input into the indicator for UFGCR target 9g.	peoples and local communities' lands that have some form of recognition)
	Prevented loss in revenue (USD/year) due to preservation of cultural heritage that currently generates revenues from its use (e.g. tourism revenues) Linked to Sendai Global Targets C-6

3.1.2. Information on existing indicators for measuring progress towards the four dimensional targets of paragraph 10 of decision 2/CMA.5

The matters discussed in UFGCR paragraphs 14, 22, and 23 are of transversal relevance to all targets of paragraphs 9 and 10. HACA recommends that attention to these matters be addressed in the discussion of indicators for measuring progress towards the targets of paragraph 10. Existing indicators in this regard include:

Context/Scale of Use	Existing Indicator							
Ethical and equitable engagement with Indigenous Peoples and local communities (UFGCR								
paragraph 22) and application of traditional knowledge, the knowledge, wisdom and values of								
Indigenous Peoples, and local knowledge systems relevant in each thematic area (UFGCR								
paragraph 14 and 22)								
U.S. Agency for International Development (US IP.1: # OF ACTIVITIES OR PROJI								
U.S. Agency for International Development (US AID) Pro-IP Learning Questions and	DESIGNED THROUGH CO-CREATION WITH							
Indicators for Tracking USAID's Policy on	INDIGENOUS PEOPLES							
Promoting the Rights of Indigenous Peoples. ¹¹	1113132113331 231 223							
	IP.2: # OF STANDALONE ACTIVITIES OR							
	PROJECTS IN OPERATION THAT ADDRESS							
	INDIGENOUS PEOPLES' DEVELOPMENT							
	ISSUES							
	IP.3: % OF USG-ASSISTED INDIGENOUS							
	PEOPLES' ORGANIZATIONS WITH							
	IMPROVED PERFORMANCE							
	IP.4: % OF CURRENT IMPLEMENTING							
	PARTNERS THAT ARE INDIGENOUS							
	PEOPLES' ORGANIZATIONS							
	IP.5: # OF LAWS, POLICIES, OR							
	PROCEDURES PROPOSED, ADOPTED, OR							
	IMPLEMENTED WITH USG SUPPORT THAT							
	PROTECT INDIGENOUS PEOPLES' RIGHTS							
	IP.6: # OF ACTIVITIES OR PROJECTS IN							
	OPERATION THAT DIRECTLY ADDRESS							
	INDIGENOUS PEOPLES' SELF-IDENTIFIED							
	PRIORITIES							

¹¹ https://www.norc.org/content/dam/norc-org/pdf2023/pro-ip-learning-questions-indicators.pdf

Climate education and empowering people, in particular children and youth, with the knowledge, skills, values and attitudes necessary for active action to combat climate change (UFGCR paragraph 23)									
Monitoring	and	Evaluating	Climate	Indicators	address	matters	like	curri	culum,
Communication and Education Project Global training, access to information, and publ					public				
Indicators ¹²		_		participation	on.				

3.2. Information on **identified gaps and areas** for which the development of new indicators may be needed.

It is well documented that attention to culture and heritage has been a gap in climate adaptation policy, practice and finance. This gap extends to indicators. Accordingly, HACA collaborators consider that cultural and natural heritage and the closely linked concepts, and the linked concepts of traditional knowledge, Indigenous Peoples' Knowledge, and local knowledge systems represent an area in which the development of new indicators is needed. This includes both the need to develop new indicators to measure progress towards the thematic target established in paragraph 9g of decision 2/CMA.5, as well as new indicators to measure progress towards the four dimensional targets of paragraph 10 of decision 2/CMA.5 (impact, vulnerability and risk assessment; planning; implementation; and monitoring, evaluation and learning), pertinent to the cross cutting considerations set out in paragraphs 14 and 22 of decision 2/CMA.5 (e.g., traditional knowledge, the knowledge, wisdom and values of Indigenous Peoples, and local knowledge systems).

3.2.1. New indicator is needed to measure progress towards the target referred to in paragraph 9g of decision 2/CMA.5

Thematic target 9g on the protection of cultural heritage is not a heterogenous provision. It includes at least three elements, each of which is important. These elements include:

- Protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving cultural practices.
- Protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving heritage sites.
- Designing climate-resilient infrastructure guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems.

HACA collaborators are not aware of an existing indicator in use at the local, national, regional or global level that captures each of these elements.

HACA collaborators consider that while the first two of these elements could be covered by one indicator, the third element should have a distinct indicator.

¹² https://mecce.ca/data-platform/indicators/.

¹³ Morel, Hana, Megarry, William, Potts, Andrew, Hosagrahar, Jyoti, Roberts, Debra, Arikan, Yunus, Brondizio, Eduardo, Cassar, May, Flato, Greg, Forgesson, Sarah, Masson-Delmotte, Valérie, Jigyasu, Rohit, Oumarou Ibrahim, Hindou, Pörtner, Hans-Otto, Sengupta, Sandeep, Sherpa, Pasang Dolma and Veillon, Richard (2022) Global research and action agenda on culture, heritage and climate change: scientific outcome of the International Co-Sponsored Meeting on Culture, Heritage and Climate Change. Project Report. ICOMOS & ISCM CHC, Charenton-le-Pont, France & Paris, France, 69p. ISBN 978-2-918086-69-7 (PDF) - 978-2-918086-70-3 (print). [Book] https://openarchive.icomos.org/id/eprint/2716/. See Guzman, P. and Daly, C. (2021) Cultural Heritage in Climate Planning; The HiCLIP Pilot Project for Understanding the Integration of Culture into Climate Action. A report on the Climate Heritage Network WG4 HiCLIP project. ICOMOS https://www.climateheritage.org/cultural-heritage-in-climate-planning; Julie's Bicycle. 2021. Culture: The Missing Link to Climate Action, Summary Report, October 2021.

¹⁴ Global research and action agenda on culture, heritage and climate change: scientific outcome of the International Co-Sponsored Meeting on Culture, Heritage and Climate Change. Project Report, supra note 13, at page 39 (climate change impacts overlooked because of a lack of cultural indicators).

3.2.1.1. Measuring progress towards protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving cultural practices and heritage sites

A new indicator is needed to measure progress towards protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving cultural practices and heritage sites. In particular, HACA collaborators note that existing indicators typically do not address both cultural practices and heritage sites. Considering this and taking into account questions such as data availability for the indicators; the ability of the indicators to reflect regional, national and local circumstances; the applicability of the indicators across different contexts; ease of interpretation, etc., HACA collaborators recommend consideration be given to the following new indicator for this element of target 9g:

Proposed new Indicator for Target 9g on measuring progress towards protecting cultural heritage from the impacts of climate-related risks by developing adaptive strategies for preserving cultural practices and heritage sites

"Extent of progress being made towards ensuring and enabling that all heritage, including natural and cultural heritage sites and cultural practices, as well as Indigenous Knowledge systems and, where applicable, local knowledge systems, are effectively covered by inclusively-developed national, local or site/element-specific adaptive strategies for preserving and protecting them from the impacts of climate-related risks that are integrated into wider territorial, landscapes, or seascapes adaptation strategies, recognizing and respecting the rights of Indigenous Peoples and local communities, including over their traditional territories."

In proposing this indicator, HACA collaborators note the following methodological matters:

- Target 9g speakers to both "cultural practices" and "heritage sites." These terms have diverse and sometimes contested meanings. Both concepts must be addressed in the indicator(s). To commenters' knowledge, the terms "cultural practices" and "heritage sites" have not been defined in existing UNFCCC or IPCC work products. The use of these terms arguably follows distinctions drawn in some heritage methodologies between tangible and intangible cultural heritage. Drawing this distinction is complex, if not problematic. We suggest the phrases "cultural practices" and "heritage sites" be taken not as establishing a binary, but rather as simply establishing the applicability of Target 9(g) to a broad continuum inclusive of all dimensions of cultural and natural heritage and the linked concepts of traditional knowledge, Indigenous Peoples' knowledge, local knowledge systems. This approach helps address the following complexities:
 - The question of what qualifies as a cultural practice is a subject of discussion in various domains, including legal and ethical domains. The term finds a parallel in the phrase "cultural traditions and customs" used in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). It arguably can be distinguished from the broader term "culture" by an emphasis on traditional and customary practices. The term also connects to the concept of "Intangible cultural heritage," which has been defined by UNESCO as

the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and

human creativity. 15

- The term "heritage sites" should be understood to connect to the concept of "tangible cultural heritage" which includes archaeological sites, buildings, structures, monuments, landscapes, and movable and documentary heritage, including but not limited to the collections held in museums, libraries, and archives. Heritage sites hold data and knowledge derived from human experience and the human past, including evidence of paleoclimatic change, social evolution and past human responses to environmental change.
- The term "heritage sites" should be understood to include all heritage sites, including natural heritage sites. In international practice (e.g. the World Heritage Convention), the term "heritage site" includes both cultural and natural sites. Natural heritage has been defined as referring to natural features, geological and physiographical formations and delineated areas that constitute the habitat of threatened species of animals and plants and natural sites of value from the point of view of science, conservation, or natural beauty.
- The specific action called for by Target 9(g) is the development of "adaptive strategies" by Parties and non-Party stakeholders. This suggests a quantitative indicator that measures the number of strategies developed. There is a need to include attention to cultural heritage in National Adaptation Plans (NAPs) and other national instruments but also to address it at site/element-specific level as well as in regional and local strategies. The new indicator proposed by HACA provides a flexible approach which allows member states to track and report data at various levels as they determine.
- It is essential that the indicator for target 9g address the issue of the inclusiveness of the processes used to develop adaptive strategies, as well as the rights of Indigenous Peoples and Iocal communities. UFGCR paragraph 20 recognizes the important role of stakeholders and rights holders. This idea is indispensable in the context of cultural heritage where the very categorization of sites/places and practices as cultural heritage is linked to their valorization as such by people. This consideration also links to cultural rights, which are an integral part of human rights connecting to broader questions of climate justice and equity. ¹⁶ Cultural rights guarantee that everyone can access the resources they need to freely pursue their process of cultural identification throughout their life, as well as to actively participate in, and reshape, existing cultures. Both the identification of heritage sites/cultural practices as such and the development of adaptive strategies implicate cultural rights.

In addition, Indigenous peoples and local communities often are associated with cultural practices and own, occupy and/or manage areas with unique and significant heritage sites. The appropriate recognition of these areas could make important contributions towards this target. However, any decisions regarding these areas/practices including the development of adaptive strategies must recognize and respect the rights of Indigenous Peoples and local communities over them and include obtaining free, prior and informed consent. UNDRIP provides that Indigenous Peoples have the right to develop their cultural heritage, traditional knowledge and traditional cultural expressions.

The foregoing single, proposed indicator was developed with a focus on the admonition to pay attention to ease of data collection. However, because of the complexities of measuring progress on protecting cultural heritage, we believe a checklist approach, perhaps as a supplemental package of

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¹⁵ Convention for the Safeguarding of the Intangible Cultural Heritage (2003) https://ich.unesco.org/en/what-is-intangible-heritage-00003.

¹⁶ See generally, United Nations, General Assembly, "Climate Change, Culture and Cultural Rights: report of the Special Rapporteur in the field of cultural rights," A/75/298 (10 August 2020), available from https://www.undocs.org/en/A/75/298. [Hereinafter, "Cultural Rights Report"].

indicators, would provide the best approach to measuring progress towards the thematic target of paragraph 9g. Attached as Schedule 1 are the possible elements for inclusion in such a checklist.

3.2.1.2. Indicator for protecting cultural heritage by designing climate-resilient infrastructure guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems

The emphasis in Target 9(g) on protecting cultural heritage by designing climate-resilient infrastructure guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems is an innovative feature of the UFGCR. Accordingly, HACA recommends that a specific indicator be developed for this element of Target 9(g). Such a target would also help measure progress towards avoiding maladaptation in view of the IPCC finding that "Inclusive planning initiatives informed by cultural values, Indigenous knowledge, local knowledge, and scientific knowledge are key to helping prevent the growing problem of maladaptation." ¹⁷⁷

HACA collaborators believe that a new indicator for this element of target 9g will be needed. We suggest the following:

New Indicator for Target 9g for measuring progress towards designing climate-resilient infrastructure guided by traditional knowledge, Indigenous Peoples' knowledge and local knowledge systems

- Implementation of initiatives to build infrastructure decision makers' competence and capacity to receive, comprehend, and value insights from Indigenous Peoples (IPs) and local communities (LCs) in the development of infrastructure, both at the individual and institutional levels.
- Adoption of mechanisms to uphold Indigenous Peoples' Rights (as enshrined in the UN Declaration on the Rights of Indigenous Peoples, 2007) in infrastructure development, which involves comprehensive and continuous consultation and Free, Prior Informed Consent (FPIC) before establishing any policies for climate adaptation that affect their territory.
- Rate of inclusion of representatives of IPs and LCs and incorporation of their holistic knowledge at all levels of infrastructure decision making.
- Adoption of mechanisms to ensure that IP & LC have a leading role in deciding where adaptation funding is used .
- Inclusion in infrastructure planning of strategies that prioritise contextualised, integrated local solutions that address all drivers of change and the needs of vulnerable groups (e.g., Indigenous Peoples, ethnic minorities, women, children, landless people).
- 3.2.2. New indicators are needed to measure progress achieved towards the targets referred to in paragraph 10 of decision 2/CMA.5 relative to the cross-cutting matters covered by UFGCR paragraphs 14 and 22

UFGCR paragraphs 14 and 22 address ethical and equitable engagement with Indigenous Peoples and local communities and application of traditional knowledge, the knowledge, wisdom and values of Indigenous Peoples, and local knowledge systems. These principles are crucial to achieving progress on each UFGCR target. Accordingly, an indicator applicable to all targets should be

10

¹⁷ IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844.

developed to measure ethical and equitable engagement with Indigenous Peoples and local communities.

In addition a second indicator should measure the application of traditional knowledge, the knowledge, wisdom and values of Indigenous Peoples, and local knowledge systems relevant in each thematic area. An example of such an effort is the Rauora framework, 18 which establishes an indigenous (Māori) worldview framework for climate adaptation in New Zealand and is incorporated into the actions/indicators under Aotearoa New Zealand's First National Adaptation Plan. 19

HACA collaborators suggest the following:

New Indicator for measuring ethical and equitable engagement with Indigenous Peoples and local communities in the dimension targets of paragraph 10

Primary Indicator: Inclusion of mechanisms to make adaptation governance subject to UNDRIP and adoption of systems to monitor the level of recognition and implementation of UNDRIP in each dimension of the iterative adaptation cycle, including impact, vulnerability and risk assessment; planning; implementation; and monitoring, evaluation and learning.²⁰

The following supplemental indicators could be used:

- Allocation of public funds (from central/local government) to Indigenous Peoples' selfgovernment institutions for work on climate adaptation including impact, vulnerability and risk assessment; planning; implementation; and monitoring, evaluation and learning.
- Consultations with local communities and Indigenous Peoples' autonomous institutions before approval of measures and projects around climate adaptation action that may affect them and their heritage
- Use of local community and Indigenous languages in systems of signposting, documentation and official communications for climate action and planning
- Social, spiritual, cultural and environmental impact assessments are undertaken prior to approval of climate projects that may affect local communities' or Indigenous peoples' lands, territories or resources, with the participation of local communities and Indigenous Peoples' representative institutions
- Climate education programs are handled or supported by Indigenous Peoples' autonomous institutions.
- Recognition of Indigenous Peoples' rights to lands, territories and resources in national climate legislation.

New Indicator for measuring application of traditional knowledge, the knowledge, wisdom and values of Indigenous Peoples, and local knowledge systems in each dimensional target of paragraph 10

Progress towards

Representation of Indigenous knowledge and frameworks within national climate legislation and planning

¹⁸ "Exploring an indigenous worldview framework for the national climate change adaptation plan," (2022) https://environment.govt.nz/publications/exploring-an-indigenous-worldview-framework-for-the-national-climate-change-adaptation-plan/.

¹⁹ "Adapt and thrive: Building a climate-resilient New Zealand (2022), https://environment.govt.nz/assets/publications/climate-change/MFE-AoG-20664-GF-National-Adaptation-Plan-2022-WEB.pdf

²⁰ For a discussion of indicators for assessing responsible community engagement in research practice and identifying patterns in levels of Indigenous community engagement, see "A global assessment of Indigenous community engagement in climate research," Dominique M David-Chavez and Michael C Gavin 2018 Environ. Res. Lett. 13 123005.

- Strengthen capacity of indigenous peoples' representative institutions in the climate space. Indicators include:
 - o Existence of indigenous peoples' self-governing institutions to aid in the development of climate action plans
 - o Special measures to promote capacity building and strengthen leadership of indigenous within the climate action space
 - o Prevalence of persons devoting time to selected cultural, spiritual and religious traditions, customs and ceremonies, as supported through climate actions
 - Use of indigenous languages in systems of signposting, documentation and official communications for climate action and planning
 - o Land use change and land tenure in the traditional territories of Indigenous Peoples and Local Communities (IPs and LCs) that supports climate action
- Issues concerning land and resource use when developing and implementing climate actions are handled by indigenous peoples' autonomous institutions.
 Indicators include:
 - Recognition of indigenous peoples' self-governing institutions and territories
 - o Recognition of indigenous peoples' right to self-government in national climate legislation
 - Free, prior, and informed consent of indigenous peoples' autonomous institutions before approval of climate measures that may affect them
 - Procedures or mechanisms for State consultation with indigenous peoples at national, sub-national and local levels

Schedule 1 Elements for Inclusion in a Checklist Approach to an Indicator for Target 9g.

Direct indicators:

- Number/proportion of heritage sites/cultural practices that have received place-specific climate vulnerability & resilience assessment.
- Percentage of heritage sites/cultural practices with implemented climate adaptation measures (successful adaptation and maladaptation).
- Frequency of monitoring and evaluation of adaptive strategies at heritage sites.
- Existence and implementation of inclusive, locally-led processes for identifying/inventorying cultural practices/values and heritage sites.
- Number of heritage buildings retrofitted with climate-resilient materials or technologies
- Area (in square meters) of historic landscapes adapted for improved water management
- Percentage reduction or increase in climate-related damage to heritage sites after implementation of adaptive measures.
- Amount of funding secured for climate adaptation projects for heritage sites/cultural practices.
- Number of jobs created through implementation of adaptive strategies for cultural heritage.
- Cost savings from preventive adaptive measures compared to post-disaster restoration for heritage places.
- Number of community members trained in plural knowledge-based adaptive techniques (integration of different knowledge systems).
- Percentage of local population involved in decision-making for heritage adaptation plans.
- Number of awareness programs conducted on climate risks to cultural heritage.
- Number of policies or regulations updated to include cultural heritage in climate adaptation plans.
- Existence of dedicated budget lines for heritage climate adaptation in national/local budgets.
- Number of cross-sectoral partnerships formed for implementing adaptive strategies.
- Frequency of climate risk or vulnerability assessments for heritage places.
- Number of heritage places with real-time environmental monitoring systems installed.
- Percentage of adaptive strategy projects with regular evaluation and reporting mechanisms.
- Number of heritage professionals and community leaders trained in conducting a climate risk assessment and on climate adaptation techniques tailored to their needs (for their heritage places)
- Quantity of research projects focused on innovative/plural knowledge adaptive strategies for heritage globally, regionally, nationally, or locally.
- Number of international collaborations on heritage climate adaptation.

Indirect indicators:

- Total number of heritage places that are officially listed and protected.
- Frequency and comprehensiveness of condition assessment reports for listed monuments.
- Number of new heritage places identified and added to the official inventory each year.
- Number of historic buildings undergoing restoration or maintenance annually.
- Amount of funding allocated for conservation efforts of historic places.
- Number of training programs and workshops on climate change (vulnerability, risk and adaptation) conducted for conservation professionals.
- Number and variety of climate-cultural activities held at events, and festivals at heritage places.
- Increase in the number of visitors and community members participating in climate-cultural heritage activities.
- Frequency and reach of campaigns aimed at raising awareness about the climate risk to cultural heritage.

- Number of environmental impact assessments conducted for heritage places.
- Increase in the area of green spaces around heritage places.
- Number of projects implemented to enhance the resilience of heritage landscapes to different threats.
- Number of initiatives aimed at engaging local communities in preserving cultural heritage.
- Number of projects documenting and preserving oral histories related to cultural heritage.
- Number of educational programs focusing on the cultural history and significance of heritage places.
- Number of stakeholders (government, NGOs, local communities) actively involved in heritage protection initiatives.
- Number of collaborative projects between different stakeholders aimed at protecting cultural heritage.
- Implementation and usage rate of feedback mechanisms for public and stakeholder input on heritage conservation efforts.
- Number of stakeholders (government, NGOs, local communities) actively involved in heritage protection initiatives.
- Number of collaborative projects between different stakeholders aimed at protecting cultural heritage.