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MAINSTREAMING OF BIODIVERSITY WITHIN AND ACROSS SECTORS AND OTHER STRATEGIC ACTIONS TO ENHANCE IMPLEMENTATION

Note by the Executive Secretary

INTRODUCTION

1. At its thirteenth meeting, the Conference of the Parties adopted a decision on the mainstreaming of biodiversity within and across sectors with a particular focus on the agriculture, forestry, fisheries and tourism sectors (decision [XIII/3](#)). In paragraph 109 of this decision, the Conference of the Parties decided to consider at its fourteenth meeting the mainstreaming of biodiversity in the sectors of energy and mining, infrastructure, manufacturing and processing, and health.

2. Further, at its twenty-first meeting, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) considered scientific and technical matters relevant to the sectors of energy and mining, infrastructure, and manufacturing and processing and health. In its recommendation [XXI/4](#), it requested the Executive Secretary to prepare an additional note to be made available to the Subsidiary Body on Implementation at its second meeting, expanding on the note and information documents provided to the twenty-first meeting of SBSTTA on this agenda item taking into account a list of elements contained in the annex to the recommendation.¹ The recommendation also requested the Executive Secretary to invite Parties and other relevant stakeholders to submit case studies and practical examples of mainstreaming of biodiversity in these sectors; to prepare, for the consideration of the Subsidiary Body on Implementation at its second meeting, a proposal for a long-term strategic approach to mainstreaming, based on this note prepared by the Executive Secretary for the Subsidiary Body on Implementation, and other relevant information sources, along with draft terms of reference for a possible ad hoc technical expert group on mainstreaming of biodiversity; and to convene a time-limited informal advisory group to assist the Executive Secretary in preparing for the discussions on the sectors, mentioned in this paragraph, at the second meeting of the Subsidiary Body on Implementation, and the fourteenth meeting of the Conference of the Parties.²

3. Further, SBSTTA recommendation XXI/4 also invites the Subsidiary Body on Implementation to take the information contained in this note, as well as information submitted by Parties and other relevant stakeholders with respect to case studies and practical examples of mainstreaming, into consideration during deliberations at its second meeting, as well as when preparing proposals for the process of developing a post-2020 global biodiversity framework.³ Finally, the recommendation also included

* [CBD/SBI/2/1](#).

¹ SBSTTA recommendation XXI/4, para. 7(a).

² *Ibid.*, para. (b)-(d).

³ *Ibid.*, para. 8

elements for a draft decision for the Conference of the Parties, and recommended that SBI consider them in preparing its recommendation on the mainstreaming of biodiversity. However, SBSTTA did not review or adopt these elements.⁴ The full list of elements is provided in annex III to the present document.

4. Also in decision XIII/3, the Conference of the Parties requested that the Executive Secretary identify best practices and successful models of institutional mechanisms in place at the national level (para. 105(b)). In addition, in decision [XIII/25](#), the Conference of the Parties requested the Executive Secretary, subject to the availability of resources, to prepare, in consultation with Parties and relevant stakeholders, information on the obstacles, as well as to identify effective practices related to the implementation of national and global targets (para. 4). These issues are considered in CBD/SBI/2/4/Add.1.

5. Also in decision XIII/3, the Conference of the Parties requested the Executive Secretary undertake additional work with respect to a typology of actions and draft guidance for reporting on business-related actions. These issues are covered in CBD/SBI/2/4/Add.2.

6. Section I of the present note provides an overview of information on the mainstreaming of biodiversity in the sectors of energy and mining, infrastructure, manufacturing and processing and health, focusing on policy implications. Section II provides a summary of the main findings contained in CBD/SBI/2/4/Add.1 related to institutional mechanisms, and additional options for potential actions and practices to improve implementation of the Convention at the national level. Section III presents a way forward towards a long-term strategic approach to mainstreaming. Section IV provides recommendations for the consideration of the Subsidiary Body.

7. The present document includes inputs from a time-limited informal advisory group that was convened following the SBSTTA-21 meeting, including inputs provided in the addendums for this agenda item, as well as case studies and other inputs received from Parties in response to notification 2018-019, issued by the Executive Secretary on 25 January 2018, which invited Parties and relevant stakeholders, to, inter alia, submit case studies and practical examples relevant to mainstreaming of biodiversity in the sectors of energy and mining, infrastructure, manufacturing and processing, and health, as well as in cross-cutting policies.⁵ It was prepared with information, including that recommended by SBSTTA-21 as per above, as well as additional sources of information. The present document is also complemented by several information documents related to the relevant sectors under discussion.⁶

I. MAINSTREAMING OF BIODIVERSITY IN THE SECTORS OF ENERGY AND MINING, INFRASTRUCTURE, MANUFACTURING AND PROCESSING, AND HEALTH

A. Context and background on mainstreaming under the Convention

8. Mainstreaming of biodiversity is embedded in the text of the Convention on Biological Diversity. The overarching mandate for “mainstreaming” under the Convention is Article 6(b), which calls for Parties to “integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies”. Article 10(a) calls on Parties to “integrate consideration of the conservation and sustainable use of biological resources into national decision-making”. Other articles of the Convention are also relevant to mainstreaming, notably Article 14 on impact assessment, and Article 11 on incentive measures.

9. The Strategic Plan for Biodiversity 2011-2020 includes a strong focus on mainstreaming, particularly in Goal A (Address the underlying causes of biodiversity loss by mainstreaming of biodiversity across government and society) and Goal B (Reduce the direct pressures on biodiversity and promote sustainable use).

⁴ Ibid, para .9.

⁵ <https://www.cbd.int/mainstreaming/sbstta-sbi/preparation/default.shtml>

⁶ CBD/SBI/2/4/Add.4; CBD/SBI/2/4/Add.5; and CBD/SBI/2/4/Add.6.

10. There have been a wide variety of efforts under the Convention that contribute to the mainstreaming of biodiversity. These are discussed in section III below, on a long-term strategic approach to mainstreaming.

B. Overview of the energy and mining, infrastructure, and manufacturing and processing sectors

11. The energy and mining, infrastructure, and manufacturing and processing sectors comprise a wide variety of industries and activities. While they all depend, to varying degrees, on biodiversity and the ecosystem services that biodiversity underpins, all have potentially significant impacts on biodiversity. These three groups of sectors are closely interrelated. For example, new energy facilities make up a large part of projected future infrastructure. Materials and fuels may be extracted by mining before being processed and used in manufacturing by other industries. Infrastructure requires materials and energy for its construction, and in turn, is needed for their distribution.

12. Most of these sectors are expected to grow significantly through 2050 and beyond, and are at the core of national economic development growth forecasts. These sectors are also reflected in the 2030 Agenda for Sustainable Development.^{7,8}

13. Such growth could have significant implications for biodiversity. For example, at a global level, infrastructure development is cited as one of the major drivers of biodiversity loss. The fragmentation⁹ effect of large linear infrastructure projects (such as roads), noise, water, soil and air pollution, water extraction and indirect or induced impacts associated with opening up previously inaccessible areas to human activity (both legal, and illegal such as poaching) can result in loss of biodiversity and degradation of ecosystem services long after construction end. Most of the new infrastructure over the next several decades will be built in or around cities, including large-scale development of new cities in many regions of the world.

14. The broad range of plausible future scenarios discussed at SBSTTA-21 demonstrates that there are opportunities for policies and other measures to be put in place to promote sustainable development pathways consistent with the objectives of the Convention, its 2050 Vision, and the specific socio-economic goals of the 2030 Agenda for Sustainable Development. Given the potential impacts that the sectors of infrastructure, energy and mining and manufacturing and processing pose on biodiversity, and the dependencies (some indirect) of these and other sectors on biodiversity and ecosystems services, the mainstreaming biodiversity considerations within these sectors is essential in ensuring the continued viability of these sectors, as well as stemming the loss of biodiversity that underpins these and other sectors, and sustainable development more broadly.

15. Analyses of the energy and mining, infrastructure, and manufacturing and processing sectors, along with trends, potential impacts and dependencies on biodiversity, and effective tools and practices to address such impacts, with references, are presented in three addendums.

C. Mainstreaming approaches for the health sector

16. At its twenty-first meeting, SBSTTA considered scientific and technical matters relevant to health and biodiversity, including guidance on integrating biodiversity considerations into One Health

⁷ See General Assembly resolution [70/1](#) of 25 September 2015 entitled “Transforming our world: the 2030 Agenda for Sustainable Development”.

⁸ These include: Goal 7 (Affordable and clean energy); Goal 8 (Decent work and economic growth); Goal 9 (Industry, innovation and infrastructure); and Goal 11 (Cities and human settlements). These goals foresee, among other things, universal access to modern energy (target 7.1), sustained economic growth (target 8.1), infrastructure to support economic development and well-being (target 9.1), and access to all for housing and transport systems (targets 11.1 and 11.2).

⁹ “The disruption and spatial and functional break-up of extensive habitats into isolated and small patches, often by roads, housing developments, and other human activities” (Business and Biodiversity Offsets Programme (BBOP). 2012. Glossary. BBOP, Washington, D.C. 2nd updated edition [Online] Available from http://bbop.forest-trends.org/guidelines/Updated_Glossary [Accessed March 2018]).

approaches.¹⁰ This section provides an overview and update and also focuses on issues related to the policy implications of the mainstreaming of biodiversity in the health sector.

17. Biodiversity and ecosystem services are fundamental to human health. It underpins a vast range of ecosystem services as sources of food, medicines, shelter, energy, livelihoods and economic development and contributes to the regulation of multiple ecosystem functions and processes, which underpins nutrition and food security, clean air, the quantity and quality of fresh water, spiritual and cultural values, climate regulation, pest and disease regulation, and disaster risk reduction. Pathogens play a complex role in biodiversity and health, with regulating benefits in some contexts and threats to biodiversity and human health in others. Human-mediated changes in ecosystems, such as modified landscapes, intensive agriculture, and antimicrobial use, are increasing infectious disease transmission risks and impact. Land use change, overharvesting, and habitat alteration and other drivers of biodiversity loss contribute to the emergence and prevalence of both non-communicable and communicable diseases, potentially posing major global health threats which cost hundreds of thousands of lives and tens of billions of dollars annually.¹¹

18. Biodiversity, ecosystem, and nature-based solutions need to be further mainstreamed into human health policies and programmes as do human health considerations into biodiversity conservation programmes. Mainstreaming the links between biodiversity and human health is central to achieving the Sustainable Development Goals and the 2030 Agenda for Sustainable Development.¹² It is also central to the sustainable development objective of “leaving no one behind”. Mainstreaming opportunities need to be tailored to specific needs and circumstances of each sector but, often, win-win solutions are available. This nonetheless requires improved coordination and policy coherence across various sectors, interest groups and other stakeholders. For mainstreaming to be effective, the health sector must play a role of joint leadership together with the biodiversity conservation sector, and in collaboration with other sectors. Moreover, these linkages must not only be mainstreamed in national biodiversity strategies and action plans (NBSAPs) but also other sectoral plans and policies notably including national health strategies, policies, programmes and accounts, and should be developed, insofar as possible, with inputs from the relevant ministries.

19. There are a range of commitments that have been taken through international processes, at the national level, and by relevant sectors to support the mainstreaming of biodiversity and health linkages. For instance, a joint work programme on biodiversity and health was established by the Secretariat and the World Health Organization (WHO) in 2012, pursuant to decision [XI/6](#) of the Conference of the Parties. Under the Joint Work Programme, WHO and CBD have collaborated with partners to support Parties in mainstreaming biodiversity and health linkages, including by: bringing together scientific evidence to support evidence based decision making; building capacity through regional capacity-building workshops; raising public awareness; supporting Parties in the implementation of biodiversity and health linkages; establishing the Interagency Liaison Group on Biodiversity and Health. These activities have generated a vast network of partnerships bringing together a wide range of United Nations agencies, international organizations, academic institutions and civil society.

20. In May 2018, the World Health Organization’s highest governing body, the World Health Assembly, examined “health and biodiversity” for the first time under the agenda item on health, environment and climate change. The report is presented as an information document.

¹⁰ See CBD/SBSTTA/21/4, CBD/SBSTTA/21/9 and CBD/SBSTTA/REC/XXI/4.

¹¹ World Health Organization and Secretariat of the Convention on Biological Diversity, 2015, *Connecting Global Priorities: Biodiversity and Human Health, A State of Knowledge Review*. Available from www.cbd.int/health/stateofknowledge.

¹² Consideration of health-biodiversity linkages is of particular relevance to Goal 3 (Ensure healthy lives and promote well-being for all at all ages) and Goals 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development) and 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss as well as Goal 1 (End poverty in all its forms everywhere), Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture), Goal 6 (water and sanitation), Goal 11 (cities), and Goal 13 (climate).

21. Key mainstreaming opportunities to jointly support the conservation, sustainable management and use of biodiversity in order to reduce the associated global burden of diseases and maximize co-benefits include:

(a) Supporting the development of interdisciplinary scientific research on biodiversity and health linkages for the development robust, evidence-based integrated indicators on health and biodiversity to evaluate the effectiveness of integrated policies, plans and programmes, monitor the effectiveness of measures and more effectively address and communicate health risks associated with biodiversity changes and ecosystem degradation;

(b) Reflecting the risks associated with biodiversity loss and ecosystem degradation in health vulnerability assessments and risk communication;

(c) Implementing measures to increase access to clean water and sanitation so as to reduce exposure to waterborne diseases and measures to improve air, water and soil quality and to reduce exposure to pathogens from contaminated water, soil and food;

(d) Developing further measures and communication tools to promote the use of green spaces in urban areas and nature-based solutions to support health benefits, including mental health benefits, of access to nature and promote physical activity and promoting sustainable diets and healthy lifestyles;

(e) Developing policies, standards and protocols and communication tools that consider health and biodiversity linkages in line with the guidance on integrating biodiversity considerations into One Health approaches, and taking a more proactive and integrated approach to addressing threats, such as antimicrobial resistance and unhealthy lifestyles;

(f) Supporting technological innovation and data sharing across the public health and biodiversity conservation sectors, and supporting technology transfer;

(g) Supporting research to evaluate the burdens of disease attributable to biodiversity loss and ecosystem degradation;

(h) Adopting ecosystem-based approaches to climate change mitigation and adaptation as a measure to reduce the burden of disease associated with biodiversity loss and climate change and integrating biodiversity in disaster risk preparedness, monitoring and response;

(i) Increasing support to, raising awareness of and developing capacity at the local, national and global levels to support the integration of biodiversity and health linkages in policies, plans and programmes including as a measure to strengthen health systems at the local and community levels;

(j) Jointly addressing the social, economic and environmental drivers of ill health, with particular consideration for the needs and public health burdens of the most vulnerable populations, including the poor, women, children and indigenous peoples and local communities;

(k) Increasing public and private sector investment in intersectoral programmes that jointly support biodiversity conservation, sustainable use and primary health prevention, including through innovative funding mechanisms;

(l) Developing education programmes and learning tools that address the social and environmental drivers of ill health;

22. The Interagency Liaison Group on Biodiversity and Health could provide Parties with support in the implementation of decision [XIII/6](#) and the decision to be considered by the Conference of the Parties on the basis of SBSTTA recommendation XXI/3.

23. Consideration could be given to developing a global roadmap under the CBD-WHO joint work programme on biodiversity and health to provide Parties with more targeted support in mainstreaming biodiversity and health linkages.

24. Additional activities in support of the mainstreaming of health and biodiversity could include developing pilot projects at the national and subnational levels to mainstream biodiversity and health linkages, particularly among vulnerable countries, including small island developing States, and compiling existing evidence-based best practices on measures implemented at the local, national and regional levels to maximize biodiversity and health co-benefits.

25. While considerable progress has been made to better integrate biodiversity and health linkages under the CBD-WHO joint work programme, considerable additional efforts are required to further mainstream biodiversity and health linkages at the local, national, regional and global levels in order to meet the objectives of the 2030 Agenda for Sustainable Development, the Strategic Plan for Biodiversity 2011-2020 and other global commitments for sustainable development.

D. Opportunities and approaches for mainstreaming in the energy and mining, infrastructure, and manufacturing and processing sectors

26. There are a range of opportunities and approaches for mainstreaming biodiversity in these sectors, involving a range of actors. These include actions that can be taken through international processes at the national level by the business sector, the financial and banking sectors, and other actors to increase the mainstreaming of biodiversity in these sectors.

27. At the national level, actions for mainstreaming biodiversity may be usefully grouped in a number of categories, including the following: (a) strategic national planning (economic, development, etc.); (b) policies, laws and regulations; (c) incentive measures; (d) spatial planning across landscapes and seascapes; (e) measures at the scale of the site or production plant; (f) supply-chain measures.

28. Some of the most important areas for mainstreaming of biodiversity are summarized below.

1. International forums and processes

29. The 2030 Agenda for Sustainable Development is one of the most important global processes for the mainstreaming of biodiversity. It sets out an ambitious framework to address a range of global societal challenges and to promote policy coherence and foster integrated implementation across sectors and domains of society. The Conference of the Parties already recognized that the implementation of the 2030 Agenda for Sustainable Development provides a major opportunity for the mainstreaming of biodiversity and for the achievement of the Aichi Biodiversity Targets.¹³

30. Implementation of the 2030 Agenda for Sustainable Development requires an integrated approach that achieves socio-economic goals while also achieving the goals and targets related to biodiversity.¹⁴ In addition to numerous goals and targets related to biodiversity and ecosystems, the Sustainable Development Goals include targets related to these sectors, aimed at ensuring that the economic aspects are balancing social and environmental considerations. For example, Goal 9, on infrastructure, makes a call in target 9.4 to upgrade infrastructure and retrofit industries to make them sustainable with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and processes. Goal 11, target 11.3, calls for sustainable urbanization, and strengthening efforts to protect and safeguard the world's cultural and natural heritage. Goal 12 calls for the sustainable management and efficient use of natural resources.

31. The [10-year framework of programmes on sustainable consumption and production](#) is another important global initiative, adopted at the [United Nations Conference on Sustainable Development](#), in 2012. Strengthening the focus on biodiversity within this programme would be beneficial for the

¹³ Decision XII/4 on integrating biodiversity into the post-2015 United Nations development agenda and the sustainable development goals; and Decision XIII/3 on Strategic actions to enhance the implementation of the Strategic Plan for Biodiversity 2011-2020 and the achievement of the Aichi Biodiversity Targets, including with respect to mainstreaming and the integration of biodiversity within and across sectors.

¹⁴ Policy Brief: Biodiversity and the 2030 Agenda for Sustainable Development, Secretariat of the Convention on Biological Diversity (<https://www.cbd.int/development/doc/biodiversity-2030-agenda-policy-brief-en.pdf>), and CBD/SBSTTA/21/2/Add.1 "Biodiversity and the 2030 Agenda for Sustainable Development".

achievement of the Convention. The New Urban Agenda¹⁵ contains numerous calls for urbanization that are consistent with safeguarding biodiversity and ecosystems. The Global Infrastructure Forum, which stemmed from the Addis Ababa Action Agenda of the Third International Conference on Financing for Development¹⁶ and engages all of the multilateral development banks, among others, has taken up discussions on sustainable infrastructure. The Sendai Framework for Disaster Risk Reduction 2015-2030¹⁷ is also highly relevant for reducing the destruction of ecosystems that are essential for human settlements and all economic sectors. The United Nations Environment Programme has numerous programmes that are also of direct relevance, including the work of the International Resource Panel. Finally, a number of other United Nations entities are engaged in efforts that have a bearing on these sectors, including the United Nations Industrial Development Organization (UNIDO) and the United Nations Conference on Trade and Development (UNCTAD).

2. *Global social and environmental safeguards*

32. Over the past few years, the World Bank and the International Finance Corporation have adopted updated environmental and social safeguards, which are likely to set the new global best practice standards. These have strengthened some aspects related to biodiversity and ecosystem services. Ensuring the widespread adoption of these standards, and their effective implementation, is a key opportunity for the mainstreaming of biodiversity in these sectors, particularly for infrastructure, and energy and mining, due to the significant finance required. Methodologies have also improved for evaluating potential impacts on biodiversity and ecosystem services.

3. *National biodiversity strategies and action plans*

33. NBSAPs are the main entry point for implementation of the Convention and the Strategic Plan for Biodiversity 2011-2020. However, very few include a specific focus related to these sectors. For example, a high-level review of the revised National Biodiversity Strategies and Action Plans indicates that 16 have strategies or actions specifically linked to mining; 35 have strategies or actions explicitly related to energy; and 36 had strategies or actions that relate to environmental and social impact assessment / strategic environmental assessment. While few had strategies or actions specific to infrastructure, some examples exist.

4. *National-level strategic planning*

34. One of the most significant opportunities to mainstream biodiversity in the energy and mining, infrastructure, and manufacturing and processing sectors is at the level of strategic decision-making within national governments and subnational governments, as well as the policies and decisions of other governments and global and regional institutions that influence such decisions. One important element of Aichi Target 2, reflected in Sustainable Development Goal target 15.9, calls for the integration of biodiversity values in national and local development and poverty reduction strategies and planning processes.¹⁸ Another important tool, Strategic Environment Assessment (SEA), is now applied in some 90 countries either as a legal obligation or on a voluntary basis. The use of a strategic environmental assessment is key to ensuring that trade-offs and alternatives for investment pathways are considered in national and regional development and investment planning. SEA is an important tool for upstream planning, to consider whether investment in new facilities is actually needed, or if other approaches are available to achieve national goals. An information document prepared for the twenty-first meeting of SBSTTA provides extensive information on this topic.¹⁹

¹⁵ Adopted by the United Nations Conference on Housing and Sustainable Urban Development (Quito, October 2016) and endorsed by the General Assembly in its resolution [71/256](#) of 23 December 2016.

¹⁶ General Assembly resolution [69/313](#), annex.

¹⁷ General Assembly resolution [69/283](#), annex II.

¹⁸ Decision XII/5 on biodiversity for poverty eradication and sustainable development sets forth extensive actions to be taken, along with the Chennai Guidance, in this regard.

¹⁹ See “Global state of the application of biodiversity-inclusive impact assessment” ([CBD/SBSTTA/21/INF/13](#)).

5. *National policies, laws and regulations*

35. National-level regulations and policies are at the heart of the mainstreaming of biodiversity at the national level. These include sector-specific requirements, as well as cross-cutting measures and regulations.

36. Sector-specific requirements typically include direct regulation (command and control) whereby a standard, procedure or process is specified, such as hazardous waste, water pollution or air emissions regulations. Regulatory requirements are also common at the scale of the site of a facility.

37. Other measures include market-based instruments, such as taxes, subsidies and trading schemes which help internalize negative environmental externalities (e.g. landfill taxes, greenhouse gas trading schemes), and the removal, phasing out or reform of incentives, including subsidies, that are harmful to the environment, among others. Many countries have been modernizing their public procurement laws, integrating sustainability into the decision-making process, which helps drive markets towards rewarding sustainable practices.

38. Policies may include incentives, such as those for using cleaner technology, supportive mechanisms for certain types of energy and mining activities or “best available technology” requirements. Land use planning policies are crucial for avoiding impacts related to the location of facilities. No net loss or net gain policies that promote or require implementation of biodiversity strategies, based on the concepts of the mitigation hierarchy and biodiversity offsets, are increasingly being adopted, although there are differing views about the use of these approaches.

39. Legislation requiring an evaluation and mitigation of potential environmental impacts is among the most important for mainstreaming of biodiversity in these sectors. However, it also has its limitations, particularly in that such assessments are usually only required at the project level, after a decision has already been made to pursue a specific development. Legislation and policy relating to civil liability on human rights is also important, given the potential impact of these sectors on indigenous peoples and local communities.

40. The effectiveness of all of these measures relies on how effectively they are implemented and enforced. For instance, the effective use of environmental impact assessment depends on both the use of effective methodologies and the availability of accurate data.

6. *Spatial planning across landscapes and seascapes*

41. The specific geographic location of mining operations, facility siting, and trajectories of linear infrastructure will strongly influence the resulting impacts on ecosystems and biodiversity, both in terms of the direct footprint of operations and the induced impacts of associated developments. In order to avoid or, where this is not possible, minimize these impacts, land-use and marine spatial planning that integrate biodiversity values are key instruments that work across economic sectors to achieve the best possible outcomes for biodiversity and society. There are a growing number of tools available to support spatial planning (e.g. the Integrated Biodiversity Assessment Tool²⁰ and MapX²¹). Spatial planning in both the terrestrial and marine realms can be extremely valuable for the integration of multiple sectors into a single space and avoiding conflicts with conservation and social considerations (often referred to as integrated land use and/or resources planning).

7. *Urban planning and related measures*

42. Urban planning increasingly recognizes the critical role of ecosystems and biodiversity for sustainable urban development, underpinning the provision of necessary water resources, food security, control of air pollution and temperature regulation, as well as for human health and enjoyment. The New Urban Agenda recognizes the key role of nature, biodiversity and ecosystems for sustainable cities and urban quality of life.

²⁰ IBAT Alliance (no date) IBAT Alliance [Online] Available from: <https://www.ibat-alliance.org/> [Accessed March 2018].

²¹ MapX (no date) MapX [Online] Available from: <https://www.mapx.org/> [Accessed March 2018].

43. The nexus of biodiversity and cities was addressed in the *Cities and Biodiversity Outlook*,²² whose 10 key messages include the need to integrate biodiversity and ecosystems into urban policy and planning, and the large potential of cities to generate innovation and governance tools for biodiversity and sustainable development.

8. *Technology and innovation*

44. Innovation and advances in technology can help reduce biodiversity impacts from these sectors. Advancements in efficiency, the increasing use of renewable energy, improved techniques in agricultural practices, and techniques such as road-less development contribute significantly to reducing the impact of human economic activities on biodiversity and ecosystems. The development of Circular Economy approaches – including the safe and efficient recovery of mined materials (minerals and metals) from discarded technology, such as mobile telephones, and the development of secondary markets for these materials – may slow the demand for primary production. Innovations in nature-based solutions also provide alternatives to engineered approaches. Various efforts are being undertaken globally to advance the development of innovative technologies that have fewer impacts on the environment, such as those being undertaken by UNIDO and the Global Environment Facility.²³ Yet, innovation and technology has been relatively absent from discussions under the Convention. It is important to assess the benefits and risks of technological advances for the mainstreaming of biodiversity.

9. *Mainstreaming and indigenous peoples and local communities*

45. Indigenous peoples and local communities are holders and owners of traditional knowledge, innovations and practices that have supported sustainable lifestyles over millennia. Indigenous peoples and local communities as on-site, local ecosystem managers, with a knowledge of the local environment, including its biodiversity, could be well placed to support efforts to mainstream biodiversity in these sectors.

46. While indigenous peoples and local communities are often marginalized and excluded, they can become victims of imposed developments (such as protected areas, mega-dams and extractive industries). However, this is not always the case. Successful partnerships have been established between such sectors as mining and indigenous peoples and local communities whereby both parties contribute to a shared goal and benefit in different ways.

47. A fundamental principle of the Convention on Biological Diversity has been the effective participation of indigenous peoples and local communities on all matters that affect them within its mandate. This is relevant for the mainstreaming efforts promoted under the Convention. In order to support Governments and indigenous peoples and local communities, the Conference of the Parties, in its decision VII/16, endorsed the Akwé: Kon Voluntary Guidelines, which provide Parties and Governments with guidance on the incorporation of cultural, environmental and social considerations of indigenous and local communities into new or existing impact-assessment procedures. They should be applied in conjunction with the guidelines for incorporating biodiversity-related issues into environmental impact assessment legislation and/or process in strategic environmental assessment endorsed by the Conference of the Parties in decision [VI/7](#) A and contained in the annex to that decision. Parties and Governments are invited to take the Voluntary Guidelines into consideration whenever developments are proposed to take place on, or are likely to impact on, sacred sites or on lands and waters traditionally occupied or used by indigenous and local communities.

²² Secretariat of the Convention on Biological Diversity (2012), *Cities and Biodiversity Outlook*. Montreal, 64 pp. Available online from: <https://www.cbd.int/doc/health/cbo-action-policy-en.pdf>

²³ Cleantech Program funded by the GEF and UNIDO which aims to encourage innovation in small and medium enterprises (SMEs) to expand in green and clean technologies to secure national competitiveness in the global twenty-first century economy. More information: <https://www.thegef.org/content/cleantech>.

10. Supply-chain measures

48. In all of these sectors, perhaps particularly in the manufacturing sector, supply chain policies can be highly powerful means for addressing the potential biodiversity impacts from suppliers. These can be required through laws and government policies, and/or adopted as voluntary measures by businesses. In the manufacturing sector, this often involves whole value chain approaches dealing with resource efficiency (e.g., reducing water use and energy consumption) and emissions reduction (e.g., minimizing waste), from the retailer to the raw material producer.

11. Voluntary international sector specific standards

49. There are a number of efforts carried out at the industry level for reducing impacts by these sectors. There are good examples of work being done by large-scale mining and energy companies to encourage the protection of biodiversity and ecosystem services (for example, guidance and tools developed by ICMM, IPIECA and CSBI²⁴) and through strengthened regulation and enforcement. These include guidance on environmental impact assessment developed by the global oil and gas industry association for environmental and social issues (IPIECA).²⁵

50. The Roundtable on Sustainable Palm Oil, which manages a certification scheme²⁶ to ensure the credibility of palm oil sustainability claims, has a membership of several hundred companies, including consumer goods manufacturers, processors and/or traders, retailers and producers. Industry associations, such as the International Council on Mining and Metals and IPIECA, can help guide and inform the private sector's approach to biodiversity and ecosystem services. Accountability and transparency is one of the 10 Principles of the International Council on Mining and Metals, which has a membership of 25 mining and metals companies and over 30 mining associations. The Charter of the Natural Resources Governance Institute provides a set of principles for how natural resources can be harnessed to support sustainable development, aimed at both governments and societies.

51. While these standards are often important in setting standards that may be more rigorous than those required at the national level, a significant challenge is that they are not universally applied across the sectors. This can result in an "uneven playing field" where companies that follow less sound measures are rewarded due to their lower costs, and points to the need for globally agreed (and enforced) best practices.

12. Corporate policies and measures

52. Individual companies or association of companies have embarked on formulating their own policies and measures to mitigate impacts on biodiversity. For example, there have been significant advancements in embedding biodiversity considerations in environmental management systems (e.g., ISO 14001, the European Union's Eco-Management and Audit Scheme (EMAS)),²⁷ typically with targets and

²⁴ For example: CSBI (2014) Timeline Tool. www.csbi.org.uk/tools-and-guidance/timeline-tool/; CSBI (2015) A cross-sector guide for implementing the Mitigation Hierarchy, www.csbi.org.uk/tools-and-guidance/mitigation-hierarchy/; CSBI (2018) <http://www.csbi.org.uk/>; Gullison, R. E, Hardner, J., Anstee, S. and Meyer, M. (2015) Good Practices for the Collection of Biodiversity Baseline Data. Prepared for the Multilateral Financing Institutions Biodiversity Working Group and Cross-Sector Biodiversity Initiative. www.csbi.org.uk/tools-and-guidance/biodiversity-data-collection/; IOGP-IPIECA (2014) Operating Management System Framework for controlling risk and delivering high performance in the oil and gas industry. IOGP Report 510. www.ogp.org.uk/pubs/510.pdf; IPIECA (2011) Ecosystem Services Guidance. Biodiversity and ecosystem services guide and checklists. www.ipieca.org/publication/ecosystem-services-guidance/; IPIECA-IOGP (2014) Managing Biodiversity & Ecosystem Services (BES) issues along the asset lifecycle in any environment: 10 Tips for Success in the Oil and Gas Industry, <http://www.ipieca.org/resources/good-practice/managing-biodiversity-ecosystem-services-bes-issues-along-the-asset-lifecycle-in-any-environment-10-tips-for-success-in-the-oil-and-gas-industry/>; IPIECA-IOGP (2016) Biodiversity and ecosystem fundamentals – Guidance document for the oil and gas industry, <http://www.ipieca.org/resources/good-practice/biodiversity-and-ecosystem-services-fundamentals/>

²⁵ IPIECA-IOGP (2016) Biodiversity and ecosystem services fundamentals – Guidance document for the oil and gas industry. <http://www.ipieca.org/resources/good-practice/biodiversity-and-ecosystem-services-fundamentals/>.

²⁶ Available at: <https://www.rspo.org/certification>, accessed on 5 March 2018.

²⁷ E.g., Hammerl, M., Hormann, S. (2016). The ISO management system and the protection of biological diversity. Lake Constance Foundation (LCF) and Global Nature Fund (GNF), Germany, 72 pp.

key performance indicators for monitoring selected biodiversity attributes at the owned or leased sites of multinational companies. This can be correlated to a large extent with efforts made to improve the surface area and condition of habitats (as well as populations of threatened species) at the level of manufacturing plants. Moreover, various other sectoral initiatives have developed useful site level guidelines and best practices that could be adapted to various manufacturing sectors to improve biodiversity management of factory sites (e.g., the Cross-Sector Biodiversity Initiative²⁸ and the Energy and Biodiversity Initiative²⁹).

13. Reporting by businesses on their actions related to biodiversity

53. Reporting by businesses on their actions related to biodiversity is another important measure that can help reduce impacts and provide incentives for positive approaches. The note by the Executive Secretary on guidance for reporting by businesses on their actions related to biodiversity (CBD/SBI/2/4/Add.2) presents an updated typology for business reporting and guidance in the form of good practice examples. In addition, research undertaken on these issues points to the need to focus future work in this area on a number of strategic priorities related to factors that are preconditions for effective reporting, bearing in mind that disclosure and reporting is the last step of the process for identifying businesses impacts and dependencies on biodiversity. These include the need for strategic actions to improve the understanding among businesses of the role of biodiversity, and to develop and improve measure methodologies and metrics for biodiversity impacts and dependencies.

14. Financial sector

54. Biodiversity has been relatively invisible in most of the financial sector. This can be contrasted with climate change, the risks and opportunities around which have led to new and innovative financial approaches, including special funding mechanisms and insurance products. Efforts to better value biodiversity and ecosystems are key to further leveraging this sector.

15. Efforts to value biodiversity

55. A number of efforts are being undertaken to better identify the value of biodiversity. One example is the Natural Capital Protocol, developed and published in 2016 by the Natural Capital Coalition, which is aimed at providing a standardized, generic framework to support businesses in better identifying, measuring and assessing their impacts and dependencies on nature, with a view to improving pertinent decision-making. This will help companies to understand where biodiversity loss poses a “material risk” that could impact their bottom line, in a manner that is legible to companies. A Natural Capital Protocol Toolkit maps existing tools, methodologies and approaches for natural capital measurement against the Natural Capital Protocol framework. Additional sector guides and supplements have been launched, including for apparel as well as food and beverages.³⁰ There are several projects under way which are aimed, among other things, at further strengthening the role of biodiversity in the natural capital concept, with a “biodiversity supplement” to the Natural Capital Protocol as one possible concrete output of this work. A working group has been established with a view to undertaking work on the role of biodiversity in the natural capital concept.

16. Institutional mechanisms at the national level

56. One of the most important measures that can be taken by Parties to advance the mainstreaming of biodiversity is to establish effective institutional mechanisms that ensure the consideration of biodiversity in decisions that could impact it. Such mechanisms are also used for consultations with stakeholders, for development of scientific and technical data and approaches, and for other purposes. This topic is more fully addressed in section III below and in CBD/SBI/2/4/Add.1.

²⁸ The Cross-Sector Biodiversity Initiative is a partnership between IPIECA, the International Council on Mining and Metals (ICMM) and the Equator Principles Association, the European Bank for Reconstruction and Development (EBRD), the International Finance Corporation (IFC) and the Inter-American Development Bank (IDB) to develop and share good practices related to biodiversity and ecosystem services in the extractive industries. Available from <http://www.csbi.org.uk/>, accessed on 5 January 2018.

²⁹ <http://www.theebi.org/>, accessed on 5 January 2018.

³⁰ <https://naturalcapitalcoalition.org/protocol/>

17. Role of communications for mainstreaming of biodiversity

57. A major obstacle to implementation of mainstreaming efforts is the fact that the value of biodiversity in general continues to be largely invisible to public and private decision makers. For example, biodiversity is currently not perceived by many public and private decision makers as relevant to them. There is also a lack of robust indicators for important aspects of the Strategic Plan for Biodiversity 2011-2020, in particular, some of the key mainstreaming targets, such as Aichi Biodiversity Target 2, on integration of biodiversity into national and local development and poverty reduction strategies, planning processes, and national accounts.

58. Effective communication to address this challenge can take form at different levels, from policy messages about the importance of biodiversity to poverty eradication and development, livelihoods, and health, to more technical data demonstrating the value of biodiversity. Effective communication needs to be targeted to specific audiences, sectors and actors. At its thirteenth meeting, the Conference of the Parties requested that the Executive Secretary “develop, as appropriate, messaging approaches on biodiversity mainstreaming for specific target groups related to these sectors, including agriculture, forestry, fisheries and aquaculture, and tourism, as part of the delivery on the global communication strategy and messaging approaches as set out in decision XII/2” (decision XIII/3, para.109). Work is being undertaken to set out a more strategic approach to address these challenges.

E. Conclusions

59. The importance of mainstreaming biodiversity in these sectors cannot be overemphasized. The activities that arise from these sectors rely directly or indirectly on biodiversity and its ecosystem services, but they also generate significant impacts on it. Significant developments and expansions are projected in all of these sectors. Integrating biodiversity values into these sectors and in cross-cutting policies is not only essential to achieve the current Strategic Plan for Biodiversity 2011-2020, but will also be an important area of consideration when embarking on the preparation of the post-2020 global biodiversity framework, which will likely consider sources of information that are relevant for the broader interlinkages between biodiversity and other societal and economic processes, notably the transformation of economic sectors and the financial industry to achieve sustainable development within the Planet’s ecological boundaries (i.e. food and environmental security, health, cities and urban development, business innovation, technology, sustainable consumption and production, water and efficient resource use, to name just a few).

60. Despite the importance of mainstreaming biodiversity in these and other sectors, as recognized by the Conference of the Parties, the opportunities and approaches described above need to be significantly scaled up in order to achieve the objectives of the Convention, as well as those of the 2030 Agenda for Sustainable Development. Suggestions on a way forward are included in sections III and IV.

II. INSTITUTIONAL MECHANISMS AND EFFECTIVE MEASURES TO ENHANCE IMPLEMENTATION AT THE NATIONAL LEVEL

A. Background and summary

61. Mainstreaming of biodiversity is only one part of the mandate of the Subsidiary Body on Implementation “to identify strategic actions to enhance implementation”, which “may include, as appropriate, actions related to mainstreaming; the development and implementation of coherent and effective measures and supporting institutional frameworks”, as well as actions related to synergies with other biodiversity-related conventions, partnerships with other intergovernmental and non-governmental organizations; and the enhancement of the role of relevant actors...”³¹ The topics of institutional mechanisms and effective measures to enhance implementation at the national level are also included in this agenda item for the consideration of the Subsidiary Body. Document CBD/SBI/2/4/Add.1 provides more detail on these topics, which are summarized briefly below.

B. Institutional mechanisms

62. One of the most important elements for the implementation of the Convention and the Strategic Plan for Biodiversity 2011-2020 is the use effective national-level institutional mechanisms. Such mechanisms are key to ensuring a government-wide approach to the development and implementation of NBSAPs, integrating the consideration of biodiversity in decisions and actions that may impact biodiversity, and engaging stakeholders in decision making. Yet, as further discussed in CBD/SBI/2/4/Add.1, such mechanisms vary significantly among NSBAPs, and there is little data on their effectiveness.

63. There are a variety of approaches to effective institutional mechanisms at the national level, which include regulatory requirements, formal inter-ministerial committees and other arrangements, scientific councils and platforms, watch-dog institutions, and consultative processes for stakeholder engagement. Examples of various approaches include: (a) government coordination mechanisms; (b) mechanisms for stakeholder inputs and engagement; (c) multi-stakeholder knowledge platforms; and (d) independent governmental audit or evaluation institutions. Further description, including some country examples, on each of these categories is provided in document CBD/SBI/2/4/Add.1, along with conclusions that are reflected in the recommendations.

C. Effective measures to enhance implementation

64. As noted above, mainstreaming is just one of a wide variety of measures that might be identified by the Subsidiary Body to enhance implementation of the Convention. As more fully discussed in CBD/SBI/2/4/Add.1, in order to consider possible effective measures to enhance implementation of the Convention and the Strategic Plan for Biodiversity 2011-2020, it is essential to first consider the effectiveness of existing practices, and obstacles to implementation.

65. The guidelines for the sixth national report, adopted in decision XIII/27, include assessment of effectiveness, associated obstacles and scientific and technical needs to achieve national targets as one of seven sections of the reports. In addition, the Conference of the Parties, through decision XIII/1, encouraged Parties, inter alia, to undertake evaluations of the effectiveness of measures undertaken to implement the Strategic Plan for Biodiversity 2011-2020.

66. In addition, Parties have identified the need for a more long-term strategic approach to mainstreaming, and a proposal for developing such an approach is included in section IV below. This proposed approach, along with the sixth national reports and other studies carried out the by Executive Secretary and by partners and stakeholders, will provide important sources of information that will facilitate the identification of measures to enhance strategic actions for implementation at the national level, and inform discussions on the post-2020 global framework for biodiversity.

III. TOWARDS A LONG-TERM STRATEGIC APPROACH TO MAINSTREAMING

A. Activities on mainstreaming under the Convention

67. There have been a wide variety of efforts undertaken under the Convention that have a mainstreaming component. These include: (a) as part of the elaboration of revised NBSAPs; (b) work to advance implementation of key cross-cutting Aichi Biodiversity Targets, including Target 1 on raising awareness,³² Target 2 on poverty and sustainable development and its Chennai Guidance,³³ Target 3 on incentives,³⁴ and Target 4 on sustainable consumption and production;³⁵ and (c) work to advance implementation of sectoral policies, such as Target 7, on management of agriculture, aquaculture and forestry. Voluntary guidelines for biodiversity-inclusive environmental impact assessment were adopted at

³² Decision XIII/22 on a framework for a communications strategy; and decision VII/24 on education and public awareness.

³³ Decision XII/5 on biodiversity for poverty eradication and sustainable development.

³⁴ Decision XII/3 on resource mobilization.

³⁵ Decision XII/10 on Business engagement; and decision XIII/3 on Strategic actions to enhance the implementation of the Strategic Plan for Biodiversity 2011-2020 and the achievement of the Aichi Biodiversity Targets, including with respect to mainstreaming and the integration of biodiversity within and across sectors.

the eighth meeting of the Conference of the Parties.³⁶ At its thirteenth meeting, the Conference of the Parties adopted an extensive decision on mainstreaming, including actions for the sectors of agriculture, forests, fisheries and tourism; cross-sectoral policies; engagement in relevant international processes, and the role of key actors including the business sector.³⁷ The Global Environment Facility has contributed significantly to mainstreaming, particularly with respect to investment in biodiversity mainstreaming projects in production landscapes and seascapes around the world.³⁸

68. To further support efforts by Parties to undertake actions to mainstream biodiversity, the Conference of the Parties in decision XIII/3 called on the Executive Secretary, subject to the availability of resources, to present options to SBSTTA on how to make the best use of existing programmes of work to further enhance the implementation of the Convention in the light of mainstreaming needs and the Strategic Plan for Biodiversity 2011-2020. An analysis provided to SBSTTA-21 identified the thematic and cross-cutting programmes of work of the Convention that have bearing on mainstreaming of biodiversity, as well as additional mainstreaming provisions adopted by the Conference of the Parties.³⁹

69. As part of its work, the Secretariat has also continued to be engaged in relevant international processes, including the 2030 Agenda on Sustainable Development, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, and the United Nations Conference on Housing and Sustainable Urban Development (Habitat III). The Secretariat has also developed new collaborations and strengthened existing partnerships with key United Nations entities (including FAO, UNFCCC, UNCCD, WHO, UNEP, UN Habitat, WTO), as well as with other non-United Nations partners, with respect to the mainstreaming of biodiversity.

70. Despite the significant decisions and specific efforts, the extent to which actions are being taken to mainstream biodiversity at the national level appears to be lagging. Some of the data points to major gaps in this regard. As further discussed in CBD/SBI/2/2/Add.1 regarding progress in revising/updating and implementing NBSAPs, only 49 NBSAPs have been adopted as “whole-of-government instruments”; 43 Parties report having conducted valuation studies of the biodiversity in their country; 31 Parties state that biodiversity has been integrated into their national development plans or equivalent instrument; 20 mention integration of their NBSAP with their sustainable development plans or equivalent instruments; 43 mention links to poverty eradication strategies, and, based on NBSAPs and other sources of information, at least 19 Parties have at least one subnational biodiversity plan.

71. There are likely several explanations for this. First, there continues to be a lack of understanding of the value of biodiversity for national economic and social interests, and thus, the failure to ensure that such value is considered in planning and decision-making that could adversely impact biodiversity. Second, the value of biodiversity and ecosystem services is often not captured by markets, and as described by Sir Nicholas Stern with respect to climate change, damage to biodiversity can be seen as a result of market failure. Third, the value of biodiversity may flow to other beneficiaries than those whose actions could potentially harm it. And fourth, the political benefits of protecting biodiversity are likely to be less clear to political leaders than taking action on matters such as the economy and jobs.

72. At a more technical level, there is a lack of understanding of what actions for mainstreaming biodiversity are likely to have the largest impacts; while extensive actions and tools for mainstreaming of biodiversity have been identified under the Convention and by partners, there has not been an effort to set priorities for key actions. Indicators for actions aimed at mainstreaming biodiversity are generally lacking. In a forthcoming report, OECD provides some approaches for possible indicators to monitor

³⁶ Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment contained in decision VIII/28.

³⁷ Decision XIII/3.

³⁸ Huntley, B.J. and Redford, K.H. (2014). “Mainstreaming biodiversity in Practice: a STAP advisory document”. Global Environment Facility, Washington, D.C.

³⁹ CBD/SBSTTA/21/INF/15.

progress towards biodiversity mainstreaming.⁴⁰ There also is a lack of information on obstacles and challenges to implementation.

B. Towards a long-term strategic approach to mainstreaming

73. By including a number of provisions on mainstreaming in the text of the Convention on Biological Diversity, the negotiators of the Convention recognized the key importance of mainstreaming biodiversity in order to achieve its objectives. This has been reinforced by recent decisions of the Conference of the Parties, which have called for a focus on certain key sectors as well as on relevant cross-sectoral policies.

74. The mainstreaming of biodiversity cannot be divorced from broader global trends. As noted above, significant growth is expected in the energy and mining, infrastructure and manufacturing and processes sectors, and growth in other key sectors, such as agriculture, is projected as well. The development of a post-2020 global biodiversity framework will provide an opportunity to further integrate the mainstreaming of biodiversity into the work under the Convention and to consider these broader trends.

75. Thus far, the consideration of mainstreaming under the Convention has included cross-cutting policy measures as well as a sector-specific approach. The cross-cutting policy measures included in previous decisions are relevant to all sectors. The sector-by-sector approach has aimed to examine sectors that are likely to have major impacts on biodiversity. However, a more programmatic or strategic approach may be more effective, given the commonalities and linkages between sectors and with cross-cutting policies.

76. Further to the request from SBSTTA in recommendation XXI/4, paragraph 7(c), the Secretariat has developed such a proposal, along with terms of reference for a possible expert group on the mainstreaming of biodiversity to support its work; these are contained in annexes I and II, and are reflected in the recommendations in section IV. The proposal includes elements aimed at actions by Parties, the Executive Secretary, partners and stakeholders. It proposes ways to continue progress towards mainstreaming of biodiversity across all sectors, while also identifying the need to set priorities to address the greatest threats to biodiversity, and to use the most effective approaches. It includes the need to identify gaps, and to leverage key partners, while avoiding duplication with other efforts. Finally, the proposal identifies the need to ensure that any long-term strategic approach to mainstreaming should also be carefully linked with discussion to develop the post-2020 global biodiversity framework.

77. In addition to the development of a long-term strategic approach to mainstreaming, section IV below includes draft recommendations specifically aimed at the sectors under consideration at the fourteenth meeting of the Conference of the Parties, building on the draft elements contained in the recommendation of SBSTTA-21, which are reproduced as annex III hereto for the consideration of the Subsidiary Body,⁴¹ as well as draft recommendations on the other issues taken up under this agenda item, including on business reporting, institutional mechanisms, and other strategic actions to enhance implementation, all of which are highly relevant to the development of a long-term strategic approach to mainstreaming, and to the post-2020 framework.

IV. SUGGESTED RECOMMENDATIONS

78. The Subsidiary Body on Implementation may wish to adopt a recommendation along the following lines:

⁴⁰ Karousakis, K (forthcoming, 2018), "Evaluating the effectiveness of biodiversity policies: impact evaluation, cost-effectiveness analysis, and other approaches", OECD Environment Working Paper.

⁴¹ SBSTTA decision XXI/4, para. 9.

The Subsidiary Body on Implementation

1. *Takes note* of the information contained in the note by the Executive Secretary on mainstreaming of biodiversity and other strategic actions to enhance implementation,⁴² the note issued for the twenty-first meeting of the Subsidiary Body on Scientific, Technical and Technological Advice,⁴³ as well as information documents⁴⁴ on mainstreaming of biodiversity in the energy and mining, infrastructure, manufacturing and processing and health sectors;

2. *Notes* that mainstreaming is a critical approach to assist Parties in the implementation of the Convention, and that transformational change is required in the conservation, use and management of biodiversity and ecosystems, including changes in behaviour and decision-making at all levels, for the achievement of the 2050 Vision for Biodiversity and the Strategic Plan for Biodiversity 2011-2020⁴⁵ and its Aichi Biodiversity Targets;

3. *Also notes* that, while numerous policies and tools exist to address the mainstreaming of biodiversity in these sectors, their use at the national level needs to be scaled-up and prioritized;

4. *Further notes* the importance of reviewing the effectiveness of, and identifying obstacles and challenges to, actions at the national level for the implementation of the Convention, including with respect to mainstreaming biodiversity;

5. *Emphasizes* the important role of indigenous peoples and local communities, as well as women, youth, local and subnational governments and other relevant stakeholders, in addressing mainstreaming in these sectors;

6. *Welcomes* the revised typology of biodiversity-related business actions and associated guidance prepared by the Executive Secretary;

7. *Also welcomes* the draft proposal for a long-term strategic approach to mainstreaming biodiversity, along with terms of reference for a possible ad hoc technical expert group on the mainstreaming of biodiversity to support it, prepared by the Executive Secretary;

8. *Recommends* that the Conference of the Parties at its fourteenth meeting adopt a decision along the following lines:⁴⁶

The Conference of the Parties,

Recalling decisions [XIII/3](#), in which it considered the mainstreaming of biodiversity in the sectors of agriculture, forestry, fisheries and tourism as well as cross-cutting issues, and in which it decided to address, at its fourteenth meeting, the mainstreaming of biodiversity into the sectors of energy and mining, infrastructure, manufacturing and processing, and health,

Taking note of the Cancun Declaration on Mainstreaming the Conservation and Sustainable Use of Biodiversity for Well-Being, adopted during the high-level segment in Cancun, Mexico, on 3 December 2016,⁴⁷

⁴² CBD/SBI/2/4.

⁴³ [CBD/SBSTTA/21/5](#).

⁴⁴ “Environmental assessment legislation – a global overview” ([CBD/SBSTTA/21/INF/5](#)); “Mainstreaming of biodiversity into the Energy and mining sectors” ([INF/9](#)); “Biodiversity and infrastructure: a better nexus? Policy paper on mainstreaming biodiversity conservation into the infrastructure sector” ([INF/11](#)); “Mainstreaming biodiversity into the manufacturing and processing industry: an initial compilation of reference documents, data and key actors” ([INF/12](#)); “Global state of the application of biodiversity-inclusive impact assessment” ([INF/13](#)); “Urban growth and biodiversity” ([INF/14](#)); “Options on how to make best use of existing programmes of work to further enhance the implementation of the Convention in the light of mainstreaming needs and the Strategic Plan for Biodiversity 2011-2020” ([INF/15](#)).

⁴⁵ [Decision X/2](#), annex.

⁴⁶ The draft decision is based on conclusions of the present document and its addendum as well as the elements from recommendation XXI-4, paragraph 9, of the Subsidiary Body on Scientific, Technical and Technological Advice. The full text of the Subsidiary Body’s recommendation is also included in bracketed text.

⁴⁷ [UNEP/CBD/COP/13/24](#).

Recognizing that the energy and mining, infrastructure, manufacturing and processing and health sectors, on the one hand, depend, to varying degrees, on biodiversity and the ecosystem services that biodiversity underpins and that the consequent loss of biodiversity can impact these sectors negatively, and that, on the other hand, these sectors have potential impacts on biodiversity which may threaten the provision of ecosystem functions and services that are vital to humanity,

Bearing in mind that mainstreaming biodiversity into the sectors of energy and mining, infrastructure, manufacturing and processing, and health is essential for halting the loss of biodiversity and for the achievement of the Strategic Plan for Biodiversity 2011-2020⁴⁸ and the goals and objectives of different multilateral agreements and international processes, including the 2030 Agenda for Sustainable Development,⁴⁹

Noting the important role of indigenous peoples and local communities, academia, the business sector, civil society, local and subnational governments, youth and other stakeholders, in addressing the mainstreaming of biodiversity in these and other sectors,

Acknowledging the work of relevant partner organizations and initiatives to advance biodiversity-related achievements by businesses, such as that of the United Nations Environment Programme, the United Nations Global Compact, the United Nations Statistics Division, the International Union for Conservation of Nature, the International Integrated Reporting Council, the Cambridge Institute for Sustainability Leadership, the Natural Capital Coalition and its biodiversity working group, and the Global Reporting Initiative, as well as that of other partners, including sectoral business associations,

Taking note of the *Cities and Biodiversity Outlook*⁵⁰ and its key messages to mainstream biodiversity at the city level given the strong linkages to the energy, infrastructure, manufacturing and processing sectors,

1. *Recognizes* that, while numerous policies and tools exist to address the mainstreaming of biodiversity in the sectors of energy and mining, infrastructure, manufacturing and processing, and health, many implementation gaps remain, including those related to strategic planning and decision-making, economy and sector-wide policies, and the wider application of biodiversity-inclusive impact assessments and the integration of biodiversity considerations in risk assessments and risk communication, in particular strategic environmental assessment of policies, plans and programmes and the use of spatial planning at the national and regional levels;

2. *Notes* the importance of reviewing the effectiveness of, and identifying obstacles and challenges to, actions at the national level for the implementation of the Convention, including aspects related to mainstreaming biodiversity;

3. *Invites* Parties, other Governments, partners and relevant stakeholders to implement past decisions of the Conference of the Parties related to the mainstreaming of biodiversity in order to address potential impacts on biodiversity from these sectors;

4. *Calls upon* businesses to utilize the revised typology of biodiversity-related business actions and associated guidance prepared by the Executive Secretary;

5. *Calls upon* Parties:

(a) To review the trends with respect to the sectors of energy and mining, infrastructure, manufacturing and processing, and health in their own countries;

⁴⁸ [Decision X/2](#), annex.

⁴⁹ See General Assembly resolution [70/1](#) of 25 September 2015 entitled “Transforming our world: the 2030 Agenda for Sustainable Development”.

⁵⁰ [Secretariat of the Convention on Biological Diversity \(2012\). *Cities and Biodiversity Outlook*. Montreal, Canada.](#)

(b) To review and, as necessary, update legal frameworks, policies and practices with respect to the mainstreaming of biodiversity in the sectors of energy and mining, infrastructure, manufacturing and processing, with the full and effective participation of the relevant sectors, indigenous peoples and local communities, academic institutions, and other stakeholders, among others;

(c) To apply best global practices on environmental impact assessments to decisions, including those of sovereign and private financial institutions, related to the approval of projects and investments in these sectors;

(d) To build, with the support of donor countries and other entities, as needed, capacity in all relevant institutions for the use of such best practices;

(e) To provide incentives to encourage investments by the financial sector in mainstreaming biodiversity in these sectors;

(f) To evaluate and pursue opportunities to utilize nature-based infrastructure to the maximum extent possible;

(g) To include biodiversity and ecosystems services in the planning and development of sustainable cities;

(h) To include the consideration of biodiversity in upstream decisions on investments in these sectors, through such available tools as strategic environmental assessments, and integrated spatial planning, including the evaluation of alternatives to such investments;

(i) To review and, as necessary, update legal frameworks, policies and practices, to foster the mainstreaming of biodiversity conservation and sustainable use in business policies and planning by, among other things, implementing incentives for best practices in supply chains, requiring reporting by businesses on biodiversity dependencies and impacts, and adopting or updating laws on sustainable procurement and similar policies to shift markets towards more sustainable products and technologies;

(j) To undertake a review of the effectiveness of measures taken at the national level to implement the Convention and the Strategic Plan for Biodiversity 2011-2020,⁴⁸ including those regarding institutional mechanisms, and to include the results of such a review in their sixth national reports;

6. *Calls upon* multilateral development banks, insurance companies, the private sector, financial institutions and other sources of financial investment for these sectors to apply best global practices regarding social and environmental safeguards on decisions regarding investments in these sectors;

7. *Calls upon* relevant organizations and initiatives to further intensify their work to advance biodiversity-related achievements by businesses and to enhance mutual information-sharing and collaboration, in particular:

(a) To improve the understanding among businesses of the value of biodiversity through, among other things, facilitating the sharing of experiences and good practices on increasing the conceptual understanding of businesses regarding their dependence on biodiversity and ecosystem services and benefits that are critical for business operations and business models, with a view to informing “materiality assessments” (i.e. assessments of the potential for biodiversity loss to be a material risk to companies) and enhancing the identification of biodiversity as a high-materiality issue;

(b) To develop and improve measurement methodologies and metrics for biodiversity impacts and dependencies, with a view to providing business managers with trusted, credible and actionable information for improved decision-making;

(c) To develop specific guidance on how to strengthen the ecosystem and biodiversity components of business reporting against the 2030 Agenda for Sustainable Development and its Sustainable Development Goals;⁴⁹

(d) To contribute to efforts to enhance the linkages between the work undertaken on ecosystem accounting within the framework of the United Nations System of Environmental-Economic Accounting (SEEA) and business-level accounting frameworks for ecosystems and biodiversity;

8. *Decides* to establish a long-term strategic approach for mainstreaming biodiversity, and *takes note* of the draft proposal prepared by the Executive Secretary;⁵¹

9. *Also decides* to establish an expert group on mainstreaming of biodiversity to support the further development of a proposal for a long-term approach to mainstreaming biodiversity, and *adopts* the terms of reference contained in the annex II hereto;

10. *Requests* the Executive Secretary, subject to the availability of financial resources:

(a) To undertake activities to support implementation of the present decision and to continue to support efforts related to mainstreaming, as requested in prior decisions of the Conference of the Parties;

(b) To further develop a long-term strategic approach to mainstreaming, based on the proposal contained in annex I hereto and supported by the expert group referred to in paragraph 9 above, and to ensure that the work to develop a long-term approach to mainstreaming biodiversity is appropriately linked to discussions on the post-2020 global biodiversity framework;

(c) To undertake additional work to further disclosure and reporting of businesses impacts and dependencies on biodiversity, working in collaboration with relevant organizations and initiatives, including to support the objectives listed in paragraph 7 above;

Health and biodiversity

Recalling decisions [XIII/6](#) and XIV/--⁵² on health and biodiversity and the importance of these decisions to the implementation of the 2030 Agenda for Sustainable Development and the achievement of the Sustainable Development Goals;

11. *Welcomes* the consideration of the interlinkages between human health and biodiversity by the Seventy-first World Health Assembly;⁵³

12. *Invites* Parties and other Governments to implement decisions XIII/6 and XIV/--⁵⁴, as appropriate and in accordance with national priorities, capacities and legislation, and to further develop communication, education and public awareness tools on the value of biodiversity conservation and ecosystem-based approaches to public health, with a view to supporting capacity development and the development of biodiversity-inclusive One Health policies, plans and programmes in line with the objectives of the 2030 Agenda for Sustainable Development;

13. *Invites* the World Health Organization, through its Executive Board, to further support the development and implementation of measures, guidance and tools for promoting and supporting the mainstreaming of biodiversity and health linkages in the public health sector, and

⁵¹ CBD/SBI/2/4, annex I.

⁵² Expected to be adopted on the basis of recommendation XXI/3 on health and biodiversity adopted by the Subsidiary Body on Scientific, Technical and Technological Advice.

⁵³ See World Health Organization document [A71/11](#).

⁵⁴ Expected to be adopted on the basis of recommendation XXI/3 on health and biodiversity adopted by the Subsidiary Body on Scientific, Technical and Technological Advice.

to consider establishing a regular reporting mechanism for the progress of activities on biodiversity and health under the CBD-WHO joint work programme on biodiversity and health;

14. *Also invites* the World Health Organization, in cooperation with other relevant partners, to support the implementation of the present decision and decision XIII/6;

15. *Invites* donor and funding agencies to provide financial assistance for country-driven projects that address cross-sectoral mainstreaming of biodiversity and health when requested by developing country Parties, in particular the least developed among them, including small island developing States;

16. *Requests* the Executive Secretary, in collaboration with the World Health Organization, as appropriate and subject to the availability of resources:

(a) To develop integrated evidence-based indicators on biodiversity and health;

(b) To develop targeted messaging approaches on mainstreaming biodiversity for the health sector, including as part of the delivery on the global communication strategy and messaging approaches as set out in decision [XII/2](#);

(c) To develop a draft global plan of action to mainstream biodiversity and health linkages into national policies, strategies, programmes and accounts, in order to further support Parties in the mainstreaming of biodiversity and health linkages, building upon decision XIII/6 and the guidance on integrating biodiversity considerations into One Health approaches.⁵⁵

⁵⁵ [CBD/SBSTTA/21/4](#), section III.

*Annex I***PROPOSAL FOR A LONG-TERM STRATEGIC APPROACH TO MAINSTREAMING BIODIVERSITY****I. INTRODUCTION**

1. Mainstreaming of biodiversity is one of the key approaches for achieving the objectives of the Convention. While numerous actions and decisions have been taken to further the mainstreaming of biodiversity in key sectors and in cross-cutting policies, a long-term strategic approach is needed in order to undertake actions for mainstreaming more effectively.

II. AREAS FOR DEVELOPMENT OF A LONG-TERM STRATEGIC APPROACH TO MAINSTREAMING

2. A number of actions will be important for developing a long-term approach to mainstreaming, including actions by governments, businesses, partners and stakeholders. Activities at the international, national and subnational levels are also needed. The goal of such an approach should be to establish priorities for action, based on scientific evidence of likely impacts and benefits, as well as key actors that need to be engaged in implementing such actions.

3. Further work in the following areas will help to shape such an approach, which will be supported by activities undertaken by the Executive Secretary and the expert group:

(a) Review of the effectiveness of different mainstreaming practices that have been used, and the identification of priorities in terms of likely results;

(b) Research and analysis on the extent to which mainstreaming approaches are being used by Parties, and identification of major gaps, obstacles and challenges;

(c) Research and analysis of effective practices for mainstreaming biodiversity, and steps needed to scale up their use, including national legislation and policies;

(d) Strengthen efforts to develop and apply indicators with respect to mainstreaming approaches;

(e) Contribute to efforts with respect to the valuation of biodiversity and ecosystem services;

(f) Facilitate technical and scientific cooperation on mainstreaming;

(g) Consideration of how the existing programmes of the Secretariat might better contribute to such a long-term strategic approach with respect to capacity-building, among other things, and identification of existing gaps in areas of work that are important for mainstreaming;

(h) Identification of opportunities to develop new partnerships and strengthening of existing partnerships to support mainstreaming of biodiversity;

(i) Identify possible mechanisms to monitor the implementation of actions to advance the mainstreaming of biodiversity at the national level;

(j) Strengthen engagement with the business and finance sectors;

(k) Continue to engage in key international processes, including the 2030 Agenda for Sustainable Development.

III. INPUTS TO THE POST-2020 PROCESS

4. Mainstreaming of biodiversity will undoubtedly be a key element of the post-2020 global biodiversity framework. It is therefore essential to ensure that discussions and inputs with respect to mainstreaming are appropriately linked with the development of the post-2020 global biodiversity framework. The Executive Secretary, with the support of the Expert Group, will develop a road map for this purpose, including both technical and policy discussions as well as inputs from various stakeholders and partners.

*Annex II***TERMS OF REFERENCE FOR AN EXPERT GROUP ON MAINSTREAMING OF BIODIVERSITY**

1. The Expert Group on Mainstreaming of Biodiversity shall be composed of ___ experts nominated by Parties competent in fields relevant to the mainstreaming of biodiversity, with due regard to geographical representation, gender balance and the special conditions of developing countries, in particular the least developed countries and small island developing States, and countries with economies in transition, as well as a limited number of experts from indigenous peoples and local communities and relevant organizations, including relevant international organizations, non-governmental organizations and industry associations. The number of experts from organizations shall not exceed the number of experts nominated by Parties.

2. Taking into account decisions of the Conference of the Parties on sectoral and cross-sectoral mainstreaming of biodiversity, as well as the work of other relevant international processes and organizations, including the 2030 Agenda for Sustainable Development, the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme, the United Nations Environment Programme, the United Nations Industrial Development Organization, the World Trade Organization, the World Bank, and making use of available information, including that of the clearing-house mechanism of the Convention, the Expert Group shall provide the Executive Secretary with advice in the development of a long-term strategic approach to mainstreaming of biodiversity. Specific areas of work will include:

(a) Identifying effective practices, guidelines, methodologies, experiences and tools related to biodiversity mainstreaming, and other strategic actions, in order to enhance implementation of the Convention;

(b) Identifying obstacles that hinder mainstreaming of biodiversity in regulations, processes, policies and programmes at the national level;

(c) Identifying options and solutions to overcome these obstacles to mainstreaming of biodiversity;

(d) Identifying key tasks as well as challenges and gaps in addressing these actions;

(e) Suggesting priority actions, timeframes and relevant actors;

(f) Identify strategies for enhancement of partnerships to achieve further progress in mainstreaming of biodiversity;

(g) Identifying areas where additional work might be desirable in order to achieve further progress on mainstreaming under the Convention;

(h) Providing any other relevant advice, including on other initiatives or developments, meetings and other opportunities to help further this work.

3. The Executive Secretary will provide the secretariat for the work of the Expert Group.

Modus operandi

4. The group will meet, to the maximum extent practicable, through virtual means, including videoconferencing. Physical meetings will take place at least once a year, subject to the availability of resources.

Duration of work

5. The work of the Expert Group on mainstreaming should be initiated immediately after approval of the terms of reference by the Conference of the Parties at its fourteenth meeting and completed not later than the fourth meeting of the Subsidiary Body on Implementation, in time for the sixteenth meeting of the Conference of the Parties, which will be held in 2022.

*Annex III***RECOMMENDATION XXI/4, PARAGRAPH 9, OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE**

The following text is reproduced from SBSTTA recommendation XXI/4, paragraph 9:

9. *Recommends* that the Subsidiary Body on Implementation at its second meeting, in preparing its recommendation on the mainstreaming of biodiversity, consider the following elements of a draft decision for the Conference of the Parties to be adopted at its fourteenth meeting:

[The Conference of the Parties,

Recalling [decision XIII/3](#), in which it considered the mainstreaming of biodiversity in the sectors of agriculture, forestry, fisheries and tourism as well as cross-cutting issues, and in which it decided to address, at its fourteenth meeting, the mainstreaming of biodiversity into the sectors of energy and mining, infrastructure, manufacturing and processing, and health,

Taking note of the Cancun Declaration on Mainstreaming the Conservation and Sustainable Use of Biodiversity for Well-Being adopted during the high-level segment in Cancun, Mexico, on 3 December 2016,⁵⁶

Recognizing that the energy and mining, infrastructure, manufacturing and processing and health sectors, on the one hand, depend, to varying degrees, on biodiversity and the ecosystem services that biodiversity underpins and that the consequent loss of biodiversity can impact these sectors negatively, and that, on the other hand, these sectors have potential impacts on biodiversity which may threaten the provision of ecosystem functions and services that are vital to humanity,

Bearing in mind that mainstreaming biodiversity into the sectors of energy and mining, infrastructure, manufacturing and processing, and health, is essential for halting the loss of biodiversity and for the achievement of the Strategic Plan for Biodiversity 2011-2020⁵⁷ and the goals and objectives of different multilateral agreements and international processes, including the 2030 Agenda for Sustainable Development,

Noting the important role of relevant stakeholders such as indigenous peoples and local communities, academia, the private sector, civil society, local and subnational governments and youth, in addressing the mainstreaming of biodiversity in these and other sectors,

Taking note of the *Cities and Biodiversity Outlook*⁵⁸ and its key messages to mainstream biodiversity at the city level given the strong linkages to the energy, infrastructure, manufacturing and processing sectors,

1. *Notes* that, while numerous policies and tools exist to address the mainstreaming of biodiversity in these sectors, many implementation gaps remain, including with respect to strategic planning and decision-making, economy and sector-wide policies, and the wider application of biodiversity-inclusive impact assessments, in particular strategic environmental assessment of policies, plans and programmes, and the use of spatial planning at the national, regional and interregional levels;

2. *Also notes* that there are also valuable initiatives that promote the conservation and sustainable use of biodiversity and, to some extent, promote its mainstreaming in productive processes;

3. *Welcomes* the resolution on pollution mitigation by mainstreaming biodiversity into key sectors adopted by the United Nations Environment Assembly at its third session,⁵⁹

⁵⁶ [UNEP/CBD/COP/13/24](#).

⁵⁷ [Decision X/2](#), annex.

⁵⁸ [Secretariat of the Convention on Biological Diversity \(2012\). *Cities and Biodiversity Outlook*. Montreal, Canada.](#)

4. *Invites* Parties, other Governments and relevant stakeholders:

(a) To review the trends with respect to the sectors of energy and mining, infrastructure, manufacturing and processing, and health in their own countries, as well as existing laws, policies and practices, to address potential impacts on biodiversity and on the traditional livelihoods and knowledge of indigenous peoples and local communities from these sectors;

(b) To foster the mainstreaming of the conservation and sustainable use of biodiversity in these sectors by, inter alia, including the economic, social and environmental value of biodiversity and ecosystem services in decision-making on investments, including by the evaluation of alternatives to such investments, by exploring innovative ways to better integrate biodiversity in these sectors, and promoting the creation of standards and good practice guidelines related to biodiversity in these sectors, taking into account ecosystem-based approaches and the implications of cumulative environmental effects on biodiversity;

(c) To review and, as necessary, update legal frameworks, policies and practices, to foster the mainstreaming of biodiversity conservation and sustainable use, as well as ecosystem services, in business policies and planning by, among other things, designing and implementing incentives along supply chains and strengthening small and medium enterprises in sustainable production and consumption patterns;

(d) To establish, strengthen or foster institutional, legislative and regulatory frameworks, incorporating an inclusive economic, social and environmentally sustainable approach involving relevant stakeholders, such as indigenous peoples and local communities, academia, civil society, the private sector and national and subnational governments, as appropriate;

(e) To review the mainstreaming of biological diversity in the elaboration, updating and reform of policies, plans and strategies of the sectors of energy and mining, infrastructure, manufacturing and processing, with the full and effective participation of the relevant sectors, private, governmental, and academic institutions, indigenous and local communities, among others, and as appropriate;

(f) To promote and strengthen good practices on sustainable production and consumption implemented in the energy and mining, infrastructure, manufacturing and processing, and health sectors that favour conservation and sustainable use of biodiversity;

(g) To encourage investments in biodiversity as a means of enhancing the functioning of ecosystems and the services they provide;

(h) To work with the private sector and civil society to address the underlying causes of biodiversity loss and mainstream biodiversity across all relevant sectors and jointly develop recommendations that will help mitigate biodiversity-related risks;

(i) To promote partnerships and strengthen institutional capacities and cooperation arrangements on mainstreaming;

(j) To strengthen mainstreaming in national biodiversity strategies and action plans and in national reports;

(k) To establish knowledge platforms to bring together State agencies, the private sector and indigenous peoples and local communities to address these complex and technical issues, taking into account matters related to environmental stewardship and corporate social responsibility, and tailored to specific audiences;

⁵⁹ [UNEP/EA.3/L.6/Rev.2](#).

(l) To generate and share through the clearing-house mechanism information on the mainstreaming of the conservation and sustainable use of biodiversity in the energy and mining, infrastructure, manufacturing and processing sectors, including case studies, lessons learned, and good practice policies and tools, as well as information on gaps identified and additional options for more effective mainstreaming in these sectors;

5. *Agrees* to establish a long-term approach to mainstreaming biodiversity in key sectors, and an intersessional process to help guide the Secretariat in its work;

6. *Requests* the Executive Secretary, subject to the availability of financial resources:

(a) To include information on mainstreaming conservation and sustainable use of biodiversity into relevant sectors in the fifth edition of the *Global Biodiversity Outlook*;

(b) To identify appropriate methodologies to evaluate and strengthen the participation of relevant actors, including the private sector, in the mainstreaming of biodiversity in production and consumption patterns in the energy and mining, infrastructure, and manufacturing and processing sectors;

(c) To promote, at the regional and global levels, the exchange of experiences and information on possible mechanisms for the mainstreaming of biodiversity in the sectors of energy and mining, infrastructure, manufacturing and processing;

(d) To liaise with the key regional and international agencies which are relevant to these economic sectors to facilitate enhanced dialogue on biodiversity and these economic sectors and to identify and promote win-win scenarios;

(e) To facilitate capacity-building and training activities at the regional and subregional levels, and the sharing of experiences, in the utilization of the approaches and tools outlined in the updated note and related information documents referred to in recommendation XXI/4 of the Subsidiary Body on Scientific, Technical and Technological Advice;

(f) To implement a long-term strategic approach to the mainstreaming of biodiversity, including through the development of guidelines to support efforts at the national level;

(g) To report on progress to the Subsidiary Body on Implementation at a meeting held prior to the fifteenth meeting of the Conference of the Parties.]
