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List of possible green economy actions

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The Ninth Environment for Europe Ministerial Conference:

Progress report on the implementation of the Batumi Initiative on Green Economy (BIG-E)

Information paper No. 6

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List of possible green economy actions

Note by the group of experts in green economy under the leadership of Switzerland with support from the secretariat and the United Nations Environment Programme

Summary

At its twenty-seventh session (Geneva and online, 3-5 November 2021), the United Nations Economic Commission for Europe (ECE) Committee on Environmental Policy welcomed the proposal by Switzerland to advance the development of the catalogue of actions/measures on possible voluntary actions/commitments under the Batumi Initiative on Green Economy on the two themes of the Ninth Environment for Europe Ministerial Conference (Nicosia, the Republic of Cyprus, 5-7 October 2022), entrusted Switzerland to form and convene an ad hoc group to prepare the catalogue and invited Committee members and other stakeholders to express their interest if they wished to join the group.

The present document was prepared by the group of experts in green economy under the leadership of Switzerland, with support from the secretariat and the United Nations Environment Programme (UNEP), in accordance with the above mandate. The draft list of possible actions aims to serve as inspiration for interested countries and organizations in identifying green economy initiatives to voluntarily commit to at the Nicosia Ministerial Conference.

The Committee will be invited to consider the paper, as appropriate.

Introduction

1. At the Eighth Environment for Europe Ministerial Conference (Batumi, Georgia, 8–10 June 2016), ministers endorsed the voluntary Pan-European Strategic Framework for Greening the Economy for the period 2016–2030¹ and welcomed the Batumi Initiative on Green Economy (BIG-E), a set of voluntary commitments to operationalize the Strategic Framework.
2. To facilitate submission of the voluntary commitments, a list of possible actions was developed by the group of experts in green economy under the leadership of Switzerland with support from the secretariat and the United Nations Environment Programme and submitted to the Batumi Ministerial Conference as an information document² to serve as inspiration for interested countries and organizations in identifying their possible commitments. Prior and after the Conference, 123 commitments have been submitted by 27 countries and 13 lead organizations³.
3. At its twenty-fourth session (Geneva, 29 - 31 January 2019) the Committee on Environmental Policy conducted a mid-term review of the Batumi Conference's main outcomes, including the progress in implementing voluntary commitments under the Batumi Initiative on Green Economy⁴.
4. At its twenty-seventh session (Geneva and online, 3-5 November 2021) the Committee on Environmental Policy “welcomed the continuation of activities by the countries under the Pan-European Strategic Framework for Greening the Economy and the Batumi Initiative on Green Economy”. It is expected that countries and stakeholders of the EfE process will submit new batch of their voluntary commitments to the Ninth Environment for Europe Ministerial Conference (Nicosia, the Republic of Cyprus, 5-7 October 2022) through the procedure set out in the Annex of the Pan-European Strategic Framework⁵.
5. To better facilitate the process of submission of the voluntary commitments by countries and stakeholders, the Committee at its twenty-seventh session welcomed the proposal by Switzerland to advance the development of the catalogue of actions/measures on possible voluntary actions/commitments under the Batumi Initiative on Green Economy on the two themes of the Ninth Environment for Europe Ministerial Conference, entrusted Switzerland to form and convene an ad hoc group to prepare the catalogue and invited Committee members and other stakeholders to express their interest if they wished to join the group.
6. The present document includes a list of possible actions to serve as inspiration for interested countries and organizations in identifying green economy actions to voluntarily commit to at the Ninth Environment for Europe Ministerial Conference. The list covers the two themes of the Conference - (i) Greening the economy in the pan-European region: working towards sustainable infrastructure; and (ii) Applying principles of circular economy to sustainable tourism.
7. The document was prepared by the group of experts in green economy under the leadership of Switzerland with support from the secretariat and UNEP. The group was chaired by the Committee's Bureau member from Switzerland and included experts from Azerbaijan, Belarus, Czech Republic, France, Hungary, Portugal, Switzerland, Uzbekistan, the European ECO Forum, the European Investment Bank (EIB), the Organisation for Economic Co-operation and Development (OECD), Zoï Environment Network, ECE and UNEP.

¹ ECE/BATUMI.CONF/2016/6

² ECE/BATUMI.CONF/2016/INF/21

³ The list is available at <https://www.greengrowthknowledge.org/big-e/browse>

⁴ ECE/CEP/2019/4

⁵ ECE/BATUMI.CONF/2016/6

List of possible green economy actions

8. The aim of the BIG-E is to operationalize the Strategic Framework, giving the member States and stakeholders the means to highlight and exchange their experience and plans in both the general field of the Green Economy and (at this stage) the two themes of the Nicosia Ministerial Conference. The voluntary commitments submitted under BIG-E are not necessarily meant to be specifically designed for the EfE process, but they could be selected from these actions/measures that are already ongoing or upcoming under various plans and programmes, possibly even the commitments made under other frameworks. Such synergy of different processes has been welcomed by the sixty-ninth session of the Economic Commission for Europe (Geneva, 20 and 21 April 2021), which committed “to step up our efforts to promote circular economy approaches and the sustainable use of natural resources, namely ... through the voluntary initiatives and capacity building cooperation opportunities that have been submitted to this session of the ECE, and other voluntary commitments that were made earlier in the Environment for Europe process”⁶.

Use of the list

9. The present list of possible green economy actions is meant to help the stakeholders in the process of identifying their voluntary commitments by providing some useful examples. To use this list in an efficient manner, the stakeholders might:

- Look at the examples included into the list - with the understanding that the list is not comprehensive nor exhaustive and serves as source of inspiration. There can be many green economy actions that are not included in the list.
- Identify if their organisation/country does have some actions/measures (to be undertaken under either planned or ongoing projects, programmes or plans) of the nature and coverage alike the examples included in the list – these projects, programmes, or plans might potentially be submitted to the BIG-E as voluntary actions
- Decide (via the relevant internal procedure) to submit a voluntary commitment from the country/organization to the BIG-E
- Fill in the template as contained in Annex 1 to the document ECE/CEP/S/2022/2 and send to the secretariat at efe@un.org (contact the secretariat for any questions as needed). You can also fill in the commitment template online⁷.

10. While contemplating submitting the voluntary commitment, the following can be considered:

- As the aim of the BIG-E is to facilitate the exchange of information and good practice, the voluntary commitments submitted under BIG-E can be selected from these actions/measures that are already ongoing or upcoming under various plans and programmes, possibly even the commitments made under other frameworks
- While the list concentrates onto two principal environmental themes of the EfE-9 Conference, voluntary commitments under BIG-E are not limited to only these two themes. An action/measure of a broader green economy nature can be submitted anytime to the BIG-E as a commitment.
- The structure of the attached list of possible green economy actions may look complex; nevertheless, the main point is the action itself. Additional information on the voluntary commitment (categorisation columns in the table) is needed to be added for monitoring

⁶ E/ECE/1497, para 2

⁷ The link will be communicated in due time

and reporting purposes and for ensuring that the action is indeed facilitating the greening of the economy.

Structure of the list

11. The suggested actions on (i) Greening the economy in the pan-European region: working towards sustainable infrastructure are clustered according to the International Good Practice Principles for Sustainable Infrastructure⁸:

- (1) Strategic planning
- (2) Responsive, resilient, and flexible service provision
- (3) Comprehensive lifecycle assessment of sustainability
- (4) Avoiding environmental impacts and investing in nature
- (5) Resource efficiency and circularity
- (6) Equity, inclusiveness, and empowerment
- (7) Enhancing economic benefits
- (8) Fiscal sustainability and innovative financing
- (9) Transparent, inclusive, and participatory decision-making
- (10) Evidence-based decision-making.

12. The suggested actions on (ii) Applying principles of circular economy to sustainable tourism are also grouped according to the following policy clusters:

- (1) Strengthen policy, regulatory and institutional frameworks to prevent future crises
- (2) Stimulate supportive fiscal measures and disable harmful ones, including fossil fuel subsidies
- (3) Support investment and finance for sustainable tourism, including sustainable mobility, local governance, and development of sustainable tourism products
- (4) Accelerate sustainable infrastructure and transport, and retrofit towards Net Zero and resource efficient operations
- (5) Establish Measurement, Reporting and Verification (MRV) systems
- (6) Engage and partner with tourism stakeholders, and build their capacity to participate effectively
- (7) Adopt digital, circular and technological solutions
- (8) Adopt sustainable procurement and consumer information tools, including sustainability standards and voluntary certification schemes
- (9) Support vulnerable groups, including women, youth, migrants, ethnic and indigenous communities
- (10) Invest in research to support science-based decision making in tourism.

13. The possible actions are tagged according to the types of measures they employ, as follows:

(a) **Legal, regulatory and policy instruments:** Include actions to implement command-and-control regulatory instruments, to change the patterns of production and consumption, improve efficiency and promote trade of green products. Examples are green procurement legislation and mandatory standards, technology and efficiency requirements.

(b) **Economic and fiscal instruments:** Include actions that are used to send or adjust price signals in support of a green economy transition. Common examples include environmental taxation, trading permits, subsidy reforms, extended producer responsibility systems, deposit-refund systems and payment for ecosystem services. This type of instruments also includes public expenditure efforts, such as financial support to green investments through soft loans, credit lines, publicly backed guarantees and revolving funds.

(c) **Information, education-based, capacity building and voluntary instruments** (often referred to as “softer” instruments): Includes actions aimed at driving behavioral changes, with the goal of making consumers and business pursue green options based on knowledge of the benefits and opportunities that can be achieved. They include voluntary certification and labelling

⁸ <https://wedocs.unep.org/bitstream/handle/20.500.11822/34853/GPSI.pdf>

schemes, as well as awareness-raising campaigns, educational and capacity-building programmes, and knowledge and skills sharing with a view to building the human capital for green economy.

14. Furthermore, the possible actions are tagged to the nine focus areas of the Strategic Framework⁹:

- (a) Focus area 1: Improve the measurement and valuation of natural capital.
- (b) Focus area 2: Promote the internalization of negative externalities and the sustainable use of natural capital.
- (c) Focus area 3: Enhance ecosystems and ecosystem services as part of ecological infrastructure.
- (d) Focus area 4: Shift consumer behaviours towards sustainable consumption patterns.
- (e) Focus area 5: Develop clean physical capital for sustainable production patterns.
- (f) Focus area 6: Promote green and fair trade.
- (g) Focus area 7: Increase green and decent jobs, while developing the necessary human capital.
- (h) Focus area 8: Improve access to services, healthy living and well-being.
- (i) Focus area 9: Promote public participation and education for sustainable development.

15. The possible actions are also tagged to the SDG targets to which they will contribute.

16. The actions identified are, as much as available, actions to deliver economic benefits with environmental and social co-benefits; make a clear contribution to the achievement of SDG targets; have a measurable impact over time; and be a driver for transformation and innovation towards green economy that may be relevant to and inspire other countries in the region.



⁹ ECE/BATUMI.CONF/2016/6, para 18

Annex 1: List of actions on greening the economy in the pan-European region: working towards sustainable infrastructure

International Good Practice Principles for Sustainable Infrastructure (see para 11 above)	Title of the Action	Description of Action and Examples	Types of measures (see para 13)	Indicate if the action is economy-wide, for cities, or for a specific sector (Agriculture, Energy, Fishery, Forestry, Housing, Mining, Manufacturing, Tourism, Transport, Waste, Water)	Focus area (see para 14 above)	SDG targets to which the measure will contribute	References /Sources
Principle 1	Promote the use of sustainability standards and rating systems in major infrastructure projects	Existing standards-like the SuRe standard, for example-can help ensure that sustainability is incorporated throughout the project lifecycle. Standards can be applied to: - domestic infrastructure projects - infrastructure projects developed abroad by national companies	a	economy-wide		9	https://www.admin.ch/gov/fr/accueil/documentation/communiqués.msg-id-83187.html
	Conduct a national infrastructure assessment (NIA)	NIAs can help to understand performance of existing infrastructure systems and identify short, medium, and long term needs to maintain and improve performance in terms of: - service delivery - environmental, social, and economic sustainability - climate risk	c	economy-wide/City/Sector	1	8,9,11	Case study St. Lucia: https://wedocs.unep.org/bitstream/handle/20.500.11822/34972/SLNIA.pdf
	Ratify the Espoo Convention and implement the Strategic Environmental Assessments (SEA) Protocol early in the planning process to mainstream sustainability into infrastructure planning.	SEA is useful tool for incorporating sustainability into strategic planning processes, " "upstream" of individual projects.	a	economy-wide, cross-cutting	1	9	Applying Strategic Environmental Assessment: Good Practice Guidance for Development Cooperation. Paris, France: OECD; 2006. Available from: https://www.oecd.org/dac/environment-development/applying-sea-good-practice-guidance.htm ; https://www.itrc.org.uk/nismod/ ; https://www.itrc.org.uk/wp-content/uploads/2019/09/UNOPS-ITRC_EBI_Curacao_2018-Full-report.pdf ; https://doi.org/10.1016/j.jenvman.2018.12.058 ; https://doi.org/10.1680/jcien.16.00018
	Create and support platforms for cross-sector, integrated strategic planning of sustainable infrastructure	Such platforms can be, inter alia, interministerial, cross sector, and politically independent, which can have benefits that include: - maximizing co-benefits and manage trade-offs between the economic, social, and environmental outcomes of infrastructure development in different sectors - strengthening political independence of infrastructure planning authorities, and separate long-term strategic planning from short-term political cycles	a	National, regional, local, cross-cutting	9	16, 17	E.g. UK National Infrastructure Commission (https://nic.org.uk/); Recommendations of the Council of the Governance of Infrastructure. Paris, France: OECD; 2020. Available from: https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0460 .
	Strengthen environmental legal frameworks that govern infrastructure development	Strong frameworks can include: - clear sustainability standards - requirements for strategic and project-level impact assessments - penalties for non-compliance - investment in enforcement	a	National, regional, local, cross-cutting	2	16	https://www.unep.org/news-and-stories/press-release/dramatic-growth-laws-protect-environment-widespread-failure-enforce

Principle 2	Develop a digital infrastructure strategy	Digital infrastructure can provide "dematerialized" alternatives to "hard" infrastructure and enable the use of digital technology to increase the environmental sustainability of other types of infrastructure. For example: - telecommuting vs. commuting in fossil-fuel powered vehicles - using smart meters and smart grids for matching renewable energy supply and demand - digitalization of integrated urban transportation infrastructure systems to reduce public transportation wait times or limit traffic idling.	a,b,c	National, regional, local, cross-cutting	8	9	https://wedocs.unep.org/bitstream/handle/20.500.11822/34973/DICA.pdf
	Create regulatory and economic incentives for infrastructure developers to apply the "mitigation hierarchy" to infrastructure development	The mitigation hierarchy seeks to first avoid negative impacts, and then minimize and mitigate them where they are unavoidable. Incentives can include, inter alia: - make project approval dependant on demonstration of the application of the mitigation hierarchy- requirement developers to implement biodiversity or water quality offsets to compensate for habitat or ecosystem service loss resulting from infrastructure development - subsidize the deployment of alternative infrastructure solutions and sustainable technologies		economy-wide	2	16	Stevenson, M. and Weber, C. "Mitigation Hierarchies First Things First: Avoid, Reduce...and Only After that—Compensate." WWF Discussion Paper; April 2020. Available from: https://wwfint.awsassets.panda.org/downloads/wwf_discussion_paper_mitigation_hierarchies_april_2020.pdf ; Heiner, M., Galbadrakh, D., Batsaikhan, N., Bayarjargal, Y., Oakleaf, J., Tsogtsaikhan, B., Evans, J. and Kiesecker, J. (2019). Making space: putting landscape-level mitigation into practice in Mongolia. Conservation Science and Practice 1 (10). https://doi.org/10.1111/csp2.110 .
	Develop non-motorized transport infrastructure	Development of non-motorized transport infrastructure - walking and cycling lanes, for example - enables low carbon transportation that has significant health and economic co-benefits.	a,c	energy, transport, tourism	3,4,7,8,9		UNECE/WHO THE PEP https://thepep.unece.org/index.php/publications
	Assess, consider and mitigate the risk of natural-hazard triggered technological accidents (Natechs) affecting (critical) infrastructure	Natech accidents are covered by the UNECE Industrial Accidents Convention.	a, c	economy-wide incl. for energy, manufacturing (in particular the chemical industry) and mining	2, 5	SDGs 3, 6, 9, 11, 12, 13, 16	UNECE: https://unece.org/industrial-accidents-convention-and-natural-disasters-natech OECD (incl. Record of good practices): https://www.oecd.org/chemicalsafety/chemical-accidents/risks-from-natural-hazards-at-hazardous-installations.htm EU Joint Research Centre e-Natech database: https://enatech.jrc.ec.europa.eu/
Principle 3	Measure the cumulative impacts of multiple infrastructure projects on a given landscape, ecosystem, or community.	Using available tools (e.g. SEA, web-based GIS tool-sets, computer models) to measure/estimate and map the cumulative environmental, social, and economic impacts (including transboundary) of multiple infrastructure projects across their entire lifespans on ecosystems and communities can help to inform better land use and investment planning and management and mitigation of risk.		economy-wide	2	15	There are several methodologies for quantifying the value of natural capital and ecosystem services so that they can be incorporated into decision-making (e.g. The Economics of Ecosystems and Biodiversity (TEEB), Wealth Accounting and the Valuation of Ecosystem Services (WAVES), System of Environmental-Economic Accounting (SEEA), Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST)). They all recognize the social and economic importance of biodiversity and ecosystem services and quantify their values in economic terms that can inform cost-benefit analysis and decision-making. These tools can help to demonstrate the benefits of investing in natural infrastructure, and facilitate accurate comparison of grey and green infrastructure as potential solutions for meeting infrastructure service needs.
	Implement staff training programmes on sustainable infrastructure	Training programmes should seek to facilitate peer-to-peer learning across the public and private sectors to build capacity, knowledge, and trust.		economy-wide	7	16,17	The Nature Conservancy (2016b). Capacity building for Mongolian Ministry of Environment, Green Development and Tourism (MEGDT) in relation to biodiversity and conservation in the southern Gobi Desert. Final summary report. http://www.conservationgateway.org/ConservationByGeography/AsiaPacific/mongolia/Documents/-Final%20Summary%20Report.pdf .
	Identify and map hazardous industrial activities	Mapping these activities supports the assessment and management of related risks, including in the transboundary context	a, c	economy-wide incl. for energy, manufacturing (in particular the chemical industry) and mining	2, 5	SDGs 3, 6, 9, 11, 12, 13, 16	www.unece.org/env/teia
	Undertake valuation of the ecosystem services provided by natural infrastructure	Economic valuation of these services enables them to be factored into economic analysis of infrastructure investments and inform decision-making. Existing tools and methodologies include TEEB, WAVES, and SAVI, inter alia.	b	economy wide	1		-

Principle 4	Develop a strategy for co-location of infrastructure assets	Co-location of infrastructure can lead to cost savings from agglomeration of construction activities, reduced impacts to biodiversity and critical resources, and increased efficiencies and synergies between infrastructure in different sectors (e.g. energy and transportation infrastructure). Examples include: - development corridors - growth poles - eco-industrial parks - prioritization of disturbed/brownfield sites		transport, housing, energy	3	15	https://developmentcorridors.org
	Prioritize Nature-based solutions in infrastructure	They can deliver infrastructure services while providing co-benefits for nature and society. For example:- investing in watershed protection and restoration to reduce overall costs of water treatment and water quality management; - creating buffers that help to regulate water flows during storm events by enhancing grasslands, forests, and other landscapes adjacent to water bodies; - develop/adopt standard specifications for the use of nature and biodesign features in infrastructure design and construction (e.g. using vegetation provide shade and minimize urban heat island effects, use of vegetated wildlife crossings over roads)		cross-cutting, water, fishery	3	9,13,14,15	Cohen-Shacham, E., Walters, G., Janzen, C. and Maginnis, S. (eds.). Nature-based Solutions to address global societal challenges. Gland, Switzerland: IUCN; 2016. Available from: https://portals.iucn.org/library/sites/library/files/documents/2016-036.pdf .
Principle 5	Accelerate the introduction and use of cleantech innovations in infrastructure projects	Measures for the promotion of cleantech innovations include: - technology support funds - climate fund instruments - pilot and demonstration programmes - environmental technology promotion	c	economy-wide		9	https://www.admin.ch/gov/fr/accueil/documentation/communiqués.msg-id-83187.html
	Develop or update standards and specifications for design, construction, operation, and decommission of infrastructure	Specifically, these should include standards and specifications for the use of alternative sustainable construction materials and technologies, and nature-based infrastructure solutions.	a,b	Economy-wide, national, regional, local, cross-cutting	1	9	Singapore, Building and Construction Authority (2020e). Green Mark Incentive Schemes. https://www1.bca.gov.sg/buildsg/sustainability/green-mark-incentive-schemes . Accessed 3 November 2020.
	Support and incentivize the use of sustainable and innovative construction materials, including recycled materials	The use of sustainable materials can help to reduce the resource and carbon footprints of the construction of infrastructure. Support measures and incentives include, inter alia: - certification schemes and rating systems - R&D initiatives - regulatory requirements to use a certain percentage of recycled materials	a, b	Economy-wide, national, regional, local, cross-cutting	1	9	Singapore, Building and Construction Authority (2020e). Green Mark Incentive Schemes. https://www1.bca.gov.sg/buildsg/sustainability/green-mark-incentive-schemes . Accessed 3 November 2020.
	Embed sustainability criteria into procurement processes	Procurement processes that give more weight to sustainability factors and performance-based criteria when awarding contracts can incentivize bidders to offer more sustainable infrastructure solutions. Examples of sustainability criteria that can be required in bidding processes include: - life-cycle costing - the use of alternative or local materials, services, and labour - the use of sustainable technologies	a	Economy-wide, national, regional, local, cross-cutting	2	12	https://wedocs.unep.org/bitstream/handle/20.500.11822/34853/GPSI.pdf
Principle 6	Align national legislation and standards with ILO Declaration on the Fundamental Principles and Rights at work	Meeting international standards for minimum wages, social security, and occupational health and safety for infrastructure workers, among other things, not only protects workers' rights but can also help to ensure that the economic and social benefits of infrastructure development are realized. Positive and respectful work environments also help to ensure better compliance with environmental regulations and project-level risk mitigation measures.	a	Economy-wide, national, regional, local, cross-cutting	8	8	
	Collect gender disaggregated data on infrastructure use and impacts	Men and women use-and are impacted by-infrastructure in different ways, and information about these differences can be used to plan and operate infrastructure that best meets the needs of different types of end users, thereby ensuring more efficient use of resources.	a, c	Economy-wide, national, regional, local, cross-cutting	8	5	

Principle 7	Establish policies and incentives for involving local MSMEs in infrastructure projects	The use of local sustainable products and services not only ensures that the economic benefits of infrastructure development-often of one the main factors in securing public support for projects-are fully realized, but it also can help reduce the carbon footprint of construction by avoiding transportation of materials.	b	Economy-wide, national, regional, local, cross-cutting	7	8	
	Foster the creation of sector technological centres to promote the transfer of sustainable technology and best practices between large companies and local micro, small, and medium enterprises (MSMEs)	The participation of large (often multinational) companies in infrastructure projects provides an opportunity to build capacity of local MSMEs to use sustainable technologies and approaches, which can have lasting economic and environmental benefits at the local and national level.	b	Economy-wide, national, regional, local, cross-cutting	7,9	4,9,17	https://wedocs.unep.org/bitstream/handle/20.500.11822/34853/GPSI.pdf
Principle 8	Introduce measures to mobilize private investment in sustainable infrastructure, as appropriate.	Private investment in infrastructure can help to close the sustainable infrastructure investment gap. Measures to reduce risks (real or perceived) can help make sustainable projects more attractive to investors (i.e. more “bankable”). Examples include: - Public Private Partnerships (PPPs)- loan guarantees- offtake agreements- blended funds- green bonds	b	Economy-wide, national, regional, local, cross-cutting	8	9,17	" https://www.worldbank.org/en/topic/publicprivatepartnerships Röttgers, D., Tandon, A. and Kaminker, C. “OECD Progress Update on Approaches to Mobilising Institutional Investment for Sustainable Infrastructure”. OECD Environment Working Papers No. 138; 2018. Available from: https://www.oecd-ilibrary.org/docserver/45426991-en.pdf?expires=1609765223&id=id&accname=guest&checksum=F2D80B68030B9FBFD7ABE7C99D57FB79 ” The Ecological Sequestration Trust. Smart ways to mobilise more efficient and effective long-term investment in city regions. London, UK: The Ecological Sequestration Trust; 2014. Available from: https://ecosequestertrust.org/financeforSDGs.pdf .
Principle 9	Support effective stakeholder engagement throughout the infrastructure lifecycle	Important process for understanding needs and potential risks, and building stakeholder support for sustainable infrastructure projects. For example: - disclosure of information/access to information - meaningful stakeholder consultation (inclusive of vulnerable groups) - grievance mechanisms	c	Economy-wide	9	10, 5, 9	G20. G20 Compendium of Good Practices for Promoting Integrity and Transparency in Infrastructure Development. Japan: G20; 2019. Available from: https://www.oecd.org/g20/summits/osaka/G20-Compendium-of-Good-Practices-in-Infrastructure-Development.pdf .
	Establish transparency frameworks/mechanisms/requirements	These facilitate stakeholders' access to information on the performance (including sustainability) of infrastructure throughout its lifespan. For example: - open access to data - third-party monitoring and reporting	c	Economy-wide	9	9, 10	https://www.unep.org/resources/publication/integrated-approaches-action-companion-international-good-practice-principles
Principle 10	Develop harmonized and integrated national and sub-national data management systems related to infrastructure.	To inform infrastructure planning and management. For example: - Establish data sharing arrangements to enable the creation of “digital ecosystems” of relevant data - Develop the capacity to collect and use available data for decision-making	c	Economy-wide	9	9, 17	United Nations Environment Programme and Science Policy Business Forum. “The Case for a Digital Ecosystem for the Environment: Bringing together data, algorithms and insights for sustainable development.” Discussion Paper; 5 March 2019. Available from: https://un-spbf.org/wp-content/uploads/2019/03/Digital-Ecosystem-final-2.pdf .

Annex II: List of actions on applying principles of circular economy to sustainable tourism

Policy clusters (see para 12 above)	Title of the Action	Who will take actions a) Government (national and local) b) Business/associations, c) investors/finance, d) International organizations, e) Academia & NGOs	Types of measures (see para 13)	Focus area(s) (see para 14 above)	SDG targets to which the measure will contribute	Connections to other Recommendations	References /Sources
1	Make commitments to take climate action and undertake annual reporting of progress. This includes signing up to Glasgow Declaration on Climate Action in Tourism	a) b)	c	4.5	9,12,13,17	6	Glasgow Declaration Table of Actions
	Make commitments to address plastic pollution via New Plastics Economy Global Commitment and the Global Tourism Plastics Initiative	a) b)	a	4.5	12 14, 15	9	https://www.newplasticseconomy.org/ https://www.oneplanetnetwork.org/programmes/sustainable-tourism/global-tourism-plastics-initiative
	Align tourism policies with national targets on biodiversity, climate, resource efficiency, pollution prevention and nature conservation, as well as mainstreaming sustainable consumption and production patterns in tourism planning and development	a)	a	1,2,3	8,9,11,12, 13,14,15	1	Innovation Norway, National Tourism Strategy 2030: Big Impact, Small Footprint (2021), The Tourism Strategy 2027 of Portugal. (http://www.turismodeportugal.pt/pt/Turismo_Portugal/Estrategia/Estrategia_2027/Paginas/default.aspx)
	Develop sustainability standards and regulations for tourism buildings, including design and refurbishments, to promote climate resilience and the protection of ecosystems	a)	a	2	9,11,12,13	2.4	
	Develop sustainability standards and regulation for enhanced waste management in tourism destinations and touristic areas, and promote the development of the necessary infrastructure to prevent pollution	a)	b	1,2,3	6,11,12,13, 14,15,16	4	
	Adopt sustainable approaches and frameworks along the tourism value chain (e.g. Integrated Coastal Zone Management (ICZM), Maritime Spatial Planning (MSP), Ecosystem-Based Management (EBM) principles, and Ecosystems Payment Services, and life cycle approaches)	a)	a	1,2,3,4,6	11,12,13,14,15, 17	10	Policy factsheet on ensuring and effective monitoring of tourism sustainability in the Mediterranean Region: https://sustainable-tourism.interreg-med.eu/index.php?id=1524&tx_news_pi1%5Bnews%5D=7414&tx_news_pi1%5Bcontroller%5D=News&tx_news_pi1%5Baction%5D=detail&cHash=043c66ebf6087d8b3baf61a17d9d126
2	Eliminate harmful subsidies (especially in the aviation and cruise sectors) and promote investment towards lower emission fuel types.	a)	b	2	7,12, 13	4.7	Glasgow Declaration Table of Actions
	Implement tourism and tourist business taxation systems and financial mechanisms (e.g. eco-tax, visitor fees) in destinations. Ensure revenues are earmarked for sustainable development, environmental protection, and green infrastructure measures/actions.	a)	b	2, 3,9	9, 13,14, 15	1.9	https://www.regjeringen.no/en/dokumenter/environment-fee/id512077/ https://www.miljovernfondet.no/en/news/final-allocation-letter-from-ministry-of-climate-and-environment-kld-2022/ A Norwegian tax revenue funds local projects to study, support, and restore the natural environment and cultural heritage sites. Recently funded projects included installation of solar panels, risk assessment studies of landfills in the melting permafrost, reconstruction of the historical monuments, research on climate disturbances of local flora and fauna). Spain's eco-tax on the Balearic Islands as seen in: OECD, "Chapter 3: Towards investment and financing for sustainable tourism" in OECD Tourism Trends and Policies 2018 https://www.oecd-ilibrary.org/sites/tour-2018-en/index.html?itemId=/content/publication/tour-2018-en&mimeType=text/html
3	Establish funds to address financial barriers of retrofitting and implementing water and energy efficiency improvements of buildings and energy systems, as well as waste management infrastructures at local and regional levels	a) c)	b	2	7,9,11,12, 13	2.4	recommendations from UK's Green Finance Institute

	Invest in and support the implementation and scaling up of nature-based solutions which sustainably manage, protect and restore ecosystems	a) b) c)	b	2,3,4,6,7,8,9	13,14,15	7	Glasgow Declaration Table of Actions https://www.oneplanetnetwork.org/knowledge-centre/resources/recommended-actions-glasgow-declaration With this Innotour project (2020-2023), the parks are strengthening sustainability along the entire tourism service chain. https://www.seco.admin.ch/seco/fr/home/Standortfoerderung/Tourismuspolitik/Innotour/Gefoerderte_Projekte/2020-bis-2023/schweizerpaerke.html
	Create green urban spaces that capitalize on natural infrastructure and promote them among consumers	a) b)	b	1,2,3,9	9,11	4	The Forest For Change project, aimed at bringing attention to the UN's Sustainable Development Goals, unveiled a green landscape with 400 trees in the courtyard of Somerset House in the center of London). https://www.globalgoals.org/news/forest-for-change
	Provide public subsidized loans or grants, market-based loans (targeting green lending, alternative loan structures, and property-linked efficiency loans), (partial) credit guarantees, and insurance for sustainable tourism assets, in particular to SMEs	a) c)	a	2, 3	12b, 17	6	Tourist Site Protection Fund in Iceland, Swiss Confederation
4	Invest in sustainable mobility (introduce temporary car-free hours, days, or zones, invest in good quality public transport infrastructure, as well as in cleaner fuels and low- and zero emission vehicles), and encourage the wider usage of sustainable tourist transport.	a) b)	a	2,3,4,5,7,8	9,11,13,14,15	2,3,4	E.g. in Paris or in London https://www.bbc.com/news/world-europe-58385502 https://tfl.gov.uk/modes/driving/congestion-charge EU strategy for sustainable tourism: https://www.europarl.europa.eu/doceo/document/TA-9-2021-0109_EN.html Superblocks in Barcelona https://www.barcelona.de/en/barcelona-superblocks.html Klimaaktiv Mobil: https://www.klimaaktiv.at/english/mobility.html
	Provide incentives to retrofit tourism buildings and infrastructure, e.g. tax credits for refurbishment and upgrade of buildings, public and private financing linked to environmental performance and commitments.	a)	b	2,3,7	9	2.3	Triodis Bank UK
	Foster public-private partnerships for the development and financing of connectivity infrastructure, essential for the tourism sector, including roads, ports and airports, which can enable economic development across several sectors and underserved communities.	a) b)	b	7,8	8,9,10,13,17	4	http://www.oas.org/en/sedi/desd/itc2011/pres/arthur_smith.pdf
	Promote sustainable approaches into development and retrofitting of infrastructure (ports, airports, energy grids, etc., in the a) construction phase (e.g. use raw materials with a low carbon footprint and the use of local materials and labor) and b) the operational phase. Integrate sustainability into public procurement for tourism infrastructure (e.g. airport, museums, tourism offices).	a) b) c) d) e)	b	2,3,7	7,9,12	7	
	Promote domestic and intra-regional tourism to reduce emissions, in particular from transport.	a) b) c) d) e)	a	4,7	8,11,12,13	4	-
	Build wastewater treatment plants near harbors and ports, in combination with the development of a comprehensive system of water quality management, regulation, and treatment for the water discharged from cruise ships and other touristic vessels (e.g. comprehensive report system for detailing concentrations of pollutants in discharge to the sea from cruise ships' wastewater that also encourages reduction of dumping in international waters).	a) c)	a	2, 3	6,9,14	4.7	https://ec.europa.eu/regional_policy/en/projects/portugal/new-wastewater-treatment-plants-for-lisbon
	Promote multipurpose infrastructure that can also be used as sites for tourism while in operation for agriculture, energy generation, breeding fish, sanitation or other uses.	a) b) c) d) e)	a	1,3,4	9	7	Labfaf Khaneiki, M. (2020). Qanat – summary paper prepared as input for case study. International Center on Qanats and Historic Hydraulic Structures – United Nations Educational, Scientific and Cultural Organization Category II Center
	Maintain and improve the connectivity, safety and sustainability of transport systems.	a) b) c)	c	2,3,7	9, 11	7	Rome Guidelines for the Future of Tourism (https://doi.org/10.1787/d11080db-en)
5	Promote data collection, disclosure and sharing of key indicators on the main impact areas (e.g biodiversity, climate, energy use efficiency, water use efficiency and waste management)	a) d) e)	c	1	7,9,13	4	
	Establish cross-ministerial legal and policy frameworks to ensure MRV systems are reliable, including with third party verification	a)	a	1	9,13	1	

	Evaluate the carrying capacity of the tourism destinations and promote quantitative instruments and assessment tools to evaluate impacts on ecosystems.	a) b) d) e)	c	1,9	10,11,12,13,15	6.1	The ALTER ECO project has developed a tool on Calculating the carrying capacity of a tourism destination, available here: https://quantitas.it/dev/med/cc/ro.html
	Build a common methodological framework upon existing monitoring and indicator systems at international and pan-European level. Monitoring frameworks should reflect the needs and expectations of the destinations, including the focus on their outstanding local qualities/assets.	a) d) e)	a	1,9	11,12,13,14,15	6	Policy factsheet on ensuring an effective monitoring of tourism sustainability in the Mediterranean Region: https://sustainable-tourism.interreg-med.eu/fileadmin/user_upload/Sites/Sustainable_Tourism/horizontal_project/BTM_Documents/Policy_Factsheets/BTM_PolicyFactsheets_1_EN.pdf Tourism sustainability toolkit in Mediterranean, Co-EVOLVE project European open IT platform for sustainable maritime & coastal tourism, MITOMED+ Project
	Monitor natural and conservation areas, biodiversity, and ecosystems to avoid negative impacts from tourism	a) b) c) d) e)	c	14, 12b	9,13,14,15	3.1	
	Promote the use of regulations for tourism operations to enhance sustainability performance and operations (e.g., hotel classification systems, environmental licenses, etc.)	a)	c	4,6,8	6,10,12,13,14,15	8	
6	Facilitate access to knowledge, information and finance on circularity by building online platforms for training, assessments, capacity building, and other useful resources connected to sustainable tourism	a) b) c) d) e)	c	1,2,4,7,8,9	4,8,9,10,12,13	2,3,4,5	Europark Federation hub for protected areas in Europe, The handbook "Sustainability in Swiss Tourism Destinations" (2021) for destination management organizations and other interested parties on 40 criteria from the fields of economy, society, environment and management.
	Develop innovative incentives to promote green tourism and volunteer tourism that relies on natural infrastructure to indirectly invest in natural sites conservation	a) d) e)	c	1,2,3,9	9,14,15	3	https://www.gohawaii.com/contact-us (e.g. Hawaii's Malama tourism initiative provides packages that involve daily volunteer activities, such as reforestation, beach cleanups, and others in exchange for free nights at designated hotels).
	Integrate lifecycle assessments of natural infrastructure into tourism policies and promote public and private initiatives to restore and enhance the capacity of ecosystems used as tourist attractions to deliver their infrastructural and ecological functions	a)	a	1, 2, 3, 4,9	9,14,15	5.1	(e.g. The Reef Restoration Foundation regenerates the damaged corals of the Great Barrier Reef by replanting them (coral gardening) from the species raised in the coral nurseries). https://whc.unesco.org/en/list/154/ https://reefrestorationfoundation.org/
	Develop innovative circular solutions in plastics and other key resources being used in tourism to reduce waste & pollution based on life cycle approaches	a) b) d) e)	b	2	6,9, 11, 12,13,14,15	1	Towards a Circular Economy Document UNEP.
7	Provide tourism stakeholders with access to digital tools and for tourism digitalization and innovation (e.g. digital tourism experiences, digital menus)	a) b) c) d) e)	c	4,9	12,13	1	Glasgow Declaration Table of Actions https://www.oneplanetnetwork.org/knowledge-centre/resources/recommended-actions-glasgow-declaration
	Promote the sustainable management of food through the implementation of circular business models (including prevention, diversion from landfill, recovery, donations, etc.)	b)	c	2,6,7	2,9,12,13	4	-
	Develop action plan for circular management of plastic packaging and items, with a focus on elimination, transition to reuse models, and sustainable procurement.	a) b) d) e)	c	1,2,6	9,12,13,14,15	4.6	Towards a Circular Economy Document UNEP.
	Develop/Improve multimodal travel digital platforms combining public transport (trains, trams, buses, etc) and walking, cycling, and ensure a more accurate and real-time measurement of demand, including seasonal peaks and expected weather disturbances.	a) b)	b	2,4,8	9,11,13	2,3,4,6	Rental of electrical cars (e.g. the Austrian ski destination Werfenweng, https://www.werfenweng.eu/EN/SAMO), and sustainable mobility (E.g.Switzerland mobility)
8	Increase awareness and communication for tourists and visitors on environmental impacts of the sector to help individuals choose sustainable, low-impact travel options and tourism activities	a) b) d) e)	c	1,2,4,7,8,9	12,13	1,5,7	Glasgow Declaration Table of Actions & Amsterdam's subway: https://verbiedfossilereclame.nl/first-step-amsterdam-is-banning-advertising-for-fossil-fuel-products-from-the-subway-stations/ Switzerland Tourism has developed the sustainability program "Swisustainable" which is open to all Swiss tourism companies and organizations. https://www.myswitzerland.com/en-ch/planning/about-switzerland/sustainability/
	Promote sustainable and circular procurement for tourism goods and services (e.g. cooling systems in buildings, plastics, electronics)	a) b)	b	2	9,12,13	4	-

	Develop and implement consumer information tools such as sustainable tourism certification and accreditation schemes to integrate sustainability criteria in tourism operations and infrastructure development	a) b) d) e)	c	2,3	9,11	4	(e.g. Iceland's VAKINN eco-certification program maintains and protects tourist attractions and nature while ensuring wider industry participation and adoption of the sustainable practices. The pool of the certificate holders includes hotels, campsites, car rental services, restaurants, etc.) https://www.vakinn.is/en/quality-system/environmental-system https://www.vakinn.is/en/certified-companies
	Promote alternative tourism models to reduce pressures and foster depersonality / Promote alternative tourism models (eco-tourism, cycling tourism, slow tourism, inland tourism) and off-season offers to attract new visitors and redirect visitors from saturated spots toward less popular destinations, whilst capitalizing on their easy access to extend seasonality and encourage sustainable mobility. This is not about 5. moved to somewhere... i would move to 8, as this is about new consumer products	a) b) d) e)	a	All	3,5,8,10,11,12,13,14,15	4.6	The Sustainable Tourism community (Interreg Med project) gather 24 thematic projects and can provide good examples of proposals to promote alternative tourism models to the sand, sun, sea model in the Mediterranean Region. Destimed Plus Project has developed Eco-tourism packages in collaboration with Protected Areas and measuring the impact through the Footprint calculator. EMBLEMATIC (Mountains) BLUEMED (Aquatic Tourism) TOURISMED (Fish tourism) MEDFEST (Culinary tourism) MEDCYCLETOUR (Cycling tourism)
	Develop legislation and sustainability criteria and standards for the procurement of travels, catering, meetings	a) d) e)	a	2	8, 9,12,13	1	Transforming Tourism Through Sustainable Procurement
9	Promote affordable and accessible public transport for vulnerable groups (including long distance trains) and access to shared mobility services and ensure accessibility tourism attractions.	a)	b	2,4,5,8	9,10,11,12,13	2.4	free public transport in Luxembourg or in Estonia
	Develop participatory tourism development plans (including climate action, biodiversity) with local communities and visitors to leverage their feedback and knowledge and ensure the needs of vulnerable and/or marginalized groups are accounted for	a) b) d) e)	a	2,4,5,8	11,13,14	1	We need better training for women in tourism' https://www.dw.com/en/we-need-better-training-for-women-in-tourism/a-39339138
10	Develop methods, and tools to support science base policy planning and decision-making using life cycle approaches and assessing risks (climate, health, environmental, social)	a) d) e)	b	1, 2, 3	12b, 17	3	Capital Coalition - The Value Of Vanishing Coral Reefs Austria (https://webunwto.s3-eu-west-1.amazonaws.com/s3fs-public/2020-09/mstpilotstudyaustralia.pdf), the Netherlands (https://webunwto.s3-eu-west-1.amazonaws.com/s3fs-public/2020-09/item_3.5_netherlands.pdf)
	Develop evidence-based sustainability roadmap for key tourism sub-sectors, aviation, cruise and recreational boating sectors, while mitigating their negative effects on air, marine and coastal ecosystems, associated biodiversity, climate, air quality and local communities.	a) b) c) d) e)	a	1,2,3,4,6,9	11,12,13,14,15	3.4	Plan Bleu has led the development of guidelines for the sustainability of cruises and recreational boating in the Mediterranean with the collaboration of three Interreg MED communities (Blue Growth Community, MED Sustainable Tourism Community and Mediterranean Community for Biodiversity Conservation). https://planbleu.org/en/page-theme/cruises-and-boating-in-the-mediterranean/