

Berlin, 27 May 2022

G7 Climate, Energy and Environment Ministers' Communiqué

1. We, the G7 Ministers of Climate, Energy and the Environment, met on 26–27 May 2022 in Berlin to address the multiple crises that are endangering our climate and environment and causing severe impacts on the planet, lives and livelihoods, and the next generations' needs around the world.

2. We condemn in the strongest terms Russia's unjustifiable, unprovoked and illegal war of aggression against Ukraine and the appalling atrocities committed by Russian armed forces in the sovereign territory of Ukraine. We stand united against Russia's violation of the UN Charter and other fundamental principles of international law and are steadfast in our solidarity with and our support for Ukraine, including for emergency responses to keep the critical infrastructure running. Russia's war of aggression is causing tragic human suffering, global economic and social disruptions, and severe environmental harm. We stand ready to cooperate with Ukraine on green reconstruction and recovery. We are deeply concerned about the devastating impacts of Russia's war of aggression against Ukraine, which has significantly exacerbated existing challenges, leading to shortages and disruptions in food and energy systems and steep price rises in commodity markets, especially including energy and global food markets. This heavily affects the lives of people around the world and increases their humanitarian and protection needs. We are determined to accelerate a coordinated multilateral response to preserve global food and energy security and stand by our most vulnerable partners in this respect.

3. We remain steadfast in our deep commitment to the rules-based international order that is central to protecting open, free and inclusive societies. We are determined to live up to our joint responsibility to counter the existential threats caused by the climate crisis, biodiversity loss and pollution.

I. Joint Action: Advancing the Climate, Energy and Environment Agenda Together

4. Tackling the triple global crisis: We express our deep concern regarding the triple global crisis of climate change, biodiversity loss and pollution, recognising that these challenges are inextricably interlinked and mutually reinforcing, and that they are driven largely by human activity and by unsustainable patterns of consumption and production. We therefore commit to immediate, short- and medium-term action in this critical decade, leveraging the synergies between climate and biodiversity action, the clean energy transition and environmental protection, which should inform long-term transformative change. We call on the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), the Intergovernmental Panel on Climate Change (IPCC) and other relevant international science and policy panels to intensify their cooperation in this regard. We recognise the opportunities offered by the transition to a more resource-efficient and circular economy. We recognise the necessity of achieving the 2030 Agenda for Sustainable Development as a plan of action for people, planet and prosperity in its entirety and we will work towards a successful outcome at the Future Summit in 2023 as an important milestone. We highlight that the 2030 Agenda for Sustainable Development, the Rio Conventions, the Paris Agreement and the decisions thereunder, including the Glasgow Climate Pact, the urgently needed Post-2020 Global Biodiversity Framework, other existing international instruments that address water and pollution, including relevant multilateral agreements on air, chemicals, and waste, and negotiations of international legally binding instruments on plastic pollution as well as on marine biological diversity of areas beyond national jurisdiction (BBNJ), among others, advance our collective efforts to address global environmental challenges. We are determined to urgently step up their implementation to achieve the goals anchored in these agreements. We emphasise the need for an urgent response in line with the latest scientific findings and an effective and integrated approach to these crises, which transform lives, health, the economy and all sectors of society. We highlight the message from the latest report of the IPCC that the window of opportunity is rapidly closing to keep a limit of 1.5 °C temperature rise within reach and secure a liveable and sustainable future for all. We underscore with concern its findings that current policies put the world on track to reach median global warming of 3.2 °C by 2100, with irreversible and lasting impacts on nature and people. We also highlight with concern the findings of the IPBES, indicating that around 1 million species are threatened by extinction, many within decades, and that biodiversity is declining and ecosystems are degrading faster than at any time in human history. We stress the urgency of adopting a new global biodiversity framework in 2022 and its prompt and swift implementation for halting and reversing biodiversity loss by 2030. We note with deep concern, and reaffirm our commitment to tackling, the disproportionate impacts of climate change and biodiversity loss on those already facing poverty, gender and social inequalities. Climate change and pollution are key drivers of biodiversity loss, and at the same time,

combating pollution, desertification, land and ocean degradation and water scarcity and protecting, conserving and restoring biodiversity are crucial for addressing climate change.

5. Mobilising and aligning financial flows: We recognise that combating climate change, biodiversity loss and pollution requires mobilising private and public, domestic and international financial resources. We commit to implementing clear policies and strategies to align financial flows with these objectives. We are determined to implement Paris-aligned and nature-positive COVID-19 recovery measures that do not harm the environment to counter the continuing devastating impact of the pandemic on all spheres of life. Recognising the importance of public action, we commit to being at the forefront of a global effort working towards fully aligning government action with our climate, energy, biodiversity and other environmental objectives, including by greening our public procurement in line with SDG 12.7 and collaborating via the Greening Government Initiative. We note that sustainable finance policies are pivotal for a green and equitable recovery and support resilience by mobilising private capital for the transition, while mitigating climate and nature-related financial risks. We recognise the key role of Multilateral Development Banks (MDBs) in mobilising finance for addressing climate change, biodiversity loss and pollution as well as the importance of mainstreaming these issues in their policies, investments and operations. We strongly welcome the Statement made by the MDBs at UNFCCC COP26 and call upon MDBs to commit to pledging concrete amounts to international biodiversity finance before CBD COP15.2. We welcome the establishment of the International Sustainability Standards Board and continue to support its work program to develop a global baseline for sustainability reporting standards. Moreover, we support the work of G7 Ministers of Finance in this regard. We recommit to increasing the gender-responsiveness and inclusivity of our climate and biodiversity finance. We welcome the strong eighth replenishment of the Global Environment Facility as the main financial mechanism that addresses all aspects of the environment in an integrated and synergistic manner and as a reflection of our commitment to tackle environmental challenges.

6. Linking climate and biodiversity: Healthy ecosystems are more resilient to climate change; they support adaptation and play an important role in mitigation by sequestering carbon. At the same time, climate change is a key driver of ecosystem degradation and biodiversity loss. We stress the importance of protecting, conserving, sustainably managing and restoring ecosystems for halting and reversing biodiversity loss by 2030 and to keep a 1.5 °C limit of temperature rise within reach. We will demonstrate leadership by calling for ambitious international action and commit to developing and implementing ambitious national policies, strategies and programmes that address climate change and biodiversity loss in an integrated way and promote mutually beneficial approaches. We highlight that Nature-based Solutions (NbS) represent a critical lever for tackling the climate crisis, biodiversity loss, deforestation, desertification, and degradation of ocean and freshwater, and are essential for carbon sequestration and for climate change adaptation. In this regard, NbS

contribute to our efforts under the UN Decade on Ecosystem Restoration and towards achieving the SDGs and the Rio Conventions. We therefore commit to step up implementation of NbS, as defined in the recent UNEA resolution ‘Nature-based Solutions for Sustainable Development’, for tackling the triple crisis of biodiversity loss, climate change and pollution, with significant benefits for adaptation and disaster risk reduction. We emphasise that social and environmental safeguards are an integral part of NbS. We are committed to increased resource mobilisation for NbS, domestically and internationally, in line with our commitment in the Nature Compact. We will ensure that NbS are integrated into the implementation of nationally determined contributions (NDCs), long-term strategies (LTSs), national adaptation plans (NAPs) or strategies and National Biodiversity Strategies and Action Plans (NBSAPs) or other strategies and plans and promote their integration into strategies for sustainable development while stressing the importance of working with partners. We stress that NbS cannot replace urgent action on decarbonisation and reduction of greenhouse gas emissions, but are necessary alongside these efforts in order to reach our net zero greenhouse gas emissions goals by 2050 at the latest, to halt and reverse biodiversity loss by 2030 and achieve the SDGs by 2030.

7. Land use, land-use change and forestry: Land-use change, including deforestation, and loss of habitats to agriculture as well as unsustainable agricultural practices are key drivers of biodiversity loss, land degradation, climate change, increasing water scarcity, and pollution. It is therefore crucial to align biodiversity-friendly and nature-positive policies on land-use, land-use change and forestry with the goals of the Rio Conventions and the Paris Agreement and the urgently needed Post-2020 Global Biodiversity Framework to achieve both climate and biodiversity goals. We welcome the discussions of G7 Agriculture Ministers regarding carbon sequestration. We restate our commitment to achieving land degradation neutrality, in line with SDG 15.3. We welcome the outcome of the 15th Conference of the Parties to the United Nations Convention to Combat Desertification in Abidjan (9 – 20 May 2022) and look forward to cooperating with other Parties to implement its decisions. Building on work by the Global Soil Partnership and on the Glasgow Leaders’ Declaration on Forests and Land Use, the G7 2030 Nature Compact and its collective commitment to halt and reverse forest loss, deforestation and land degradation by 2030, we commit to establishing ambitious national targets and strategies to protect, conserve, restore and sustainably manage and use terrestrial ecosystems, especially forests, and to monitoring and reporting on these targets. We commit to strengthening natural carbon sequestration and reducing emissions in agriculture, forestry and other land-use sectors while conserving or protecting biodiversity, including by implementing sustainable land management practices and supporting efforts towards substituting emissions-intensive materials with sustainably-produced emissions-reducing or climate-neutral and nature-positive alternatives as well as improved monitoring. Moreover, we highlight the importance of investment in climate-smart and nature-positive agriculture innovation to further expand the set of solutions that can address the multiple challenges of climate change, biodiversity loss and pollution, and

enhance food security and contribute to the One Health approach, and we note efforts of initiatives such as the Agriculture Innovation Mission for Climate in galvanising additional investment.

8. Sustainable and climate resilient water management: We recognise that, due to climate change, population growth and unsustainable water practices, freshwater resources are increasingly deteriorating, thus threatening sustainable development, especially food security, human health, energy security and gender equality, and the environment including biodiversity. We are therefore committed to reducing anthropogenic pressures on freshwater, including groundwater, supporting sustainable water practices such as integrated water resources management (IWRM) at all levels, including through transboundary cooperation, as appropriate, in order to conserve or protect the multiple services of water-based ecosystems by enhancing their resilience, including through NbS. We will assist particularly vulnerable countries in sustainable and climate-resilient water management. We will enhance efforts for achieving the water-related goals and targets of the 2030 Agenda globally, especially through strengthening synergies and interlinkages with other sectors. For this purpose, we are committed to contributing to a successful outcome at the UN 2023 Water Conference.

9. Ocean: We recognise the critical importance of a healthy global ocean and seas and resilient marine and coastal ecosystems in our joint effort to address climate change, enhance adaptation and resilience for coastal and vulnerable communities, halt and reverse biodiversity loss, improve food and nutrition security and enable sustainable development and resilient livelihoods, especially for coastal populations worldwide, ensuring no one is left behind. We therefore commit to showing global leadership and taking urgent concrete action to tackle the decline of ocean health including by combating marine pollution and ending Illegal, Unreported and Unregulated fishing. We emphasise the urgent need for enhanced ocean governance, scientific cooperation and bold ocean action within the G7 and beyond and contribute to it through the annexed G7 Ocean Deal.

10. Circular economy and resource efficiency: We highlight the need to move away from fossil fuel-based, linear economic systems and towards circular and regenerative systems, which value nature as an asset and in which resources remain in the economy as long as possible. Making resource efficiency and circular economy the norm, including throughout value chains, will foster the competitiveness and resilience of our economies and communities, while simultaneously supporting our efforts to achieve deep emission cuts and reach net zero greenhouse gas emissions by 2050 at the latest, halt and reverse biodiversity loss by 2030 and minimise pollution. We recognise that sustainable consumption and production and sound management of chemicals and waste are intrinsically linked and mutually interdependent. Design for durability and longevity, technologies needed for decarbonisation such as lightweighting technologies, and sustainable chemistry approaches

as well as actions to improve recyclability, design out waste and reduce food loss and waste are effective for enhancing resource efficiency.

11. Clean energy technologies and investments: We recognise the essential role of clean energy technologies, energy efficiency solutions and circular economy in achieving sustainable development and a climate-neutral, nature-positive future, decarbonising global economic systems, reducing pollution and creating millions of good paying jobs in the net zero transition. We emphasise that energy efficiency and net zero energy systems contribute to an affordable, clean, and sustainable future for all, in particular for vulnerable consumers and communities, whilst protecting biodiversity. Ensuring this energy transition requires that public and private investment is rapidly scaled up. As the world engages in these efforts, certain foreign direct investments in technologies that are fundamental to technological leadership can have significant national security implications as well.

12. Supply chains: Acknowledging the impact that Russia's war of aggression against Ukraine has had on global supply chains, we underline the importance of well-functioning and sustainable global supply chains and diversification for the resilience of our economies. Likewise, we recognise that across sectors, securing effective supply chains is an important means for implementing sustainable shifts in our production and consumption patterns. We will therefore strive for openness through ambitious policies to support the diversification, resilience and sustainability of supply chains. In addition, promoting the environmental, social, and economic sustainability of supply chains will enable a transition to a climate-neutral, nature-positive, equitable and resilient economy in a way that protects the environment, climate and human rights. We highlight the important role of the private sector in advancing the sustainability and resilience of supply chains, including through the implementation of transparency measures such as reporting and traceability as well as through environmental and human rights due diligence in line with the OECD Guidelines for Multinational Enterprises (MNEs) and the UN Guiding Principles on Business and Human Rights (UNGP), and commit to promoting the effective implementation of such measures.

13. Minerals: We are steadfastly committed to accelerating the clean energy transition, as it is critical for achieving climate change mitigation based on energy efficiency and a shift to the use of clean, safe and sustainable energies in our countries and beyond. We note that the technology deployment requirements associated with this transition will be underpinned by an unprecedented need for enhanced resource efficiency, as well as a shift in demand for specific minerals and metals essential for net zero emissions energy supply, with associated impacts on the environment, human health and human rights that need to be effectively addressed. It is essential that critical mineral supply chains follow the highest possible environmental and human rights standards. We encourage investment in technologies, processes, and methods that expand sustainable production while improving resource efficiency and circular economy. We are determined to ensure a sufficiently transparent and sustainable supply of critical minerals to maintain energy security, and a

competitive and affordable energy market amidst the infrastructure build-out associated with our net zero objectives, giving priority to diversification and to the most responsible forms of producing, processing and sourcing raw materials, as well as to the promotion of resource circulation. Recognising the work undertaken in other multilateral fora, including the International Energy Agency, to advance collaboration on the critical minerals needed for the clean energy transition, the G7 is exercising leadership on climate, inclusive and green growth and to foster resilience in global critical mineral supply chains. To achieve these goals, the G7 will convene discussions to identify how to enhance collaboration on mineral security to build secure, responsible, and integrated critical mineral supply chains using international cooperation, policy and financial tools. We will expedite solutions that will enable the most responsible forms of producing, processing and manufacturing materials, including efforts to improve resource efficiency, waste management, conservation and substitution in the pursuit of supply chain transparency, climate change mitigation and resilience, sustainability and circularity in supply chains in line with our international climate, energy, environmental and economic goals.

14. Sustainable agriculture and food systems: Russia's war of aggression against Ukraine further intensifies pressure on global agriculture and food systems. As we respond to the immediate crisis, we will ensure that the measures we take contribute to building sustainability and resilience in agriculture and food systems, including fisheries and aquaculture, and to achieving the goals of international commitments, including the Paris Agreement and the urgently needed Post-2020 Biodiversity Framework by ensuring the conservation, protection, sustainable management and restoration of forests and other terrestrial ecosystems. We note that climate change, biodiversity loss and land degradation threaten healthy and productive lands and soils, which constitute the foundation of food systems. We are convinced that the continued domestic and international transformation to sustainable food systems, as highlighted at the UN Food Systems Summit and COP26, is fundamental for achieving the SDGs by 2030, global food security and health resilience, as well as our biodiversity and climate goals. Recognising the close interlinkages between food systems and human, animal, including wildlife and plant health, we recommit to strengthening the One Health approach and working holistically to effectively mitigate the impact of threats, including zoonotic diseases, antimicrobial resistance and biodiversity loss, across all sectors.

15. Inclusive and just transition: We emphasise the importance of strengthening respect for human rights and leaving no one behind in the context of our efforts to transition to a net zero, nature-positive, resilient, and sustainable future. This includes the needs of affected workers, businesses and communities. We note that our economies can contribute to sustainable and inclusive growth and recognise the importance of a just transition and accordingly seek to strengthen social protection systems and promote employability and continuing education, reskilling, and training as well as acknowledge changes in occupational

safety and health. We stress the intrinsic value of gender and LGBTQ+ equality, the empowerment of women and girls, disability inclusion, inter-generational justice and diversity. We champion the active involvement, consultation, leadership and participation in climate, energy and environment decision-making from all groups of society, Indigenous Peoples, women and girls, people with disabilities and their representative organisations, local communities, low-income communities and marginalised populations. These groups are critical for achieving environmental justice and social and economic sustainability in line with the SDGs. To this end, we aim to deliver climate, energy and nature policies, plans, finance and actions that advance gender equality, gender empowerment and social inclusion, enabling locally-led adaptation and mitigation as well as conservation and sustainable use activities and addressing the barriers to accessing climate, energy and nature finance faced by local civil society organisations, such as women’s rights organisations, and by Indigenous Peoples. We further reaffirm our commitment to action in support of the UNFCCC-enhanced Lima Work Programme on Gender and its Gender Action Plan, the CBD Gender Action Plans and 2030 Nature Compact, as well as the Glasgow Climate Pact to increase the full, meaningful and equal participation of women in climate and biodiversity action, and to ensure gender-responsive implementation and means of implementation, which are vital for raising ambition and achieving climate and biodiversity goals.

II. Environment

(1) Protection, Conservation, Restoration and Sustainable Use of Biodiversity

16. Global biodiversity goals and targets, notably the Aichi Targets, have not been fully achieved and biodiversity continues to be lost at alarming rates, jeopardising sustainable economic development and human well-being. A transformative Post-2020 Global Biodiversity Framework with ambitious goals and targets, strengthened implementation and enhanced planning, monitoring, reporting and review is crucial to halt and reverse biodiversity loss by 2030. As the G7, we remain committed to a target of conserving or protecting at least 30 percent of global land and at least 30 percent of the global ocean by 2030 and will advocate for improved quality, effectiveness and connectivity of protected areas and other effective area-based conservation measures (OECMs). We are also committed to an ambitious restoration target, in line with the commitments such as those under the UN Decade on Ecosystem Restoration, the High Ambition Coalition for Nature and People and the Leaders’ Pledge for Nature. We support the inclusion of Nature-based Solutions (NbS), as defined in the recent UNEA resolution on Nature-based Solutions for Sustainable Development, in the Post-2020 Global Biodiversity Framework and stress that ambitious global targets on mainstreaming biodiversity across and within government, society and all sectors are pivotal. Further, we call for enhanced action on the sustainable use

of biodiversity in the Post-2020 Global Biodiversity Framework and we commit to adopting an ambitious target on the sustainable management of biodiversity in key productive sectors. To meet biodiversity finance needs and building on efforts already made, we support that the Framework include a target for the alignment of public and private financial flows with biodiversity objectives and a holistic approach to resource mobilisation, including an increase in resources from all sources, a more efficient and effective use of resources as well as identifying and, for those G7 members Party to the CBD, redirecting or eliminating incentives, including subsidies, harmful to biodiversity. We advocate for the full and effective inclusion, consultation and participation of Indigenous Peoples as well as local communities and respect for and protection of the rights of Indigenous Peoples in the new framework, and the need to obtain free, prior and informed consent, as set out in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). Ambitious targets by themselves, however, will not suffice. To ensure delivery, we will champion coherent and robust planning, monitoring, reporting and review mechanisms, with NBSAPs as the main implementation tool, a robust set of headline indicators to track progress by parties to the CBD, as well as a global stocktake of ambition and implementation and a ratcheting up mechanism to increase ambition and implementation over time.

17. As the G7, we will lead by example and will advocate for a strong, ambitious and effective Post-2020 Global Biodiversity Framework, to be adopted at CBD COP 15, and act right away to implement it. We are going to effectively conserve or protect at least 30 percent of our own lands, including terrestrial and inland waters, and 30 percent of our coastal and marine areas by 2030. We continue to support the UN Decade on Ecosystem Restoration with ambitious restoration initiatives in our own countries and bi- and multilateral support of restoration activities globally. In this context, we welcome and support, on a voluntary basis, the UN Decade's Multi-Partner Trust Fund. Committed to further mainstreaming biodiversity in decision-making, we will ensure implementation of the System of Environmental Economic Accounting (SEEA), which includes a Central Framework (CF) and the recently adopted Ecosystem Accounting (EA), a regular and institutionalised compilation of accounts, will use related indicators for policy and decision-making, and provide international support for further development and implementation of SEEA-EA, including knowledge and capacity development and system refinements. Those G7 members party to the CBD will submit revised NBSAPs by CBD COP 16 to reflect and contribute to the fulfilment of the latter's ambitious goals and targets. In these strategies and plans we will build on the 2030 Agenda for Sustainable Development and continue to create meaningful linkages to the climate agenda, including through NbS.

18. We recognise that increased financial and other resources from all sources, including private and public, national and international, are required to achieve our collective ambition to halt and reverse biodiversity loss by 2030 and implement the Post-2020 Global Biodiversity Framework. We emphasise the critical role of private finance in advancing

transformative changes towards nature-positive economies and call on private actors to align their financial flows. We will ensure robust policies and systems are in place to facilitate the alignment of financial flows with sustainability objectives, including biodiversity. Aware of our role as major economies, we are committed to mobilising resources from all sources, including public finance, to substantially increase our national and international funding for nature by 2025 including increased funding for Nature-based Solutions, commensurate with the level of ambition of the new global biodiversity framework, and ensure our economic and financial decision-making is aligned with and supports national and international biodiversity objectives. We encourage countries beyond the G7 that have not already done so to join us and make commitments on international public biodiversity finance by COP 15.2 and to dedicate increased resources to biodiversity domestically. Building on the G7 2030 Nature Compact, we will ensure our international development assistance does no harm to nature by 2025, and delivers positive outcomes overall for people, climate and nature. Acknowledging the harmful effect of some subsidies on the environment and the need to reform policies with recognised negative impacts on nature: we commit to lead by example by reviewing relevant domestic policies as soon as possible, according to national circumstances, and will take action as appropriate to develop replacements that are nature positive. In addition, those G7 members party to the CBD commit to aligning all financial flows with biodiversity objectives including identifying and redirecting or eliminating subsidies harmful to biodiversity, at the latest by 2030, taking initial steps without delay, and call on all countries and financial institutions, in particular Multilateral Development Banks (MDBs), to do the same. We strongly support the Global Environment Facility and its key role in supporting the implementation of the Post-2020 Global Biodiversity Framework, including NBSAP development. We also commend the successful 8th replenishment of the Global Environment Facility which includes an increase of funding for biodiversity. We call on MDBs and Development Finance Institutions to increase and mobilise their finance for nature and further leverage private capital. We welcome the MDB Joint Statement on Nature, People and Planet and call on MDBs to commit to clear and time-bound actions for its implementation and report on their funding for nature by CBD COP15. We also invite other MDBs to join and subsequently implement the Joint Statement. We therefore call on MDBs to ensure alignment of their portfolios with the goals of the Paris Agreement and the anticipated Post-2020 Global Biodiversity Framework. The Task-Force on Nature-related Financial Disclosures (TNFD) can contribute to the alignment of financial flows by encouraging and supporting better-informed decision making on nature-related risks. We therefore urge market participants to engage in the development of the TNFD's framework. We urge governments and regulators to support its development.

19. NbS are among the actions that play an essential role in the overall global effort to achieve the Sustainable Development Goals including by effectively and efficiently addressing major social, economic and environmental challenges. We commit to mainstreaming, enhancing and scaling up, across all sectors, at home and abroad, the

implementation of NbS, to benefit biodiversity and climate. We welcome the UNEA 5.2-Resolution Nature-based Solutions for supporting sustainable development. We understand NbS as actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, and resilience and biodiversity benefits. We emphasise that social and environmental safeguards - as highlighted by the UNEA 5.2 resolution - are an integral part of NbS, allowing them to deliver their full potential effectively, equitably and sustainably and we will ensure that such safeguards, for example those under the UN system, are employed. We encourage the use of internationally recognised standards that ensure quality and sustainability of NbS. When deploying NbS, we will secure or increase ecosystem integrity and strong benefits for biodiversity and secure inclusive and equitable governance processes. In doing so, we will respect and protect the rights of Indigenous Peoples, as reflected in relevant national law and international instruments such as UNDRIP, and through consultation and with their consent, integrate the knowledge of Indigenous Peoples as well as local communities. We commit to better mainstreaming NbS throughout our governance, instruments and policies across sectors as well as our COVID-19 recovery programme.

20. Stressing the importance of biodiversity and ecosystem services for human, animal, including wildlife, and plant health and well-being, we will promote and support the implementation of an integrated One Health approach. This includes reducing pollution and addressing climate change, as well as a reduction of the risk of future emergence or re-emergence of diseases, zoonotic spill-over, epidemics or pandemics resulting from biodiversity loss and the degradation or destruction of natural ecosystems. We welcome the development of the definition of One Health by the One Health High Level Expert Panel, endorsed by Food and Agriculture Organization (FAO), Organisation for Animal Health (OIE), World Health Organization (WHO) and United Nations Environment Programme (UNEP), and look forward to its forthcoming recommendations on monitoring and surveillance of emerging zoonotic diseases. We also welcome the new Quadripartite Alliance for One Health composed of FAO, OIE, UNEP and WHO. We support the adoption of an ambitious and effective CBD Global Action Plan for Biodiversity and Health at COP 16. Further, we welcome the new Multi-Partner Trust Fund on Nature for Health aimed at helping countries target their policies more holistically and supporting decision-makers and relevant stakeholders in taking measures to help prevent future pandemics. Finally, building on last year's commitment and the recommendations of UNEP's report on Environmental Dimensions of Antimicrobial Resistance (AMR), we remain committed to accumulating knowledge on AMR in the environment. We will continue to work with our ministerial colleagues with responsibility for health, food and farming and medicines regulators, where independent of government, as appropriate, to develop and agree on international standards.

(2) Protection, Conservation, Restoration and Sustainable Use of the Ocean

21. We acknowledge a healthy, clean and productive ocean, its resources and unique ecosystem as essential for all life on earth and recognise the outstanding global importance of its protection, conservation, restoration and sustainable use. We realise with great apprehension that the ocean is under high and still growing anthropogenic and cumulative pressures. It is with utmost concern that we recognise the accelerating effects of climate change on the ocean, including six consecutive years of record-breaking ocean temperatures, as well as increasing ocean acidification, pollution and biodiversity loss. We recognise that our efforts fall short of the global commitments on ocean protection and conservation under the 2030 Agenda for Sustainable Development with SDG14 and relevant UNEA resolutions, as well as relevant commitments under the CBD and consistent with international law as reflected in the UN Convention on the Law of the Sea. We underline the key role of the regional dimension, namely the Regional Seas Conventions and Regional Fisheries Management Organizations (RFMOs) and Regional Fisheries Advisory Bodies (RFABs). To live up to these pledges, raise ambition and ensure sufficient and timely progress in implementation, we are adopting the annexed G7 Ocean Deal.

22. We will increase our efforts nationally and internationally to conserve or protect at least 30 percent of the global ocean by 2030 through ecologically representative, well-connected networks of effectively and equitably managed Marine Protected Areas (MPAs) and OECMs. This commitment could include highly and fully protected MPAs in our own coastal and marine areas, as appropriate and respecting the rights of Indigenous Peoples, as reflected in relevant national law and international instruments such as UNDRIP.

23. We acknowledge the key role of ecosystem-based marine spatial planning in achieving the objectives of protecting, conserving, restoring and sustainably using the Ocean.

24. We call for the conclusion of the negotiations for an international legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) in 2022. We strive for an ambitious, effective, inclusive, fair, balanced and future-proofed BBNJ instrument that will be a major contribution to enhanced multilateral cooperation for the ocean taking into account the precautionary approach as set out in Principle 15 on the Rio Declaration of Environment and Development and an ecosystem-based approach. We will support its future implementation and contribution to conservation or protection of at least 30 percent of the global ocean by 2030 through an ecologically representative, well connected network of MPAs and OECMs and other area-based management tools including as appropriate, highly and fully protected marine areas in areas beyond national jurisdiction.

25. We fully support the commitment of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to establish a representative system of MPAs in the Convention area as soon as possible. This should be based on the best available scientific evidence as well as on the proposals to establish MPAs in the Weddell Sea, East Antarctica and the region around the Western Antarctic Peninsula. Large-scale and ecologically significant MPAs, such as those under consideration in CCAMLR, are crucial to conserve biodiversity and to build ocean resilience to climate change impacts in Antarctica. We intend to continue high-level outreach to CCAMLR members to facilitate the discussion for the designation of MPAs in the Southern Ocean.

26. We fully welcome the global, regional and national initiatives to protect, conserve and restore coastal and marine ecosystems and acknowledge their great potential for providing climate change mitigation, adaptation and resilience. We pledge to contribute with national, regional and international efforts in the conservation, protection and restoration of these ecosystems. Recognising that SDG 14 is among the least funded of the SDGs we are committed to enhanced ocean finance, including for coastal and marine NbS that deliver for people, biodiversity and climate whilst respecting their strong social and environmental safeguards within the G7 and beyond.

27. We are ready to do our utmost to end plastic pollution worldwide. We laud the UNEA 5.2 resolution End Plastic Pollution: Towards an international legally binding instrument and are committed to the rapid progression of negotiations initiated under that resolution with the aim of their completion by the end of 2024. We underline that a comprehensive approach is required that addresses the lifecycle of plastics and acknowledges that technical and financial resources are needed to support such an instrument. We emphasise that the cost of environmental damage has been growing tremendously and will continue to grow without intensified and coordinated action.

28. Rather than waiting for the new instrument and without prejudice to ongoing negotiations, we each commit to, without delay, taking ambitious actions that have environmental and socio-economic benefits along the lifecycle of plastics, and we encourage and support partner countries to do the same. Our actions could include, as appropriate: addressing single-use plastics, non-recyclable plastics as well as plastics with harmful additives through measures such as phasing out when possible and reducing their production and consumption; applying tools to internalise attributable costs of plastic pollution; and addressing the sources, pathways and impacts of microplastics, as well as promoting environmentally sound waste management. In so doing, we will also foster robust engagement and involvement of stakeholders. Additionally, we commit to supporting efforts to improve transparency and traceability throughout the global plastic value chains. Advancing our efforts against marine litter, we will continue the work on the prevention, mitigation and recovery of ghost fishing gear by measures like marking and reporting.

29. With regard to possible future deep-sea mining, we highlight the unique chance to regulate a human activity before it is put into practice in order to prevent damage to the marine environment. Fully aware of the potentially devastating impacts on marine ecosystems and the functioning of the ocean as a climate regulator and in order to safeguard the integrity, connectivity and functioning of the deep-sea ecosystems, we will continue to actively engage in the development of the regulations for exploitation under the International Seabed Authority (ISA). We will continue enhancing knowledge on the deep sea, its unique ecosystems and the impacts of possible deep-sea mining and put a particular focus on developing effective environmental standards as binding elements in future permitting processes. These standards should include science-based threshold values for pressures and impacts on benthic, demersal and pelagic ecosystems, as well as a requirement that a Regional Environmental Management Plan, including a network of representative, effectively managed protected areas is in place before an exploitation license is granted in a region. Furthermore, we strongly support the consideration of including a specific requirement for test mining as part of an EIA. We also support the adoption of a standardised approach by the ISA to the designation of Regional Environmental Management Plans. We underline that the recent triggering of the UNCLOS “two year rule” should not diminish our ambitions for developing a regulatory framework that ensures the effective protection of the marine environment. We affirm taking a precautionary approach to potential mining of marine minerals in the Area. A robust knowledge basis on the deep sea marine environment and on the risks and potential impacts of deep sea mining operations, that is able to demonstrate the environment is not seriously harmed, is critical for considering our consent in the ISA council for any future mining permits.

30. Illegal, unreported and unregulated (IUU) fishing is still one of the biggest threats to marine ecosystems, depleting fish stocks and destroying marine habitats. We renew the commitment to ending IUU fishing through strengthened international and multilateral cooperation, increased transparency and traceability, information sharing and enforcement as well as stronger monitoring, control and surveillance. This will contribute to a sustainable management of fish stocks and fish supply for local food and nutrition security. We will undertake every effort in the World Trade Organization to successfully conclude the fisheries subsidies negotiations with a meaningful agreement as soon as possible on comprehensive and effective disciplines that eliminate subsidies that contribute to IUU fishing and to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing. We will also promote global ratification and implementation of the FAO Agreement on Port State Measures as an effective binding instrument to end IUU fishing, and of the International Maritime Organisation Cape Town Agreement.

(3) Increasing Resource Efficiency, Transforming Economies towards Circularity

31. We note with great concern that the exploitation of natural resources is a main driver of the climate, biodiversity, and pollution triple crisis. The International Resource Panel has highlighted that the global extraction and processing of material resources accounts for 90 percent of biodiversity loss and half of greenhouse gas emissions. Resource efficiency and circular economy are indispensable tools to reach our goals in these areas and to reduce pressure on key natural resources such as water and land which are increasingly under stress. We stress the importance of adopting an integrated approach in managing resources efficiently to simultaneously address multiple environmental challenges. Recalling the 2016 Toyama Framework on Material Cycles and our goal to reduce the consumption of natural resources, noting that current resource exploitation is resulting in environmental degradation and is placing increasing pressure on the planet, endangering the very systems that provide the basis for sustainable development, we will therefore increase our efforts to fully leverage resource efficiency and circular economy for achieving the 2030 Agenda and its SDGs, our respective NDCs, global biodiversity targets and national biodiversity strategies and action plans. We strive for our economies to quickly become more circular.

32. In order to harness the full potential of resource efficiency and circular economy, policy coherence and a systemic approach across the entire product life cycle are needed. We therefore welcome the adoption by UNEA 5.2 of the resolution ‘Enhancing Circular Economy as a contribution to achieving sustainable consumption and production’. We will take measures, in cooperation with the private sector, to enhance the design of products including taking into account lifecycle assessment to favour product lifetime extension, repair, re-use and easier recycling, among other actions. We will respond to the Assembly’s invitation to share and discuss best practices regarding relevant product information along value chains. Furthermore, we task the G7 Alliance on Resource Efficiency to support such cooperation within the G7 and more widely.

33. The Bologna Roadmap, the working document of the G7 Alliance on Resource Efficiency adopted in 2017, has successfully guided our work on resource efficiency and circular economy in the past five years. During its implementation phase, we have strengthened our collaboration and built a strong basis for our future work. Building on the Bologna Roadmap, we will start a new work stream within the G7 Alliance on Resource Efficiency dedicated to identifying effective ways to use resource efficiency and circular economy as tools for achieving and stepping up our climate and biodiversity targets. To guide the future work of the Alliance, we adopt the new Berlin Roadmap, as set out in the annex.

(4) Managing Chemicals and Waste Sustainably related to SDG Target 12.4

34. We note with serious concern the findings and conclusions of the Global Chemicals Outlook II and recognise the need to address the adverse effects of the mismanagement of chemicals and waste and to achieve SDG Target 12.4 related to chemicals and waste. We recognise with alarm the mismanagement of chemicals and waste contribute to the global pollution crisis, threatening human, animal and environmental health as reported by UNEP. We recognise the need to stop unsustainable business-as-usual practices and to increase efforts to achieve the sound management of chemicals and waste throughout their life cycle in order to substantially reduce the number of deaths and illnesses from exposure to hazardous chemicals as well as to air, water and soil pollution. Therefore, we will decisively step up global action against pollution and to achieve the sound management of chemicals and waste.

35. Recognising the need for an improved scientific basis for policy action, we will actively work through the ad hoc Open-Ended Working Group established at UNEA 5.2 towards the establishment of a Science-Policy Panel by the end of 2024 to contribute further to the sound management of chemicals waste and to prevent pollution.

36. Underscoring our strong commitment to reduce lead in the environment, to reduce the disproportionate lead exposure in vulnerable communities, we encourage appropriate domestic regulation or control of lead in all countries, which can deliver societal benefits that far exceed the costs. We look forward to the EU-USA co-hosted workshop to be held under the German Presidency to take stock of G7 activities and develop possible options for future work and cooperation on sources of lead to reduce lead exposure in developing countries. The G7 aims to identify areas of action to strengthen the work to minimise lead pollution and exposure globally and strengthen cooperation with existing international initiatives and instruments, particularly SAICM. In doing so, the G7 will continue to work with multilateral organisations such as UNEP, WHO and UNICEF.

37. We strive for an ambitious result of the Fifth International Conference on Chemicals Management (ICCM5) including the adoption of an ambitious improved enabling framework to address the sound management of chemicals and waste beyond 2020, reflecting the lifecycle approach and putting in place the means for its effective implementation.

38. We recognise the importance of the implementation of the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS) and will continue and intensify our work with the UN GHS Sub-Committee to encourage its broader adoption and promote its implementation including in developing countries.

39. We aim to strengthen cross-sectoral and international cooperation on chemicals and waste management at all levels, to achieve joint benefits. In particular, we support capacity building in developing countries and countries with economies in transition by providing expertise and improved assistance for gaining access to all available resources for sound management of chemicals and waste. Furthermore, we welcome the increased volume of funding in the 8th replenishment of the Global Environment Facility to support the implementation of the Stockholm and Minamata Conventions and the sound management of chemicals throughout their life cycle in general.

40. We note the importance of effectively implementing respective obligations under the Stockholm Convention, especially regarding the elimination of the use of Polychlorinated Biphenyls (PCB) in equipment by 2025 and the environmentally sound management of PCB waste by 2028, and, therefore, support decisive action, potentially including envisaged arrangements by the GEF to accelerate action on PCB elimination.

(5) Implementing Environmental Sustainability through our Supply Chains

41. We commit to supporting a transition to environmentally sustainable supply chains which are net zero aligned and climate resilient, reduce pollution, decouple agricultural production from forest loss and land degradation, use resources sustainably, reduce product environmental impact, foster circular economy, and are nature-positive.

42. We recognise that the protection of human rights, the environment and climate are inextricably linked. We encourage companies to contribute, through their supply chains, to the achievement of environmental, social and economic sustainability goals worldwide. National and international environmental and social safeguards and labour standards such as the ILO Tripartite Declaration of Principles concerning Multinational Enterprises (MNEs) and Social Policy, the OECD Guidelines for MNEs and other international legal instruments continue to provide the framework for promoting sustainability of corporate action in their operations and supply chains. While taking into account the need to avoid disproportionate burdens and costs for SMEs, we will strengthen our efforts to implement and promote a mix of effective binding and non-binding policy measures that incentivise sustainability in supply chains and take due account of the environmental impacts of supply chains, including, as appropriate, effective domestic due diligence regulation, the enhancement of transparency and reporting throughout supply chains, and a strengthening of sustainable and green public procurement.

43. We recognise the need for legal clarity for businesses across jurisdictions, the consideration of the needs of producer countries, and the risk of supply chains shifting to avoid regulation necessitate solutions for coherent and comprehensive action. Internationally accepted risk-based due diligence standards, as developed under the UN

Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, should be used as a basis of and to streamline our due diligence endeavours.

44. We welcome the ongoing discussions in the OECD Working Party for Responsible Business Conduct and the stocktaking report on the OECD Guidelines for MNEs, which notably highlights the important role the Guidelines can play in providing unified guidance on the scope of environmental impacts and risk that business should address. We support a review of the OECD Guidelines that takes into account the findings of the stocktaking report, particularly with respect to the environmental chapter. Responsible business conduct guidance should clarify expectations regarding the current global crises, including the triple crisis of climate change, biodiversity loss and pollution, and reflect the need to transition to sustainable production and consumption patterns and implement the SDGs by 2030.

45. We underline the importance of international exchange of information to share best practices and identify solutions in all types of supply chains of relevant enterprises. We commit to supporting businesses, particularly SMEs, e.g. through help desks, sectoral dialogues, and recommendations, including for sustainable land use. We underline the importance of cooperation and support between and among the G7 governments, the private sector, consumer and producer countries, international organisations, academia, and civil society, including youth. We welcome discussions by G7 Labour Ministers, Agriculture Ministers and Trade Ministers on ways to facilitate sustainable supply chains.

46. Agricultural expansion is the driver of around 90 percent of global deforestation and has a major impact on land degradation. Many agricultural commodities are traded internationally. We will therefore accelerate the transition to sustainable supply chains that decouple trade and agricultural production from deforestation and forest degradation, to meet our joint commitment to halt and reverse forest loss and land degradation by 2030 in the Glasgow Leaders' Declaration on Forest and Land Use. We acknowledge the need to work towards a shared understanding of the underlying challenges of addressing deforestation and to develop complementary approaches to overcome them, thereby reducing costs through coordinated action. The basis could be to look to existing authoritative standards and guidelines on responsible business conduct from OECD and others in order to drive coherence. As consumer countries, we are determined to take responsibility including through demand-side measures, strengthening governance and transparency, and through capacity building for industries and producer countries to increase sustainability in their supply chains. We will, if appropriate, develop regulatory frameworks or policies, which may include the introduction of due diligence requirements for commodities associated with the risk of deforestation and forest degradation, and review our progress by the end of 2023. We take note of the work done by the German Presidency and welcome the Presidency's initiative to commission the OECD to provide further analysis and guidance. In addition, to explore opportunities to increase the coherence of approaches, we will work with partners, foremost

producer countries and other consumer countries, Indigenous Peoples, the private sector, non-governmental organisations, academia, relevant international organisations and local communities. In this context, we will continue our participation in and support of relevant initiatives, inter alia the Forest Agriculture and Commodity Trade (FACT) Dialogue, and we will promote sustainable forest management and sustainably produced wood and wood products, including through work by the International Tropical Timber Organisation.

III. Climate and Energy Transition

47. Accelerating the implementation of the Paris Agreement: We reaffirm our unwavering commitment to strengthening the implementation of the Paris Agreement. To this end, we commit to urgent, ambitious and inclusive action in this decade to reduce emissions to keep a limit of 1.5 °C temperature rise within reach, to enhance resilience and adaptive capacity to the impacts of climate change and to align financial flows with the goals of the Paris Agreement. We remain steadfast in our commitments to provide finance to those most vulnerable to the impacts of climate change. We will fully play our part in urgently implementing the Glasgow Climate Pact, and further commitments made at COP26, including sectoral initiatives. Following these objectives, we will work towards a successful COP27 and beyond.

48. Urgent action to close the gap for 1.5 °C: The contribution of IPCC Working Group III to the Sixth Assessment Report has found that there has been a consistent expansion of policies and laws addressing mitigation, and this has led to the avoidance of emissions that would otherwise have occurred. However, we note with serious concern the existing gap between limiting global warming to 1.5 °C and current targets leading to an increase in emissions by 13.6 percent compared to 2010 levels in 2030, as shown in the March 2022 UNFCCC Global Stocktake synthesis report on nationally determined contributions (NDCs) under the Paris Agreement. We also recognise the implementation gap between NDC targets and the expected outcome of existing policies. In light of the latest findings of the IPCC, we highlight the increased urgency to act for limiting global warming to 1.5 °C, so as to have peaked global greenhouse gas emissions between 2020 and 2025 and to reduce them by around 43 percent by 2030 and 84 percent by 2050 relative to the 2019 level. As part of this decline in emissions, global carbon dioxide emissions need to be reduced by around 48 percent by 2030 and 80 percent by 2040 relative to the 2019 level, with global net zero carbon dioxide emissions to be reached in the early 2050s. It is imperative to close the gaps and urgently take action ensuring climate commitments such as NDCs and long-term strategies (LTSs) are based on the latest available science including the IPCC Sixth Assessment Report.

49. 1.5 °C mid-term and long-term mitigation ambition and implementation: We highlight that all G7 members committed to achieve net zero greenhouse gas emissions by 2050 at the latest and submitted ambitious updated NDCs before COP26. We welcome that

many other countries committed to net zero targets and updated their NDCs as well. We recall and support the Glasgow Climate Pact's resolve to pursue efforts to limit the temperature increase to 1.5 °C and request to Parties to revisit and strengthen the 2030 targets in their NDCs as necessary to align with the Paris Agreement temperature goal by the end of 2022. We urge all countries – especially major emitters – whose 2030 NDC targets are not yet aligned with a 1.5 °C pathway to increase the ambition of these 2030 targets well before COP27. We urge all countries to move towards economy-wide emission reduction targets. We reiterate our commitment to effectively implement domestic mitigation measures aimed at achieving our NDC targets and we commit to increase our ambition, including for example, by adopting or strengthening sectoral targets, by developing non-CO₂ sub-targets, or by adopting stringent implementation measures. We stress the importance of the annual update of the UNFCCC NDC synthesis report and its inclusion of sectoral measures noting the deadline of 23 September 2022 for NDC submissions to be reflected in this report. Those of us who have not done so, commit to submitting LTSs that set out concrete pathways to net zero greenhouse gas emissions before or by 2050 and to do this as soon as possible, making utmost efforts to do so in time for inclusion in the UNFCCC LTS Synthesis Report ahead of COP27. We call on all countries that have not yet submitted such strategies towards just transitions to net zero emissions by or around mid-century to do so prior to COP27. We commit to enhance our support for developing countries in updating and implementing their NDCs and LTSs including through our contribution to multilateral funds or bilateral support. We welcome the facilitative work of the NDC Partnership and other such initiatives. We commit to support the first annual high level ministerial roundtable on pre-2030 ambition at COP27, and an ambitious work programme under the Paris Agreement to urgently scale up mitigation ambition and implementation in this decade in a manner that complements the global stocktake as Parties decided in the Glasgow Climate Pact.

50. Adaptation: We recognise with deep concern that continued global warming leads to increased risks and impacts in all regions globally, including in our countries, profoundly affecting human life and disproportionately impacting women and marginalised groups, as well as livelihoods and ecosystems, as identified in the Working Group II contribution to the IPCC Sixth Assessment Report. We emphasise the finding that inadequate progress towards the SDGs by 2030 reduces climate resilient development prospects. At the same time, accelerated climate action is a prerequisite of achieving the SDGs. We recognise that climate resilient development is already challenging at current warming levels and will become even more so if global warming exceeds 1.5 °C and may not be possible in some regions if global warming exceeds 2 °C. Against these findings, we highlight that all countries, including the G7, must enhance adaptation efforts while urgently reducing emissions as the only way to keep the need for adaptation within manageable bounds. In particular, we recognise the need to enhance action and support for adaptation in vulnerable countries. We underline the central role of effectively implemented national adaptation strategies and plans and to support developing countries in the development and implementation of these

strategies, plans and respective communications as well as in monitoring and assessing the progress of adaptation actions. We recently submitted our adaptation communications to the Paris Agreement detailing our respective measures, as the G7 committed to last year. We will mainstream adaptation across sectors and governance levels including local planning and promote awareness of the role of the private sector in increasing resilience of infrastructure and companies including building climate-resilient supply chains. We will scale up Nature-based Solutions to improve resilience to climate change, and substantially increase our efforts for sustainable water management around the world. Demonstrating progress towards the global goal on adaptation is key and thus, we support the objectives of the two-year Glasgow-Sharm el-Sheikh work programme and are committed to leverage this process into tangible results for enhanced adaptive capacities, strengthened resilience and reduced vulnerability to protect people, livelihoods and ecosystems. Both this programme and reporting of adaptation action will inform the Global Stocktake.

51. Loss and damage: Despite ongoing efforts in climate change mitigation and adaptation, risks from climate change impacts remain in all countries for all plausible scenarios and are already resulting in economic and non-economic losses and damages. We stress that comprehensive risk management approaches are key to building long-term resilience of countries, vulnerable populations and communities to loss and damage. We recognise that action and support for vulnerable countries, populations and vulnerable groups need to be further scaled up and emphasise the role of private and public sources, including from G7 members, in providing enhanced support regarding averting, minimising and addressing loss and damage associated with the adverse impacts of climate change. We strongly support the operationalisation of the Santiago Network for averting, minimising and addressing loss and damage associated with the adverse effects of climate change to catalyse demand-driven technical assistance of relevant organisations, bodies, networks and experts for the implementation of relevant approaches in particularly vulnerable developing countries. In addition, we fully support and will constructively engage in the Glasgow Dialogue among Parties, relevant organisations and stakeholders to discuss the arrangements for the funding of activities for averting, minimising and addressing loss and damage associated with the adverse effects of climate change. We welcome the work by Development Ministers towards a global shield against climate risks for poor and vulnerable people and countries by strengthening the climate and disaster risk financing and insurance (CDRFI) architecture, building on the InsuResilience Global Partnership.

52. Mobilising and aligning finance for a climate-neutral and resilient world: We are collectively committed to delivering on the US\$100 billion joint mobilisation goal as soon as possible and through to 2025, in the context of meaningful mitigation actions and transparency on implementation. We reiterate the deep regret expressed by Parties in Glasgow that this goal has not yet been fully delivered. We reaffirm our commitment to working with other developed country parties to urgently implement the Climate Finance Delivery Plan: Meeting the US\$100 Billion Goal, as well as other additional pledges made in

Glasgow, to reinforce our confidence that it will be met in 2023. We will, together with other developed country parties, work on a progress report ahead of COP27 focused on the implementation of the ten guiding principles for collective action, as identified in last year's Delivery Plan. Further, we highlight the Paris Agreement's recognition that mobilising finance requires a global effort and call on all countries to scale up their efforts to mobilise finance from all sources to support climate action. We recognise the urgent need to align financial flows with the long-term goals of the Paris Agreement as required in Article 2.1.c. Making finance flows consistent with low-emissions and climate-resilient development is an objective of all Parties and we call on all countries to enhance the understanding of ways to implement and progress towards this goal. All relevant economic and financial decision-making processes need to fully take into account climate and sustainability aspects and promote the implementation of ambitious nationally determined contributions and the SDGs. For shifting from billions to trillions, we underline the urgent need to scale up efforts to mobilise the private sector for accelerated action in mitigation and adaptation to achieve net zero emissions by 2050 and climate-resilient development, recognising the critical role that strong enabling environments, innovative finance vehicles, public and private finance institutions, blended finance, policies and risk pools play in this regard. We note with concern the scale of private finance currently still supporting non-Paris aligned activities especially in the fossil fuel sector. We welcome private sector initiatives and voluntary commitments including through their active participation in the Glasgow Financial Alliance for Net Zero. Additionally, we underline the urgent need for the public sector to further enhance the enabling environments in all countries by adopting appropriate regulatory frameworks, policies and fiscal and economic levers in order to create more sustainable investment opportunities for private investors contributing to the implementation of NDCs. We also welcome the establishment of the UN Secretary General's High-level Expert Group to enhance the credibility of net zero commitments by non-state actors. We are committed to engaging in constructive and collaborative exchanges in an open, inclusive and transparent manner, ensuring participatory representativeness, with the aim of setting a new collective quantified climate finance goal by 2024 that is fit for purpose for reaching the long-term goals of the Paris Agreement and reflects the need to align all global finance flows with these objectives.

53. Adaptation finance and access to climate finance: We are working alongside others towards the implementation of the Glasgow Climate Pact's call to collectively at least double the provision of climate finance for adaptation to developing countries from 2019 levels by 2025, in the context of achieving a balance between mitigation and adaptation finance in the provision of scaled-up financial resources. We strongly call on all relevant finance institutions, such as MDBs, DFIs and multilateral funds to further strengthen their efforts, including by setting ambitious adaptation finance targets and by supporting the scaled-up participation of the private sector. We will work together through the agreed progress report to the Delivery Plan to provide more information on these adaptation finance

efforts. We highlight the importance of improving access to climate finance, with a specific focus on poor and most vulnerable countries, particularly LDCs and SIDS. In this regard, we welcome the leadership of climate finance providers and recipients in applying the Taskforce on Access to Climate Finance's Principles and Recommendations and pioneer country trials launched at COP26 and are looking forward to the lessons learned from the implementation of its pilot phase in 2022. We urge all climate finance providers and recipients to apply the Taskforce's Principles and Recommendations and encourage the Taskforce to continue to advance its work, in particular with regard to the role of the private sector.

54. MDBs Paris Alignment: We recognise the crucial role of integrating climate change considerations consistently into all relevant economic and financial decision-making processes. We urge Development Finance Institutions, including MDBs, to present concrete plans for aligning their direct and indirect operations with the goals of the Paris Agreement as soon as possible, at the latest by COP27, and to leverage their balance sheets and enhance their private sector engagement to support the enhancement of NDCs and LTSs, support economic development in alignment with a 1.5 °C pathway and climate resilience, and to increase the use of risk mitigation tools such as guarantees. In this regard, we call on all multilateral development banks (MDBs) to finalise and make publicly available robust methodologies for Paris alignment before COP27 for all its activities, in particular for indirect and policy-based lending, and to set out how they collectively plan to report on the alignment of their portfolios by COP27. We further call on MDBs to set out plans by 2022 to mobilise private finance, in line with their mandates, and strategically de-risk investments in view of co-sharing risks with the private sector, including through country-led processes and platforms. MDBs also have a critical role in supporting developing economies in their pathways towards low greenhouse gas emissions and climate-resilient development. We as G7 Members commit to use our roles as shareholders of the relevant institutions to facilitate these actions. We acknowledge the need to make climate finance gender-responsive and enhance its effectiveness, especially to unleash the potential of women empowered to contribute to climate and sustainability action.

55. Role of international cooperation: We commit to further deepen and strengthen international cooperation to keep 1.5 °C within reach, highlighting that we can only reach our shared climate and energy goals by joining our efforts, benefiting from faster diffusion and cost reduction of green technologies, an accelerated SDG implementation and strengthened natural ecosystems. In this context, we also recognise the need to enhance the mobilisation of financial and technical support to developing countries to facilitate the necessary just and equitable economic and societal transitions in the context of their sustainable development priorities and prospects. Being mindful of limited government resources and a multitude of international cooperation formats, we highlight the necessity to review and, where possible, streamline existing cooperation formats to strengthen their effectiveness and efficiency. Well established international energy organisations and multilateral platforms like the Clean Energy Ministerial 3.0 and Mission Innovation 2.0, the Energy Efficiency Hub, the

International Energy Agency, and the International Renewable Energy Agency can play an important role in this process. We commend the work of the OECD 'International Programme for Action on Climate' in its support of countries to make progress towards net zero emissions and more resilient economies by 2050.

56. Supporting the Breakthrough Agenda: We welcome the launch of the Breakthrough Agenda at COP26 which aims to make clean technologies and sustainable solutions the most affordable, accessible and attractive option in each emitting sector globally before 2030. We reaffirm our respective endorsements of the Glasgow Breakthroughs as its first set of global leader-led common targets on power, road transport, steel and hydrogen, and call for more countries to join in, and support the development of additional breakthroughs as appropriate. We are ready to partner with other countries to ensure delivery on the Glasgow Breakthroughs through existing processes such as Mission Innovation and the Clean Energy Ministerial, informed by an annual report.

57. Open, cooperative international Climate Club: We recall the G7 Leaders' decision in February 2022 to explore establishing an open, cooperative international Climate Club, consistent with international rules, and with participation beyond the G7. We appreciate the value of initiatives aimed at strengthening international climate responses, including with respect to keeping the 1.5 °C limit within reach and otherwise strengthening implementation of the Paris Agreement. We had a first discussion on the Climate Club proposal and look forward to intensifying our discussions and expanding consultations, including with G20 partners and other developing and emerging countries. In our discussions, we focused on a Climate Club's potential contribution to promoting ambitious climate action, including by serving as a forum for discussion and coordination; on its relationship to the Paris Agreement; on participation; and on a Club's potential role in inter alia accelerating decarbonisation, sharing best practices regarding the comparability among and efficacy of various mitigation efforts and outcomes, and addressing risks of carbon leakage, while complementing our internal policy approaches. We note the discussions other G7 Ministers had on the Climate Club proposal and welcome their contribution. We consider that a Climate Club could drive forward industrial green transformation, taking into account the G7 Industrial Decarbonisation Agenda and the G7 Hydrogen Action Pact (G7-HAP).

58. Just energy transition partnerships: We will not only accelerate our own energy transitions and decarbonisation efforts, but act as an incubator for global efforts. Therefore, in line with the concept of just transition, we will collaborate with partners to advance ambitious Just Energy Transition Partnerships with developing countries and emerging economies that seek to significantly raise their climate ambition and accelerate their transition to a net zero pathway, in a manner that is consistent with keeping a limit of 1.5 °C temperature rise within reach. The Just Energy Transition Partnership with South Africa launched at COP26 provides an example of how innovative multi-donor partnerships and coordination with countries committed to advance ambitious reforms can work to mobilise

finance to deliver emission reductions. Inspired by this experience, together with future partners, and a more ambitious approach from MDBs and private finance, we aim to support several developing countries and emerging economies that demonstrate a high level of ambition in developing and implementing a country-led, accelerated, sustainable and socially just energy transition that contributes to net zero emissions, strengthened NDCs, and sustainable societies and economies that are aligned with the Paris Agreement and support the 2030 Agenda, considering each country's specific situation. These partnerships will complement, strengthen and support our ongoing international climate cooperation efforts and build on well-established international initiatives such as the NDC Partnership and other such initiatives. The partnerships will act as a catalyst to encourage and facilitate relevant regulatory reforms, mobilise finance and achieve tangible mitigation outcomes at scale. They will promote the alignment of finance with the long-term goal of the Paris Agreement while ensuring the conditions for affected workers and communities to thrive in a net zero carbon economy.

59. Carbon markets and carbon pricing: We recognise the crucial potential of carbon markets and carbon pricing for incentivising investments in technologies, infrastructure and Nature-based Solutions that promote a transformation to net zero, accelerate cost-efficient emission reductions, and enhance the alignment of financial flows with the long-term goals of the Paris Agreement. In this context, we highlight that the revenues generated through carbon markets and carbon pricing can enable countries to finance further climate action, and to support vulnerable and low-income households in the transformation to net zero. We will work together, and with partners beyond the G7, to expand the ambitious use of carbon markets and carbon pricing around the world. Acknowledging the critical role of governments in leading by example as well as catalysing economy-wide changes through our actions, we will explore and promote the adoption of other carbon pricing and carbon market-based measures, including carbon shadow pricing, for accelerating the reduction of emissions related to public procurement and investments. We recognise that the risk of carbon leakage may increase with more divergent climate policy ambition among other factors.

60. Reducing emission intensities: We emphasise that in order to achieve net zero globally, it is essential to produce and introduce products with a minimal or negative carbon footprint and reduce emission intensity as fast as possible taking into consideration trajectories in the transition to net zero. In the context of industrial production, taking into account that reductions in emission intensity are an outcome of various reduction efforts by various actors, such as national governments, regions, local governments, and companies, according to each country's energy situation and industrial structure, we recognise that emission intensity along with other key metrics including sustainability, security, and good governance, transparency and accountability can contribute to coordinating policies for the development and diffusion of low-carbon emission intensity products in the near-term. We recognise that emission intensity is an important factor for the implementation of

instruments to address the risk of carbon leakage. We therefore recognise the need to collaborate on the development of measurement standards for evaluating the emissions intensity of production as well as other social and governance metrics starting with what are understood to be essential elements of production.

61. Implementation of Article 6: We welcome the CMA.3 decision on guidance / rules for Article 6 of the Paris Agreement which provides a robust framework for Parties to avoid double-counting, ensures environmental integrity, and promotes sustainable development where Parties engage in international carbon markets to implement and achieve their NDCs. While the focus needs to remain on domestically reducing emissions and increasing removals, we recognise the potential of Article 6 for facilitating further ambition to close the gap towards limiting global warming to 1.5 °C and fostering private sector involvement in and mobilisation of finance and resources for climate action. We stress the importance of strengthening support for capacity-building to developing countries with respect to the robust implementation of Article 6 and the International Civil Aviation Organization's global market-based measure, CORSIA. We will review the objectives of the Carbon Market Platform and enhance outreach to partner countries in light of the new guidance and rules for Article 6. We reaffirm the fundamental importance of environmental integrity and sustainable development in the design of high integrity carbon market mechanisms, including those used by the private sector for voluntary purposes which should be based on robust rules and accounting that ensure avoidance of all forms of double-counting. We encourage the private sector to set out and undertake aggressive mitigation strategies that target net zero emissions by 2050, prioritising reductions in greenhouse gases across their full value chain.

62. Collaborative climate and energy action: We encourage ambitious, Paris-aligned action and collaboration and coordination across all levels and sectors of government, involving all cities, regions, communities, stakeholders, citizens and business sectors, acknowledging that the necessary transformation to net zero and climate resilience will be driven and implemented to a large extent at local level, including through initiatives developed by local governments, city networks such as the Global Covenant of Mayors, ICLEI and C40, as well as civil society and private sector-led initiatives. In this context, we recognise the need to include and engage subnational and non-state actors in the development, update and implementation of NDCs and NAPs and to support them in their efforts to educate, raise awareness, enhance public participation and implement localised climate action, including through technical assistance, capacity-building, and finance. This includes empowering and supporting the role of those most affected by climate change as agents of change, particularly women, girls, youth, and indigenous peoples. We recognise that women's full, equal and meaningful participation and leadership at all levels of decision-making are critical for making climate change action more effective. We underline the importance of the enhanced Marrakesh Partnership and its work programme 2021-2025 for a catalysed implementation across sectors.

63. Gender equality and diversity in the energy sector: We look forward to the forthcoming joint G7 Gender Equality and Diversity in the Energy Sector Report on activities and progress made so far and stress the need for enhanced action to achieve equality and dignity for all. We reaffirm our commitment to the Equal by 30 campaign launched in 2018 and the set of strengthened commitments adopted in 2021 to work towards equal pay, leadership and opportunities for women and to advance gender equality and diversity in the clean energy sector by 2030. (1) We will lead by example to strive for gender balance in leadership positions across national public energy institutions. (2) To further leverage the potential of women's participation in the clean energy industry, we intend to amplify best practices from the G7 Gender Equality and Diversity in the Energy Sector Report and identify potential further areas of action by the end of the year on how to address social, cultural and educational barriers to entry and retention in the sustainable energy workforce, monitor our progress annually, and aim to collect better gender-disaggregated data. (3) We will make efforts within our governments, which may include designating a national gender and energy transition focal point, to work to coordinate and facilitate implementation and integration with economy-wide gender strategies. (4) Finally, we invite the G7 Gender Equality Advisory Council, the Clean Energy Ministerial, IEA and IRENA to work with us on reporting on our progress annually and to develop recommendations for further action.

64. HFCs, Montreal Protocol and Kigali Amendment and related initiatives: We reaffirm the importance of consistent and universal implementation of the Montreal Protocol for both the protection of the ozone layer and the climate and call upon all countries who have not already done so to ratify the Kigali Amendment to the Montreal Protocol. We will continue to implement the phasedown of hydrofluorocarbon production and consumption reflected in the Kigali Amendment to the Montreal Protocol while supporting the direct transition to efficient, climate- and environmentally friendly alternatives. Apart from the Montreal Protocol, we also highlight the importance of reducing emissions of hydrofluorocarbons (HFC) throughout the life cycle and welcome international efforts and knowledge sharing initiatives in this regard, including approaches for sustainable waste management of appliances containing ozone-depleting substances (ODS) and HFC.

65. Methane: We highlight that in order to keep 1.5 °C within reach and to reduce the likelihood of overshoot, significant methane emission reductions must be achieved globally by 2030. In this context and in the light of the latest findings of the IPCC, we highlight the need to reduce global methane emissions by 34 percent by 2030 and by 44 percent by 2040 relative to the 2019 level to limit global warming to 1.5 °C by 2100 with no or limited overshoot. We therefore reaffirm our commitment made at COP26 to implement the Global Methane Pledge, whose endorsers are committed to collectively reduce global anthropogenic methane emissions by at least 30 percent below 2020 levels by 2030. In order to accelerate its implementation, those of us who have not already done so endeavour to implement domestic methane emission reductions by developing national climate plans and strategies and implementing accompanying measures, and we encourage those who do not

yet have such plans to develop them. We stand ready to support the Climate and Clean Air Coalition as a core implementing partner of the Pledge. While the generation of waste is not encouraged, we recognise the opportunities to mitigate methane emissions from the waste sector, primarily by diversion of organic waste from landfills through best management practice and processes aiming at material and energy recovery and as appropriate by sound management of landfill sites as well as by using waste-to-fuel technologies to produce renewable methane from organic waste, agricultural residues and biomass that does not depend on arable land or cannot be utilised in a better way. The waste sector can contribute to a reduction in atmospheric methane emissions if the infrastructure in place to transport the renewable methane does not allow for intentional or unintentional venting of methane. We also recognise the opportunities to mitigate methane emissions from the energy sector by capturing and using methane from the oil and gas sector that would otherwise have been vented, wasted, flared or lost in transport, and by using best practices to minimise methane from coal mining. We further recognise that more efforts are needed to reduce agricultural methane emissions. We recognise the need to continuously improve emissions measurement, reporting and verification to inform national emissions inventories and the work of the International Methane Emissions Observatory (IMEO), launched during G20 2021 by the UN Environment Programme (UNEP) with the support from the European Union, in collecting, reconciling and verifying anthropogenic methane emissions data at a global level and encourage continued cooperation with relevant stakeholders such as the International Energy Agency. In addition to our national efforts, we highlight the importance of reducing the methane emissions associated with energy production and consumption. We therefore will consider providing increased support to methane reduction and elimination projects in developing and emerging economies. In particular, we are committed to working with other oil and gas producing countries to accelerate flaring and methane abatement projects and strengthen policies to reduce methane emissions in the oil and gas sector.

66. Impact of Russian war of aggression on current energy market situation and energy supply security: Russia's unjustifiable, unprovoked and illegal war of aggression against Ukraine is causing strong reverberations in international energy markets and has led to further significant price increases on oil, gas, coal, minerals and, indirectly, electricity, goods and services and food across the G7 and beyond. We note with grave concern the burden this creates for households, in particular for low-income households, as well as businesses and industry, in G7 countries and beyond. We also acknowledge that elevated prices will be felt acutely both in mature economies as well as in developing countries that are net energy importers with already drained financial resources. We will monitor developments closely in order to take further concerted and stringent measures if necessary, including as adequate with partners outside the G7. It is necessary to consider effective measures in order to stop the increase in the energy prices driven by extraordinary market conditions, without compromising key climate policy mechanisms to drive the energy transition. Recent events have also given rise to significant risks to the energy supply security

of G7 countries and beyond. We call on oil and gas producing countries to act in a responsible manner and to respond to tightening international markets, noting that OPEC has a key role to play. We will work with them and all partners to ensure stable and sustainable global energy supplies. We will act in solidarity and close coordination in the event of potential supply disruptions and will do what is needed to mitigate the impact on our economies and citizens, especially in order to protect vulnerable groups. We commit to continue working together to ensure diversification of energy and related critical minerals sources, supplies, routes, and means of transport to build system resilience and promote competitive, reliable, affordable energy markets based on transparent rules. On 8 May 2022, G7 Leaders committed to phase out our dependency on Russian energy, including by phasing out or banning the import of Russian oil. Some G7 members have stepped up their efforts to enhance energy self-sufficiency. Decreasing dependence on natural gas from Russia in the European Union is of special urgency. We welcome the timely 10-Point Plans put forward by the International Energy Agency. We acknowledge that the European Commission has published its REPower EU Plan to phase out dependency on Russian fossil fuels as soon as possible. We stress the important role increased deliveries of liquefied natural gas (LNG) can play in order to mitigate potential supply disruptions of pipeline gas, especially to European markets. We acknowledge that investment in this sector is necessary in response to the current crisis, in a manner consistent with our climate objectives and without creating lock-in effects. The current crisis highlights the real, urgent need and the opportunity for Europe to reduce its dependency on Russia by diversifying supply, accelerating the roll out of clean, safe and sustainable energy technologies, and critically enhancing energy efficiency, with significant progress possible by the end of the year.

67. Increasing energy security through an accelerated energy transition: The current crisis underlines the critical need to ensure a strong contribution of innovative, clean, safe, reliable and sustainable energy technologies in enhancing energy efficiency and the security and stability of energy supply. We are thus further strengthened in our resolve to accelerate the clean energy transition towards a net zero emissions future by 2050, while also keeping energy security and affordability at the core of our action, including through the rapid expansion of low-carbon and renewable energies and an increase in energy efficiency. We emphasise that an accelerated clean energy transition is key to improving security, stability and affordability of energy supply by reducing the supply security and climate risks associated with dependence on fossil fuel energy sources and making energy more widely accessible, enhancing industrial competitiveness and protecting energy consumers. We note that the development and deployment of clean, safe and sustainable energy technologies, in particular energy efficiency improvements and the expansion of low-carbon and renewable energies, supports economic growth and job creation including as many as 2.6 million jobs in the G7 over the next decade according to the IEA's Net Zero by 2050: A Roadmap for the Global Energy Sector report. We also appreciate that an accelerated energy transition serves as a catalyst for the implementation of SDG 7 and for the 2030 Agenda as a whole. The energy

transition will continue to be materially intensive, and we need to ensure secure, responsible and sustainable supply chains for the critical minerals needed to power the net zero economies. We also reaffirm the importance of open, flexible, transparent, competitive and sustainable energy markets. This includes ensuring secure, sustainable and resilient markets for critical minerals and critical clean technology components to achieve stable, secure and affordable clean energy supply without harm to the environment.

68. Energy efficiency: We highlight the role of energy efficiency as the “first fuel” in the energy transition. We underscore that conserving and making efficient use of energy and resources are key across all sectors and can strengthen energy and resource security, lower greenhouse gas emissions, boost economic competitiveness, create jobs, help prevent biodiversity loss and environmental pollution, reduce energy poverty and mitigate the macroeconomic and social impact of high energy prices. To this end, we will improve our regulatory frameworks and leverage public and private finance to promote both technological and non-technological solutions to foster energy efficiency improvements in our economies. This should include measures such as behaviour change and public guarantees to de-risk private investments. We will increase our efforts towards meeting the Sustainable Development Goal 7.3 on energy efficiency and strengthen our international cooperation including through the IEA Energy Efficiency Hub and the Super-efficient Equipment Appliance Deployment Initiative for those that have already joined these initiatives. We recognise efforts to implement stronger demand side measures that will benefit consumers while reducing emissions.

69. Renewable energy: Emphasising the major importance of an enhanced and rapid growth in the deployment of renewable energy in our economies and globally for keeping 1.5 °C temperature rise within reach, we will drastically increase electricity generated by renewable energies, as well as the use of renewables in heating, cooling and transportation. We acknowledge that a greenhouse gas neutral energy supply with strong reliance on renewable energy is economically sensible, technically feasible, reliable and safe. In deploying renewables, we will fully harness their positive potential for improved energy security and access as well as economic growth. We also recognise the importance of R&D activities to support the growth of the most innovative renewable technologies that will contribute to a net zero future. We recognise work by international energy organisations to support efforts to accelerate and expand the use of renewable energy technologies. To achieve our goals, we will remove barriers and obstacles that currently hinder or slow down the expansion of renewable energies, for example in the context of planning and permitting procedures, market design, grid operation, fiscal incentives, and investments in infrastructure needed for the integration of high shares of variable renewables. We recognise that in order to get on a pathway to net zero emissions by 2050 at the latest we will need to provide public financing for renewables as a means of leveraging the required levels of private investment. In this regard, we acknowledge the IEA net zero scenario which suggests that G7 economies invest at least US\$1.3 trillion in renewable energy including tripling investments in clean

power and electricity networks between 2021 and 2030. In addition, we will continue to share knowledge and best practices gathered across the G7 on the grid integration of renewables and fostering the creation of enabling regulatory frameworks within developing and emerging economies.

70. Power-to-X, low-carbon and renewable hydrogen and its derivatives such as ammonia, G7 Hydrogen Action Pact (G7-HAP): We emphasise the central role of low-carbon and renewable hydrogen and its derivatives such as ammonia for achieving net zero emissions and an energy-secure future. Ramping-up global markets and supply chains for low-carbon and renewable hydrogen and its derivatives is a key enabling step towards a full decarbonisation of our economies. This need has become even more prevalent given the current geopolitical turmoil and disruptions, which led to record-high energy prices and a severe risk for our energy security. In line with the Glasgow Breakthrough Agenda, we therefore aim at accelerating and strengthening our joint action in the field of low-carbon and renewable hydrogen and its derivatives, as well as at streamlining the implementation of existing multilateral activities. To this end, in cooperation with and avoiding duplication with other initiatives such as relevant initiatives under the Clean Energy Ministerial, Mission Innovation, the International Partnership for Hydrogen and Fuel Cells in the Economy, IRENA, the IEA Technology Collaboration Programmes, and the Hydrogen Energy Ministerial, we launch the G7 Hydrogen Action Pact (G7-HAP). We commit to take the following actions, which will contribute to reaching the goals of the Paris Agreement as well as to providing new opportunities for the sustainable development of economies and societies in G7 countries and beyond: (i) We will accelerate the development of low-carbon and renewable hydrogen, and other Power-to-X value chains, domestically and at global scale, notably in hard-to-abate sectors. (ii) We will speed-up the shaping of regulatory frameworks and common standards which facilitate the production, trade, transport and use of low-carbon and renewable hydrogen and derived products. (iii) We confirm our strong financial commitments for the market ramp-up of low-carbon and renewable hydrogen and its derivatives, thereby signalling an irreversible shift towards a world economy based on low-carbon and renewable energy sources. (iv) We will identify and close existing gaps for the ramp-up of low-carbon and renewable hydrogen value chains, reaching also beyond G7 countries. (v) We will exchange best practices on low-carbon and renewable hydrogen production based on sustainability criteria and facilitate dialogue on the geopolitical implications of an emerging global hydrogen market. (vi) We support the role of low-carbon and renewable hydrogen and its derivatives in the decarbonisation of natural gas infrastructure and for zero-emission thermal power generation.

71. Decarbonisation of power systems: We note the IPCC AR 6 Working Group III Report and its findings on the need, to substantially reduce overall fossil fuel use, switch to alternative energy carriers and increase energy efficiency and conservation. We further note that the report also highlights that the continued installation of unabated fossil fuel infrastructure will lock-in GHG-emissions. We welcome the Glasgow Climate Pact and its call to accelerate efforts towards the phasedown of unabated coal power. We highlight that, wherever feasible, electrification of energy demand sectors is key to decarbonising our energy systems. Recalling our agreement in the 2021 Climate and Environment communique, we further commit to a goal of achieving predominantly decarbonised electricity sectors by 2035, prioritising, consistent with our 2030 NDCs, our power sector transition commitments and our respective net zero commitments, concrete and timely steps towards the goal of an eventual phase-out of domestic unabated coal power generation. To this end, we will rapidly scale up the necessary technologies and policies for the clean energy transition. In doing so, we reaffirm the importance of national energy security, affordability and resilience and underscore the importance of providing support for affected workers, regions and communities. We commit to supporting an accelerated global unabated coal phase-out and recognise that some Members participate in the Powering Past Coal Alliance, which contributes to the achievement of this objective.

72. Nuclear energy: Those countries that opt to use it, reaffirmed the role of nuclear energy in their energy mix. Those countries recognise its potential to provide affordable low-carbon energy and contribute to the security of energy supply as a source of baseload energy and grid flexibility. They state their assessment that the development and deployment of advanced nuclear technologies including Small Modular Reactors within the next decade will likely contribute to more countries around the world adopting nuclear power as part of their energy mix. The G7 underline that the highest standards of nuclear safety and security are important to all countries and their respective publics.

73. Fossil fuels subsidies: We stress that fossil fuel subsidies are inconsistent with the goals of the Paris Agreement. Phasing out inefficient fossil fuel subsidies is a key component of delivering on Article 2.1.c of the Paris Agreement. Phasing out inefficient fossil fuel subsidies frees up scarce public resources, which can be used to support an accelerated clean energy transition and can help reduce competitive disadvantages for clean energy technologies. In view of the Russian attack on Ukraine, financial support for companies and citizens affected by severely rising prices for fossil fuels is now on the political agenda for several countries. Nevertheless, we aim for our relief measures to be temporary and targeted and we reaffirm our commitment to the elimination of inefficient fossil fuel subsidies by 2025. To accelerate the achievement of our collective goal, we will take action as required to ensure full implementation of our commitment. Recognising the need to increase transparency, we aim to report on progress towards the achievement of our commitment in 2023 building on ongoing processes including in the G20, SDG target 12.c and in the OECD,

and will consider options for developing joint public inventories of fossil fuel subsidies as soon as possible. Building on this work and the COP26 commitment to accelerate efforts towards the phase-out of inefficient fossil fuel subsidies, we call on other countries to make progress on these efforts ahead of COP27. In this regard, we will also take steps to increase cooperation, discussion, and best practice sharing on eliminating inefficient fossil fuel subsidies and enhancing transparency at the international level.

74. International fossil fuel finance: We reiterate our commitment to align official international financing with the goals of the Paris Agreement as reflected in Article 2.1.c, and to achieve deep global emissions reductions in the 2020s, as well as in the 2030s and 2040s. In this context, we also highlight that we have ended new direct government support for unabated international thermal coal-fired power generation by the end of 2021, including through Official Development Assistance, export finance, investment, and financial and trade promotion support. We remain convinced that the most important contribution towards energy security is an accelerated and prudently managed clean energy transition and are steadfastly committed to pursuing this. We stress that global investments in low and zero emissions energy need to significantly increase to keep the world on track for net zero emissions and the 1.5 °C limit. We highlight the importance of supporting developing countries to achieve their climate goals and the energy transition in a timely and well managed fashion. We will continue to promote the flow of public and private capital towards investment aligned with the long-term goals of the Paris Agreement. Recognising that advancing national security and geostrategic interests is crucial, and further recognising that accelerating the international clean energy transition and phasing out continued global investment in the unabated fossil fuel sector is essential to keep a limit of 1.5 °C temperature rise within reach, we commit to end new direct public support for the international unabated fossil fuel energy sector by the end of 2022, except in limited circumstances clearly defined by each country that are consistent with a 1.5 °C warming limit and the goals of the Paris Agreement. We commit to align our official trade, export and development finance policies towards these objectives, including the possibility of providing additional incentives for clean energy technologies, and implementing these commitments within this time frame. This will also guide our approach in public finance institutions and on the boards of MDBs and bilateral DFIs. We therefore call on other major economies, the MDBs and bilateral DFIs, multilateral funds, public banks and relevant agencies to also adopt these commitments. We commit to review our progress against our commitments.

75. Decarbonising our industries: We underline the key importance of decarbonising key industrial sectors to keep a limit of 1.5 °C temperature rise within reach. The 2020s are decisive years to shape the regulatory policy framework that guides investments reaching beyond 2050 and prevent stranded assets in the industry. We therefore commit to support the acceleration of the pace of industry decarbonisation in particular in sectors in which emissions are hard to abate, and to strengthening cooperation on transforming our industries towards climate neutrality. We will therefore further advance the work on the G7 Industrial

Decarbonisation Agenda (IDA) to complement and support the activities of existing key initiatives and will amplify ambition. We will further work on promoting appropriate push and pull mechanisms to accelerate the innovation and scaling-up of near-zero technologies and infrastructure across G7 members and beyond to support a sustainable and just transition. We recognise that research and innovation play a vital role in driving forward further the decarbonisation of all industrial sectors. We therefore commit to continue focusing on public clean energy and low-carbon RD&D efforts that support the emergence of new technologies, underpin the development of necessary codes, standards and regulations while reducing market distortions. Keeping in mind the importance of reducing emissions immediately and across all sectors, we will also continue and strengthen our work to reduce emissions from key industrial processes through enhanced energy and resource efficiency, electrification, process integration, low-carbon and renewable hydrogen, comprehensive industrial heat utilisation and reduced waste in industry, fuel switching and carbon capture, utilisation and storage (CCUS) and carbon recycling. Acknowledging that achieving net zero industry will require enhanced global efforts, we will explore supporting low and middle-income countries through financial and technical cooperation, as well as in multilateral fora. To build demand, we want to accelerate the momentum on market uptake for near zero industrial production products on a broader scale and will push for the advancement of the issue on the agenda in other international fora.

76. Achieving Net Zero Heavy Industry Sectors in G7 Members: We welcome the report by the International Energy Agency on “Achieving Net Zero Heavy Industry Sectors in G7 Members”, especially its recommendations regarding the suitable policies and financing mechanisms on the pathway to near zero industry production and the suggested principles of common and practicable definitions of near-zero-emission materials production, taking into consideration circumstances unique to each sector and region. Taking into account the timeline for technological innovation, we recognise that lead markets for near zero emission materials should be scaled-up already in this decade to gain dominance after 2030, consistent with our goal of achieving net zero emissions by or before 2050. While actively stepping up to near-zero-emission, all countries should provide policy support for the necessary transition which are in line with pathways towards net zero. From the IEA report we further note that lead markets for near-zero-emissions primary steel and clinker used in cement can potentially grow respectively to 100 and 250 million tonnes worldwide by 2030 and we endeavour to deploy relevant policy measures and stimulate private initiatives to contribute to realise this opportunity.

77. Advancing the G7 Industrial Decarbonisation Agenda: We want to foster and accelerate the emergence of markets for near zero industrial products. Advancing the G7 Industrial Decarbonisation Agenda and informed by the IEA Report on Net Zero Heavy Industries in G7 Members, we decide on recognise the definitions in the report as a robust starting point for a common understanding of ambitious general definitions for near-zero-emission steel and cement production, taking into consideration circumstances unique to

each sector and region for near zero industrial production processes (see annex “Conclusions regarding the Industrial Decarbonisation Agenda”). We will work to align definitions in future projects for industry decarbonisation. We note that this can serve as a model to develop and agree on definitions for further energy-intensive industry sectors. We also underscore that a comprehensive set of different policies addressing key areas is needed to accelerate industry decarbonisation, especially in the sectors in which emissions are hard to abate and recognise the toolbox of potential policy measures, identified in the IDA (see annex “Conclusions regarding the Industrial Decarbonisation Agenda”). We decide to explore the details of these elements and actions further within the IDA framework and review its progress adequately. We highlight sustainable and green procurement as an appropriate mechanism to accelerate a technology switch in hard to abate sectors, especially steel and cement, taking into account the timeline for technological innovation. With its significant market power in each country and relevance for global emissions, the public sector is crucial for the creation of lead markets for near-zero-emission materials. We further welcome the agreements reached on the Glasgow Breakthrough on steel as a promising step to unlocking green steel production. We will work to advance its goals over time. We further welcome the work to accelerate the decarbonisation of industry done by international initiatives such as the Clean Energy Ministerial’s Industrial Deep Decarbonisation Initiative (IDDI), the First Movers Coalition, the Leadership Group for Industry Transition and the Mission Innovation net zero Industries.

78. Road sector: We acknowledge that the transport sector accounts for approximately one quarter of global energy-related CO₂ emissions. We emphasise that keeping a limit of 1.5 °C temperature rise within reach is only possible through a swift and substantial reduction of greenhouse gas emissions from the transport sector by a massive uptake of electrification technology and deep cuts in emissions in the 2020s, facilitated by an overall transformation of the sector. We note AR 6 Working Group III Report and its findings on decarbonising the transport sector, which states that, electric vehicles powered by low emissions electricity offer the largest decarbonisation potential for land-based transport, on a life cycle basis. The IPCC report further states, that sustainable biofuels can offer additional mitigation benefits in land-based transport in the short and medium-term and that sustainable biofuels, low-emissions hydrogen, and derivatives (including synthetic fuels) can support mitigation of CO₂ emissions from shipping, aviation, and heavy-duty land transport but require production process improvements and cost reductions. Working towards a zero emission road sector as a critical component of keeping 1.5 °C within reach, we commit to a highly decarbonised road sector by 2030 including by, in this decade: significantly increasing the sale, share and uptake of zero emission light duty vehicles, including zero emission public transport and public vehicle fleets; accelerating the transition away from new sales of diesel and petrol cars; substantially reducing emissions from medium and heavy duty vehicles; investing significantly in charging and refueling infrastructure; promoting innovation; and supporting sustainable and safe battery recycling. We recognise the range of pathways that Members are adopting to approach these goals. We note the commitments made by those

who signed the COP26 declaration on “Accelerating the transition to zero emission cars and vans”. We welcome and support the Zero Emission Vehicle Transition Council and will work with other global partners to accelerate the deployment of zero emission vehicles for passengers and freight including exploring ways to support developing countries in making the transition. We further commit to supporting our industries and citizens with this transition in an equitable and inclusive way. We commit to ambitious action to promote sustainability and decarbonisation along the life cycle of vehicles.

79. Sustainable transport modes in urban and rural areas: We stress the urgent need to promote sustainable mobility and reduce greenhouse gas emissions from the transport sector to help achieve net zero emissions globally by 2050. We set a goal to significantly increase the share of our transport budgets spent on sustainable low or zero-carbon transport modes such as public transport, railways, shared mobility, cycling, walking and on accelerating the adoption of electric vehicles by funding charging infrastructure. We will intensify our efforts in enhancing the offer of more sustainable and interlinked transport modes in urban and rural areas and supporting inter-modal transport with investment in rail and waterborne infrastructure. We commit to promote a modal shift to encourage our industries and citizens to use low or zero emission transport modes. Furthermore, we also need to promote decarbonising the entire life cycle of vehicles. We commit to support the transition of our industrial bases and to provide ambitious investment to research, and to further develop and scale up the technologies needed to support a rapidly growing global market for sustainable mobility.

80. International aviation: We commit to support an ambitious Paris-compatible long-term aspirational goal that delivers net zero emissions from international aviation no later than 2050, and to work together to secure an effective and ambitious outcome of the first periodic review of ICAO’s Carbon Offsetting and Reduction Scheme for international aviation (CORSIA) at the 41st ICAO Assembly in 2022. Therefore, we commit to support joint measures to increase fuel efficiency for civil aviation accompanied by strong research and development to foster the development of low-carbon aircrafts including electric and hydrogen-based solutions and innovative engine technology. In addition, we support measures to jointly increase the availability of sustainable aviation fuels, in order to lower CO₂ emissions of the aviation sector in the short-term. We support the COP26 International Aviation Climate Ambition Declaration, and those countries who have joined it, the Toulouse Declaration.

81. International shipping: We commit to strengthen global efforts to achieve zero emissions from international shipping by 2050 at the latest. We pledge to work at the International Maritime Organisation (IMO) towards such a goal, including the development and adoption of ambitious Paris compatible medium and long-term goals and measures for 2030 and 2040 to ensure an adequate trajectory. In this regard, we also commit to build a global consensus on strengthening the levels of ambition in the initial IMO strategy on

reduction of greenhouse gas emissions from ships in the context of its forthcoming revision, in line with the Paris Agreement temperature goal. We recognise the crucial role of zero and low emission life cycle technologies and fuels, and the need for action across the entire shipping value chain, including zero and low emission green ports and investments for the production of zero and low emission fuels and infrastructure, as well as considering life cycle zero emission fuel standards to ensure sufficient supply of these fuels to the sector. We support the COP26 Clydebank Declaration for green shipping corridors and, for those who have joined it, the Declaration on Zero Emission Shipping by 2050.

82. Net zero buildings: We note the AR 6 Working Group III Report and its findings on decarbonising buildings and recognise the need for more ambitious and more effective policies to accelerate renovation rates, improve energy efficiency, leverage renewable energy and build the technical, institutional and financial capacity to reach net zero greenhouse gas emissions by 2050. With direct, indirect, and embodied emissions from existing buildings and from the construction industry contributing to approximately 40 percent of global CO₂ emissions and rising demand for building materials, especially in emerging countries with growing urban middle classes, we note the importance of decarbonising buildings in combatting climate change and the need to enhance buildings' climate resilience. Where not yet in place, we commit to advance targets, with the earliest possible dates, to reduce energy-related emissions from public and/or private buildings in line with keeping 1.5 °C limit to temperature rise within reach. We will sustainably increase energy efficiency, including by promoting the setting of performance standards for existing buildings and design standards for new buildings, as well as and incentivising renovations, and enhance action to reduce all types of greenhouse gas emissions during the entire life cycle of buildings, such as in land use, design, building materials, construction and dismantling, and by supporting the growth of lead markets and demand for sustainable building materials, exploring also the potential of buildings to store carbon in sustainably sourced construction materials. We view as essential the development of circularity based on the durability, reuse and recycling of building materials and equipment. We commit to increase the availability and disclosure of domestic data on the embodied carbon of our buildings with the aim of enabling targeted policies to, e.g., reduce life cycle emissions and use the carbon storage potential of buildings. We commit to increase national efforts to decarbonise building heating and cooling systems by using appropriate policy tools, including regulations and incentives, with the ultimate objective of transitioning away from fossil fuels. We will therefore take a phased approach to work towards new heating and cooling systems being zero carbon-ready and or interconnected to an increased share of renewable energy, and also aim to accelerate the transition away from the installation of new fossil fuel boilers. In addition, we will support the roll-out of heat-pumps and the rapid phase-in of more climate-friendly refrigerants. To reduce the carbon emissions from our existing buildings and increase their climate resilience, we will increase our annual rates for renovations and retrofits, with special emphasis on the worst performing buildings and on public buildings. We will promote reaching zero carbon-

ready/zero emission new buildings, ideally by 2030 or sooner, reflecting also the role of buildings in facilitating the deployment of zero emission transport such as via charging infrastructure and parking provisions. We will support the training of professionals working in the buildings sector to help achieve our climate objectives. We note the Net Zero Carbon Buildings Commitment initiated by the World Green Building Council and signed by businesses, cities and regional governments. We call in particular on the private sector to increase its contribution to reducing emissions from buildings globally. We will increase our efforts to support the transformation of the buildings and construction sector in partner countries. We recognise the role of the Global Alliance for Buildings and Construction as a critical international forum to advance the sector's transition towards climate neutrality globally and engage with national governments.

83. Resilient and net-zero-emission cities: We acknowledge the important role of cities, regions and local governments in implementing a just climate and energy transition and in making the transition socially acceptable in the context of local needs and environmental conditions. We acknowledge cities and urban areas are critical global systems to combat the triple crises of climate change, biodiversity loss and pollution. At the same time, cities and their residents are vulnerable to climate change impacts, and we acknowledge the need to reduce vulnerability by increasing adaptive capacity. Smart, sustainable and resilient cities can act as a laboratory for a future with net zero emissions, through the development of innovative and sustainable energy solutions based on the key role of renewable energies, sustainable mobility, demand side management and the active participation of energy consumers. We note that, with the SDGs as a roadmap, global urbanisation presents an opportunity, inter alia, for transformational and climate resilient adaptation and to significantly reduce greenhouse gas emissions as recognised in the IPCC's 2018 Special Report on Global Warming of 1.5 °C and the contributions of Working Groups I, II and III to the IPCC Sixth Assessment Report respectively. We note the immediate emission reduction potential of cities and the importance of avoiding locking in carbon in fast-growing cities. Mayors and other local stakeholders have a key role to play in this transformation, including through bottom-up initiatives such as strengthening municipal planning capacities and city networks. In that regard, we stress the urgent need to accelerate investments in decarbonised and resilient urban planning and infrastructures, including through Nature-based Solutions to intensify progress on power system decarbonisation, digitalisation and effective utilisation of demand- and supply-side resources as one strategic priority, particularly in partner countries. We underline that the urban system transformation needs to be driven to a large extent at, by and with local levels of government and we will consider the potential and needs of subnational actors as one strategic priority in infrastructure investments and initiatives including for a green recovery and a just and inclusive transition. We will facilitate international city-to-city collaboration towards decarbonisation.

84. Carbon dioxide removal: We recognise that the IPCC's latest analysis shows that almost all pathways that limit global warming to 1.5 °C with limited or no overshoot project the use of carbon dioxide removal (CDR) on the order of 100–1000 GtCO₂ over the 21st century. While bearing in mind the risks and limitations associated with some of these technologies, we commit to working together to investigate the efficacy of particular applications and as appropriate accelerate the scale-up of CDR technologies, underlining that CDR cannot replace but must supplement urgent action on decarbonisation and reduction of greenhouse gas emissions. While it remains imperative to protect, restore and expand our natural carbon sinks, including through Nature-based Solutions, we also recognise that additional negative emissions technologies with robust social and environmental safeguards, such as Bioenergy with Carbon Dioxide Capture and Storage (BECCS) and Direct Air Carbon Dioxide Capture and Storage (DACCS), could also play a role in reaching net zero emissions, and are poised to see significant cost declines over this decade with further innovation and deployment. Carbon dioxide removal can contribute to lowering net emissions in the near-term, to offsetting residual emissions in sectors that are difficult to decarbonise completely in the mid-term, and to achieving net negative emissions in the long-term if deployed at levels exceeding annual residual emissions. Technical solutions such as CCUS and carbon recycling though not necessarily negative emissions technologies on their own, can reduce emissions from large-scale energy and industrial sources that cannot be avoided otherwise, and can be of relevance for some countries in meeting the goal of a net zero economy. To that end, we commit to provide innovation funding to further lower the costs of these technologies, and recognise such initiatives as the Mission Innovation Carbon Dioxide Removal Initiative and the First Movers Coalition.