

Climate, Energy and Environment Ministers' Meeting Communiqué

(Torino, April 29-30, 2024)

We, the G7 Ministers of Climate, Energy, and the Environment, met on 29th-30th April 2024 in Turin

We recall the G7 Leader's Statement released on 24 February 2024 which reaffirmed the G7's unwavering support to Ukraine, and salute once more the bravery and resilience of the Ukrainian people who have been fighting tirelessly for Ukraine's freedom and democratic future in the midst of ongoing Russia's illegal, unjustifiable, and unprovoked full-scale invasion which constitutes a blatant violation of the UN Charter. We condemn the direct attacks on power generation and the electricity grid, and will continue to help Ukraine repair and restore its critical energy and environmental infrastructure deliberately destroyed by Russia and we reemphasize our strong support for Ukraine's energy security, including through the G7+ Ukraine Energy Coordination Group and green reconstruction. We are also deeply concerned by the multiple crises in several regions of the planet that pose geopolitical challenges to all governments and have significant impacts on people worldwide, in particular on energy and food security. We are deeply concerned about the devastating and growing humanitarian crisis in Gaza and recall the G7 Leaders' Statements of 6th December 2023 and other relevant G7 Statements as well as the Declaration issued by the G7 Transport Ministers on the Red Sea escalating crisis on 20 February 2024; the G7 Foreign Ministers' Communiqué on the situation in the Middle East adopted on 19 April 2024 and the UN Security Council resolution 2728 on 25 March 2024 that demands for an immediate ceasefire and the immediate and unconditional release of all hostages.

I. Chapeau

The triple global crisis of climate change, biodiversity loss and pollution – We reiterate our concerns on the gravity and urgency arising from the interlinked and mutually reinforcing global crisis of climate change, biodiversity loss, and pollution as well as desertification, land, soil and ocean degradation and water scarcity, drought and deforestation which pose a global threat to sustainable development. We further acknowledge that these issues further aggravate economic and social disruptions, health threats and environmental damage, energy access and security challenges, and existing security concerns including those caused or exacerbated by Russia's war of aggression against Ukraine. To address these challenges, we reaffirm our commitment to implement immediate, short- medium-term concrete actions in this critical decade. We will build on progress, the support we have mobilized, and partnerships we have forged with others beyond the G7, to address the triple crisis.

G7 leadership in addressing the triple global crisis – In this regard, mindful of our leadership role in addressing the triple global crisis, we recall our existing commitments in the fields of climate, energy and environment including to reach greenhouse gas emissions (GHG) net-zero by 2050 at the latest in order to keep a limit of 1.5°C temperature rise within reach, in line with the full implementation of the CMA.5 decision on the Global Stocktake (GST), and realize the transformation of the economic and social system towards net-zero, circular, climate-resilient, pollution-free and nature-positive economies and to halting and reversing biodiversity loss by 2030, in an integrated manner, while ensuring sustainable and inclusive economic growth and development, enhancing the resilience of our economies and accelerating energy transition. As we pursue them, we commit to leveraging synergies and preventing trade-offs, and supporting the implementation of UNEA 6/7 on promoting synergies in this regard. We reaffirm our determination to fully deliver on these commitments in an effective and efficient manner, working with all committed partners with a view to enhancing multilateralism and international cooperation contributing to the achievement of the UN 2030 Agenda and its Sustainable Development Goals (SDGs), as well as to the goals of the Paris Agreement and the goals and targets of the Kunming-Montreal Global Biodiversity Framework.

Critical year for action – Emphasizing the urgency of taking actions in this critical decade at all levels, we commit to work closely with all partners, underscoring the key role of international cooperation as an enabler of global climate, energy and environment commitments. We reiterate our call for urgent and enhanced action

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at all levels across all sectors and all countries to achieve the transformation towards net-zero, circular and nature positive economies. Noting the significant amount of resources required to address the triple crisis we are facing, we stress the importance of mobilizing financial resources from all sources, private and public, national and international. We also stress the essential role of this year in meeting these objectives with 3 COPs of the Rio Conventions, namely the 29th COP of the UNFCCC and the 6th CMA of the Paris Agreement, the 16th COP of the CBD, the 16th COP of the UNCCD, as well as the finalization of the international legally binding instrument on plastic pollution including in the marine environment, which addresses the full life cycle of plastic, by the end of the year.

Science - We reaffirm the importance of a science-driven approaches in policy-making to tackle the global climate and environmental crisis. To this end, we welcome the contributions of the Intergovernmental Panel on Climate Change (IPCC) and its Sixth Assessment Report (AR6), the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessments, the UN Environment Programme (UNEP) and its Global Environment Outlook, the International Resource Panel and other relevant international science and policy panels and their reports and call for their continued collaboration. We underline the need to take in deep consideration the best available science as well as the knowledge of Indigenous Peoples in identifying solutions that allow us to understand the changes taking place in our climate and environment and to urgently reverse related negative trends.

Inclusion - Recognizing the importance of the roles played by all of society in particular vulnerable and marginalized groups, we stress that robust public engagement and participation are critical, in particular of the people and communities on the frontlines of the triple crisis, for achieving environmental, social and economic sustainability. To this end, we reaffirm our commitment to working to ensure the transition is just and inclusive, leaving no one behind. As members of the G7, we will work closely with all segments of society and support their active involvement and meaningful participation. Recognizing the vital role that young voices play in shaping a sustainable future, we are particularly committed to empowering and supporting youth participation and their initiatives, such as "Youth4Climate", which provide a platform for showcasing their innovative ideas, and ensure meaningful youth engagement in national and international fora to address environmental challenges. We also recognize the important role of Indigenous Peoples in addressing climate change and the clean energy transition, among other environmental issues, and commit to respecting their rights as affirmed in the United Nations Declaration on the Rights of Indigenous Peoples. In addition, we recognize the important role played by all subnational governments, businesses and industries, workers, and labour unions in facilitating a sustainable transformation towards a net-zero future.

Gender - We reaffirm our commitment to put gender and LGBTQIA+ equity at the heart of our efforts to tackle the triple crisis and to accelerate clean energy transition, taking all appropriate measures for the empowerment of women and girls, as well as LGBTQIA+ persons to support the creation of an innovative and inclusive workforce, equipped with the knowledge and skills needed. Recognizing that women and girls are often disproportionately affected by the impacts of climate change and also their critical role as leaders and agents of change, we are determined to support women's empowerment and gender equality in all relevant fora, such as the Lima Work Programme on Gender and its Gender Action Plan implementing under the UN climate change process and the Gender Plan of Action under the Convention on Biological Diversity (CBD) . We will continue to work towards gender equality and diversity particularly in the clean energy sector including our joint efforts under the Equal by 30 campaigns. To better assess the gender impacts of our actions, we will increase our efforts to collect better gender-disaggregated data and cooperate with gender Equality Advisory Council, the Clean Energy Ministerial, IEA and IRENA to work with us on tracking our progress.

II. Climate and Energy Section

Accelerating the G7 Net-Zero Agenda

1. Keeping 1.5°C within reach – We note with deep concern the findings of the GST that there is a significant gap between current emissions trajectories and those required to keep the limit of 1.5°C global average temperature rise within reach. We also recall with concern the findings of the 2023 Synthesis Report on Nationally Determined Contributions (NDCs) under the Paris Agreement, that implementation of current NDCs would reduce greenhouse gas emissions on average by 2 percent compared with the 2019 level by 2030. In this context, we fully recognise the urgent need for deep, rapid, and sustained reductions in global



GHG in line with 1.5°C pathways in this critical decade. We remain committed as G7 to providing a substantial contribution to efforts to reduce global GHG emissions by around 43 percent by 2030 and 60 percent by 2035, relative to the 2019 level, in light of the latest findings of the IPCC AR6. We underline that this is a collective effort and further actions from all countries, especially major economies, are required in order to peak global GHG emissions by 2025 at the latest and achieve global net-zero emissions by 2050.

2. 1.5°C-aligned NDCs – Recognizing that the GST provides a clear direction for the next round of NDCs to be communicated by early 2025 and underlines the urgent need for scaling and speeding up concrete action, we affirm our continued efforts towards the highest possible emission reduction trajectories while tracking the progress. To this end, we are determined to communicate the next round of NDCs, which are catalysts for investment, in a timely manner. In this regard, we call on all countries - especially the other major economies whose emission trajectories are most consequential to keep the 1.5°C target within reach – to communicate NDCs by early 2025 that respond to the outcome of the GST and align with net-zero by mid-century and include economy-wide absolute reduction targets, cover all GHGs, sectors and categories and are aligned with limiting global warming to 1.5°C, as informed by the best available science. We also urge those who have not yet done so to come forward by the end of 2024 with long-term low emissions development strategies that set out a pathway to net-zero by or around mid-century. We note the capacity challenges particularly for the Least Developed Countries and Small Island Developing States related to preparing and communicating NDCs and we are ready to provide support as appropriate. We also stress the importance to submit biennial transparency reports on time, as required by the Paris Agreement, and affirm our intention to meet this requirement and support others to do the same. In this context,

- i. submitting NDCs that demonstrate progression and the highest possible ambition, with economy-wide, absolute reduction targets, covering all GHGs, sectors and categories, aligned with 1.5°C, 9-12 months ahead of CMA.7, emphasizing that it is essential that other major economies submit such NDCs if we are to keep 1.5°C within reach;
- ii. explaining how these NDCs are informed by the outcome of the GST, including the global sectoral goals set forth in paragraph 28 and 33 of decision 1/CMA.5;
- iii. including our 2030 targets with our next NDCs and demonstrating their alignment with our net-zero by 2050 commitments and our Long Term Strategies (LTSs);
- iv. engaging actively in an annual GST dialogue referred to in paragraph 187 of decision 1/CMA.5 and Sharm el-Sheikh mitigation ambition and implementation work programme to have actionable outcomes for urgently scaling-up mitigation ambition and implementation;
- v. provide support for capacity building needs for NDC preparation in developing countries, including through the NDC Partnership, and encouraging all international institutions and the UN system to coordinate their efforts in this regard;
- vi. submitting biennial transparency reports, as required by the Paris Agreement, and encouraging and supporting others to submit their biennial transparency reports, at the latest by 31 December 2024 and where possible well ahead of COP29.
- 3. GST outcome We welcome the strong, clear, balanced outcome set forth in the CMA.5 GST decision and affirm our intent to implement the following concrete actions as part of the global efforts decided upon CMA.5, taking advantage of all decarbonization solutions and technologies while recognizing different national pathways. We engage in United Arab Emirates dialogue on implementing the GST outcomes and the relevant work programs to integrate relevant outcomes of the first GST, bearing in mind the importance of scale and speed up of climate actions across mitigation, adaptation, means of implementation and support toward the goals of the Paris Agreement.
 - a) Global renewable tripling target We recognise that the pace and scale of deployment of renewable energy must increase significantly, propelling the global transition away from fossil fuels, increasing energy security and economic growth and creating jobs. Reaffirming the importance of accelerating the deployment of renewable energies, we are fully committed to the implementation of the global goal of tripling of installed renewable energy capacity by 2030 to at least 11 TW, and to ensure decisive action to mitigate challenges from permitting, financing and social acceptance to close the gap of 2000 GW in 2030. To enable achievement of the COP28 outcome on tripling renewable energy capacity, we must extend electricity systems resilience, and flexibility notably through increase deployment of storage systems, distributed energy resources, smart grids, digitalised demand response, PV self-consumption



and promotion of both the proactive role of consumers as prosumers and renewable energy communities. We also note the importance of building diverse supply chains across renewable energy, including perovskite solar cells and floating offshore winds, and energy storage technologies to ensure their secure and abundant supply and we reaffirm the 2023 G7 commitment to collectively increase in offshore wind capacity by 150 GW by 2030 and of solar PV to more than 1TW by 2030. We highlight that according to IEA and IRENA's analysis G7 are on track to achieve the solar PV expansion if existing policies are fully and timely implemented, while we note that further acceleration is needed for offshore wind deployment with enhanced policy efforts regarding higher competitive auction volumes, faster permitting and accelerating offshore grid extension and connections and recognizing the IEA's 2023 Net-zero Roadmap, which calls for scaling-up utility – scale battery storage and grid investments, and noting the IEA's 2024 special report on batteries, which emphasizes their role in overcoming grid integration and balancing challenges,

We commit to:

- support tripling global renewable energy capacity and strengthen energy security by increasing system flexibility through demand response, grid reinforcement, and smart grid deployment, including contributing to a global goal for energy storage in the power sector of 1500 GW in 2030, a more than six-fold increase from 230 GW in 2022 including through existing targets and policies;
- ii. recalling the IEA's analysis that global grid investment needs to nearly double by 2030 to over USD 600 billion per year in order to meet announced national climate targets, significantly scale-up investment in electricity transmission and distribution grids by 2030 with the aim of expanding, strengthening, modernizing, and digitalizing networks in support of tripling global renewable capacity and strengthening energy security;
- iii. promote stationary battery storage development and deployment to increase storage efficiency and reduce storage costs, increase coordination and supportive policies, and technologies to include storage in grid planning and operations;
- iv. encourage a diversified, sustainable, secure and transparent supply chain for battery storage, including sustainable and cost-competitive alternative battery chemistries and materials, and promote resource efficiency and circularity across the whole life cycle of battery storage systems;
- v. foster collaboration and knowledge sharing measures to enhance grids and their flexibility and resilience including through grid reinforcements, regional transmissions, smart grids, digitalized demand response, improved PV self-consumption and the proactive role of consumers as prosumers and a more active role of the electricity distribution grids;
- vi. support adjustments to policies and regulations, including permitting procedures, market design, power purchasing agreements to speed up the investment in additional renewable capacity storage, and grids' expansion and modernization:
- vii. promote policies and measures including research and development of technologies for energy flexibility and storage, in particular for seasonal variability of energy consumption.

We invite IRENA and IEA to monitor and report our progress by 2025 in reaching our collective contribution to the global renewable tripling target and annually thereafter, building on their existing regular analyses of global renewable developments.

b) Global energy efficiency doubling target - We affirm the commitment under the UAE consensus at COP28 to double the global average annual rate of energy efficiency improvements by 2030 to 4 percent and call upon all countries to take additional steps towards achieving this goal. Energy efficiency is the first fuel and is an essential element of clean energy transition contributing to energy security. The IEA's Net-zero by 2050 Scenario shows the importance of stronger action on energy efficiency this decade in order to deliver significant energy demand reductions and hence early emissions reductions while also lowering energy bills and enhancing energy security and helping to reduce investment costs. We underline the role of energy efficiency in transitioning away from fossil fuels while bringing social and economic gains, supporting inclusive, people centred and just net-zero transition. We stress the role of electrification for clean energy transition. We encourage all countries to reflect ambitious targets and concrete actions on energy efficiency in the next round of NDCs and national energy transition plans. To this end we will boost capacity building and technical assistance to developing countries to develop policies and necessary investment frameworks. We highlight the importance of adequate regulatory frameworks at national and sub-national level as basis for effective energy efficiency measures and spur investments and of accelerated action on existing and innovative technologies such as heat pumps. demand side management and digitalisation. We strongly promote disclosure of energy efficiency



related information, and best practice exchange, finance for energy efficiency, support for small and medium size enterprises (SMEs) and energy sufficiency such as behavioural measures, and increasing choices for sustainable products and services. In order to achieve net-zero emissions by 2050, it is necessary to accelerate global coverage and strengthening of standards of energy products, such as heating, cooling, refrigeration, lighting and motors. It is particularly crucial to achieve the rapid energy conversion of the public and private building stock by encouraging deep refurbishing and the adoption and implementation of ambitious standards in all countries. It is also important to achieve the transformation of existing structures into net-zero or nearly zero energy buildings (nZEB), according to national circumstances and taking into account historical buildings constraints. In this regard, we note the Chaillot Declaration on buildings decarbonisation, adopted at the First Buildings and Climate Global Forum, as an important enabler to foster the development of a sustainable buildings sector. We also recognize the need to support public sector leadership in promoting energy efficiency interventions, in order to consistently reduce their energy consumption and GHG emissions and promoting economic savings which can be reallocated into public services. We call upon the IEA to support the achievement of COP28 energy efficiency global pledge including through global tracking, the Energy Efficiency Policy Toolkit, and its Annual Global Conference on Energy Efficiency, taking place this year in Nairobi, Kenya. We also note the IEA report "Empowering urban energy transitions: Smart cities and smart grids" which recognizes the role of cities as catalysts to accelerate smart urban clean and sustainable energy transition in support of the energy efficiency doubling target, and the benefits that digitalisation can unlock. We commend the many international initiatives underway to support energy efficiency progress and call for close cooperation to jointly reach the global target.

- i. strengthen the leading role played by the public sector in enhancing energy efficiency interventions both at national or subnational levels, promoting effective regulatory and financial measures. In this context we welcome continued engagement through the Net-Zero Government initiative, and we underline efforts to reach its goal of achieving net-zero emissions from national government operations by 2050, including by identifying concrete and effective roadmaps which we encourage all signatory countries to complete by COP29;
- ii. support developing and most vulnerable countries in contributing to the global efforts of doubling energy efficiency rate to 4 percent by 2030, working together to exchange best practices in order to drive energy savings in end-use key sectors;
- iii. use policy and regulatory levers at our disposal to continue to raise standards for energy-using products, buildings, and industrial and commercial processes and facilities and assist developing countries to implement and strengthen standards and labelling frameworks;
- iv. support smart urban clean energy transitions through increased international collaboration, knowledge exchange, capacity building, technology transfer on voluntary and mutually agreed terms, and projects to trial innovative approaches. In this context, we welcome the role of Digital Demand-Driven Electricity Networks (3DEN) Initiative, supported by the G7 Presidency with the support of IEA, in synergising international collaboration on these topics, in particular with emerging market and developing economies.
- c) Accelerating efforts towards the phase out of unabated coal power generation and decarbonization of power systems – We welcome the IEA findings that energy related CO₂ emissions and coal demand in G7 countries reached record low levels in 2023 – in the case of coal demand, levels not seen since 1900 - while GDP has grown more than three times. Despite this encouraging achievement, and noting the analysis of the IEA's Net-zero Roadmap report showing that to meet the Paris Agreement, phase out of unabated coal is needed by 2030s in advanced economies and by 2040 in all other regions in its scenario, and that no new unabated coal power plant should be built we note with concern that emissions from global existing coal assets - on their own - would tip the world across the 1.5°C limit. Recognizing the need to prioritize concrete and timely steps towards the goal of accelerating phase out of unabated coal power generation, in a timeframe consistent with keeping a limit of 1.5°C temperature rise within reach and noting with concern the latest evidence from the IEA that global coal fired power generation capacity increased by 1.6 percent to more than 2.2 TW and estimates that over 500GW of potential new coal capacity under development outside of advanced economies, we reiterate our call in line with the 2023 G7 Leaders' Statement for other countries and partners to join us in ending permitting and construction of new unabated coal fired power plants as soon as possible, recognizing the work of the Powering Past Coal Alliance and noting the work of those



joining the Coal Transition Accelerator to facilitate these goals. To this end, we call on the IEA to report in 2025 on actions to phase out unabated coal fired power generation globally and broader international progress needed on no new unabated coal power plants to keep 1.5°C within reach as part of the efforts to transition away from fossil fuels.

Recalling our Sapporo commitment on prioritizing concrete and timely steps towards the goal of accelerating the phase out of domestic unabated coal power generation in a manner consistent with keeping a limit of 1.5°C temperature rise within reach, and reaffirming in this context our respective existing phase out dates

We commit also to:

- phase out existing unabated coal power generation in our energy systems during the first half of 2030s or in a timeline consistent with keeping a limit of 1.5°C temperature rise within reach, in line with countries' net-zero pathways;
- ii. reduce as much as possible, in the meanwhile, the utilization of unabated coal power generation plants in our energy systems to a level consistent with keeping the limit of 1.5°C temperature rise within reach:
- iii. take concrete and timely steps in this regard as part of the policies that inform and implement the next NDC:
- iv. promote cooperation with countries and international partners including the financial sector towards the end of the approval of new unabated coal-fired power plants globally as soon as possible;
- v. call on private finance institutions to continue working with governments to enable the transitioning away from unabated coal power and end support for new unabated coal power.
- d) Accelerating efforts globally towards net-zero emission energy systems We recall the CMA.5 outcome that achieving net-zero emissions in energy systems well before or by around mid-century is critical to 1.5°C pathways. We note with concern the findings of the IEA that energy-related CO₂ emissions continued to increase in 2023, reaching a record high of 37.4 billion tonnes (Gt). We recall the findings of the IPCC that there are many cost-effective and readily available solutions to reduce energy-related emissions today. We welcome the inaugural edition of the International Energy Agency's Clean Energy Market Monitor and highlight its findings that the accelerating deployment of 5 key clean energy technologies, including solar PV, wind power, nuclear power for those countries that use it, electric cars, and heat pumps is already avoiding around 2.2 Gt of CO₂ emissions per year from 2019 to 2023. We also recognize the need for accelerated public and private investment in energy innovation to reach net-zero energy systems, in line with the International Energy Agency's analysis that 35 percent of emissions reductions needed for net-zero by 2050 must come from today's pre-commercial energy technologies and highlight that progress in clean energy innovation is already delivering new tools and lowering their costs. We emphasize the importance of international collaboration to accelerate the development and commercialization of clean energy solutions required for net-zero emissions pathways, particularly through existing international fora, including the IEA, Mission Innovation and the Clean Energy Ministerial and the Power Breakthrough Agenda. We confirm our commitment to achieving a fully or predominantly decarbonized power sector by 2035 and call on all major economies to submit NDCs in 2025 that are consistent with the goal of reaching net-zero in energy systems well before or by 2050, so to deliver the necessary emission reductions as indicated by the IPCC. We are ready to engage with partner countries for effective cooperation towards these goals, including through relevant multilateral initiatives.
- e) Transition away from fossil fuels in energy systems Recognizing the critical role of energy in the fight against climate change and emphasizing the global need to transition away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, so as to achieve net-zero by 2050 in keeping with the science, we call on all countries to act swiftly on this objective. We underline our commitment, in the context of a global effort, to accelerate the phase out of unabated fossil fuels so as to achieve net-zero in energy systems by 2050 at the latest in line with the trajectories required to limit global average temperatures to 1.5°C above preindustrial levels and call on others to join us in taking the same action. In this context, we welcome the IEA's analysis that, based on current policy settings, demand for all fossil fuels is expected to reach a peak before 2030 but note that needs to be a cut in fossil fuels demand of more than 25 percent by 2030 and 80 percent in 2050 in the net-zero scenario, including the construction of no new unabated coal power plant. We also recognise the role of non-combustion uses of fossil fuels which are consistent with net-zero trajectories.



To this end, we call upon the IEA to provide recommendations in 2025 to decision makers on how to design a roadmap to implement the transition away from fossil fuels in energy systems, including the technology pathways and timeframes to enable this transition, including to enable reduction in fossil fuels demand and to provide detailed tracking of its progress. In this context,

- operationalizing our contribution to the global transition away from fossil fuels in energy systems, through the development and implementation of domestic plans, policies and actions, including to inform and be reflected in our NDCs and LTSs, and call on others, particularly other major economies, to act likewise;
- ii. supporting action in favour of advancing affordable and inclusive transitions globally to accelerate the transition away from fossil fuels in energy system in manner that it is consistent with the goals of the Paris Agreement;
- iii. make intensive efforts to reduce demand for and use of fossil fuels, including by rapidly scaling-up clean technologies in power generation, transportation and other end users.
- f) Industrial decarbonization and hard-to abate sectors We recognize the need to accelerate the decarbonisation in the industrial sectors and particularly in the hard-to-abate sectors, that should aim to significantly reduce potential harm to the environment, supporting the rapid global scale-up of innovative technologies, including circular economy. We recognise that carbon management technologies, including CCU/carbon recycling, CCS and CO2 removal measures, particularly in hard to abate sectors are an essential component of the transition to net-zero as also underlined in the CMA.5 GST. Therefore, we affirm the importance of significant increase in the pace and scale of deployment of carbon management technologies and infrastructure, as well as promoting development of export/import mechanisms for CO₂, and further noting the work of those Parties participating in the Carbon Management Challenge to support a global goal of advancing carbon management projects that would reach gigatonne scale by 2030. We underline that renewable, clean/zero-emission and low-carbon hydrogen and its derivatives such as ammonia are key to advance decarbonization across sectors and industries, notably in hard-to-abate sectors. We affirm the importance of building a secure, resilient, renewable, clean/zero-emission and low-carbon hydrogen supply chain and continuing to work on the mutual recognition of hydrogen certification schemes in compliance with environmental and social criteria and to develop international standards. This includes a standardized methodology for GHG footprint calculation for hydrogen across the whole value chain, and to work towards mutual recognition mechanisms based on climate, environmental, and social criteria in order to ensure carbon intensitybased tradability, transparency, robustness and trustworthiness, understanding and addressing both direct and indirect GHG emissions. We recognise the opportunities to implement the use of renewable and low GHGs such as the appropriate use of sustainably produced net-zero or low greenhouse gas biomethane. Bio-LNG, Bio-LPG and biogas, as well as Bio-diesel, Bio-char and Bio-coal, from sources that do not conflict with maintaining and increasing carbon sinks, in particular from waste and we note their growing importance due to their wide range of use, particularly in hard to abate and in off-grid sectors. Underlining the key importance of decarbonizing the industrial sector to keep a limit of 1.5°C temperature rise within reach and the need to focus in developing and strengthening low and near zeroemissions definitions and harmonizing emissions measurement methodologies for heavy industry, we welcome the progress on international cooperation in the area of industrial decarbonisation made since the Sapporo G7 meeting, and the ongoing work on measurement and standards in the IEA's Working Party on Industrial Decarbonisation (WPID), the OECD's Inclusive Forum on Carbon Mitigation Approaches, the Clean Energy Ministerial Industrial Decarbonization Initiative and the Climate Club. We affirm the importance of aligning to develop international emission measurements methodologies and standards for low and zero-emissions materials, also engaging countries outside G7. We recognize the need to implement concrete actions by public and private sectors, with implications in terms of national and international policy and regulatory environments, technology and infrastructure planning, global commodity markets, international supply chains and business models, also supporting industry decarbonisation in emerging markets and developing economies (EMDEs) also by supporting dedicated investments and encouraging private finance. When we promote industrial decarbonisation, we also recognise the need to address spillover effects of mitigation policies, including the risks of carbon leakage while maintaining consistency with rules and principles of international trade, support trade relations and contribute to global emission reduction.



We call upon IEA and the OECD in collaboration with other international organizations such as IRENA to continue their works on industrial decarbonization to advance industrial transitions through improved tracking, benchmarking and potential standards, taking into account the development of new technologies, for the decarbonization of hard to abate sectors.

- i. follow up and develop the works of G7 Industrial Decarbonisation Agenda (IDA), including policy toolbox, standards and definitions for industry transition, global data collection framework for steel production and product emissions and appropriate evaluation of avoided emissions. In this sense we actively engage in and contribute to ongoing international work and multilateral initiatives for evaluation mechanisms, certification schemes, international standards, including emission measurement methodologies and common definitions for low and near zero-emissions materials;
- ii. pursuing efforts to accelerate the reduction of emissions with a view of their phasing out in the hard-to-abate sectors inter alia from energy intensive facilities as soon as possible, especially by developing and scaling-up low and near zero technologies such as those in the IEA's net-zero roadmap in line with decarbonization pathways. We call on all advanced economies and G20 members to equally take appropriate steps:
- iii. adopt policy measures to drive demand for low and near zero-emission materials, such as low and near zero-emission steel, cement, concrete, chemicals, aluminium, glass and renewable and low-carbon fuels, also through the work of existing sectorial multilateral initiatives;
- iv. promote the adoption of innovative solutions in regulation, business models and market operations for industries decarbonization;
- v. to advance projects to significantly scale-up carbon management, noting the IEA NZE Scenario. We further commit to striving for best practice in CCUS projects including by ensuring the vast majority of emissions are captured:
- vi. cooperate on promoting a free and fair international economic system and international consistency of methodologies to measure embedded emissions, including measures to address carbon leakage and have due regard to relevant international standards, where they exist, when considering carbon leakage measures;
- vii. promote and facilitate the scale-up of investments in the industrial sector for innovative technologies, smart clean electrification, improved energy efficiency, direct use of renewable heat, sustainable bioenergies, sustainable production of energy from waste, sustainable biogases and biofuels, renewable, clean/zero-emission and low-carbon hydrogen and its derivatives such as ammonia and direct use of renewable energy close to demand centers, the use of carbon management technologies:
- viii. scale-up investments in R&D, innovative technologies and pilot projects to decarbonize industry and hard-to-abate sectors. We recognize the recent success of the IEA Energy Innovation Forum in taking stock of progress made and challenges ahead in scaling-up innovative technologies for decarbonization, as well as fostering synergies between national and international efforts. We welcome the continuation of the Energy Innovation Forum in 2025;
- ix. promote use of decarbonization technologies and solutions in the developing countries, including by means of local production of sustainable fuels and feedstocks.
- g) Global non-CO₂ carbon emissions and other climate pollutants We reaffirm the importance of substantially reducing non-CO₂ carbon emissions and other climate pollutants globally, including for HFCs, recognizing that without global implementation of the Kigali Amendment, HFC emissions are projected to raise global temperatures by 0.3-0.5°C by 2100. We call on all remaining countries to ratify the Kigali Amendment to the Montreal Protocol so that we can achieve universal ratification as quickly as possible. We continue to strongly support a robust implementation of the Kigali Amendment to the Montreal Protocol worldwide and to taking and supporting through the Multilateral Fund early actions to reduce HFC consumption and maintaining and/or enhancing the energy efficiency of replacement technologies and equipment in the manufacturing and servicing sectors while phasing down HFCs. We welcome the historic replenishment of the Multilateral Fund of almost USD 1 billion in 2023 for the period 2024-2026. We also welcome the Global Cooling Pledge launched at COP28 in Dubai committing to work together with the aim of reducing cooling related emissions across all sectors by at least 68 percent globally relative to 2022 levels by 2050. We recognize the profound impact of sulphur hexafluoride (SF6) on climate change and the urgent need for coordinated global action. Over a 100-year period, SF6 is 23500 times more potent than carbon dioxide as a greenhouse gas with an atmospheric lifetime of 3200



years. We highlight the opportunities of avoiding emission lock ins in the massive extension and development of new grids needed for electrification, especially in Africa, and reiterate our commitment to pursue those opportunities within our countries and in collaboration with others. We recognize the importance of non-CO₂ precursors to tropospheric ozone; reducing these emissions will benefit air quality and improve global health and food security. We also recognize the need to reduce nitrous oxide which historically contributed over 5 percent of the global warming experienced to date, and in particular the immediate and urgent opportunity to reduce N₂O from industrial sources.

We commit to:

- i. take concrete actions to reduce non-CO₂ emissions together with relevant stakeholders including by sharing experience and good practices;
- ii. promoting the proper choice of refrigerants and management of hydrofluorocarbons throughout their life cycle especially for leakage prevention and end-of-life management of refrigerants, including efforts to support developing countries, in an environmentally safe manner and strive to promote the swift reduction of HFCs globally;
- iii. maintaining a high level of ambition to systematically implement the Global Cooling Pledge and strengthen relevant existing initiatives delivering sustainable cooling in order to achieve both climate mitigation and adaptation;
- iv. reduce emission and leakage of SF6 and pursue efforts to phase out the use of SF6 in new switchgear applications, by 2035, as appropriate, while noting such efforts are subject to the availability and applicability of its alternatives and ensuring proper maintenance and the end-of-life management of existing SF6 switchgear.
- h) Methane emissions Noting with concern that methane concentration in the atmosphere is still increasing, we underline that reducing methane emissions that account for about a third of the warming we experience today, is key to keep a limit of warming of 1.5°C within reach and avoid climate tipping points and limit temperature overshoot. We therefore recognise that methane emissions need to be reduced in all emitting sectors. We also underline that according to IEA's net-zero scenario reductions in the emission intensity and consumption of oil and gas results in a 60 percent reduction in GHG emissions from oil and gas operations from 2030 to limit warming to 1.5°C. We highlight that oil, coal and gas demand reduction is essential to reduce overall CO2 and methane emissions to limit warming to 1.5°C. Considering the high potential of the fossil energy sector to lead towards tangible methane emission reductions in the short and mid-term, we recognize that cutting methane emissions from fossil fuel operations by means of already existing technologies is largely feasible and cost-effective for oil and gas operations, and it should play a central role in national efforts to reduce such emissions along with the development of a global market for hydrocarbons associated with lower methane emissions. We also note the need to improve measurement and reporting of methane emissions from oil and gas industry operations using globally recognised frameworks such as Oil and Gas Methane Partnership OGMP 2.0 and call on the private sector to take effective voluntary measures by strengthening international frameworks on measurement and reporting. We highlight that G7 countries are putting in place measures to collectively deliver reductions in methane emissions across all sectors, including energy, waste, and agriculture, aligned with the Global Methane Pledge's collective goal of at least 30 percent reduction by 2030. We acknowledge the importance of taking practical actions to reach this goal with a view to identifying best practices, regulatory options and measures. We call on the IEA to further monitor the methane mitigation efforts and results at country level and develop concrete recommendations for reaching the 2030 collective global methane pledge. To further accelerate these efforts.

- pursue collective effort towards a 75 per cent reduction in global methane emissions from fossil fuels, including by reducing methane emissions intensity of oil and gas operations by 2030, through developing a robust methodology and use of measured data, and work with non G7 producing countries to reduce the methane emission intensity of imported fuels recognizing the IEA's emission reduction scenario;
- ii. accelerate methane measures in line with the global reduction level of at least 35 per cent in methane emissions by 2035 reflected in 1.5°C IPCC scenarios;
- iii. accelerate methane emission measures as well as support developing countries in reducing methane emissions from waste sector including through advancing resource efficiency and circular economy



- approaches, and improving landfill management, to contribute to achieving the available global methane emission reduction potential estimated from waste sector by 30-35 per cent by 2030;
- iv. explore options for regulatory approaches and market-based instruments to support methane emission reduction actions;
- v. enhance data transparency and accuracy, by utilizing satellite observation data, and supporting the work of the UNEP's International Methane Emissions Observatory:
- vi. significantly reducing all domestic routine flaring and venting by 2030; and call G7 gas suppliers to do so.
- i) Road sector decarbonization including policies initiated by G7 countries We recall the 2023 G7 Leaders' Hiroshima Communiqué and the CMA.5 GST decision that calls on Parties to contribute to the global efforts accelerating the reduction of emissions from road transport through a range of pathways to achieve 1.5°C, including through development of infrastructure and rapid deployment of zero and lowemission vehicles. We emphasize that such pathways should be in line with a trajectory to net-zero by 2050 and with keeping a limit of 1.5°C within reach. We recall the recognition in the recent G7 Transport Ministers' declaration of the various actions taken by each country that has set 1.5°C-aligned targets for the transition to net-zero transport and introduced regulatory frameworks to accelerate the deployment of technologies to that end in an efficient manner. Noting that according to IEA analysis the road transport emissions have fallen 10 per cent in G7 countries compared to 2007 peak, we reaffirm our commitment to a highly decarbonized road sector by 2030 and achieving net-zero emissions in the road sector by 2050. We also note the IEA's analysis that electrification is the key technology for decarbonizing road transport and fuel switching also plays a role. In this context, we recognize the need to keep on accelerating the reduction of emissions from road transport, and note the IEA analysis of tracking the progress on our efforts and emission reduction from vehicle stock, and the opportunity that sustainable zero-emission vehicles and sustainably produced net-zero and low GHG emissions fuels as part of an efficient decarbonization of the transport sector, provide for supporting a transition towards net-zero emissions by 2050. We encourage all countries to reflect a range of actions on road transportation in developing the policies to support the next NDCs and national transition plans and we will boost capacity building and technical assistance to developing countries to develop the policy, regulatory and investment frameworks necessary. We welcome the opportunities identified by the IEA to individually and collectively bolster transport decarbonisation policies and call on the IEA to provide more detailed analysis towards the achievement of this goal, that includes life cycle assessment analysis on various technological options for light-duty, medium-duty and heavy-duty vehicles achieving net-zero emissions in the road sector by 2050. We call upon CEM to elaborate further on ways to accelerate the adoption of zero-emissions vehicles and their technologies as well as sustainable carbon neutral fuels supply and demand.

- accelerate vehicles fleet turnover in Paris-aligned trajectory through economic policy measures to support consumers and companies, recognizing the need to reduce emissions from road transport on a range of pathways to achieve 1.5°C;
- ii. promote electric vehicles public charging infrastructure growth including sectorial regulatory measures and public financial supports in order to significantly increase the total capacity and geographic span of the recharging infrastructures in G7 countries by 2030 compared to 2023 and to increase the roll out of charging infrastructure globally and supporting deployment in developing countries:
- iii. continuing to work at G7 level and beyond, promoting synergies with industries, agencies and R&D centres on innovation, robust minimum standards and sustainability criteria for carbon neutral fuels, and coordinate to ensure that fuels and battery materials and their supply chains are traceable and sustainable, supporting recycling and aligning with environmental sustainability and social aspects;
- iv. encourage collaboration across governments, international organisations and the private sector, amongst others, to strengthen international cooperation for emerging markets and developing economies in the road transport sector. In this context of various initiatives we also note the Turin Joint Statement on Sustainable Biofuels addressed to G7 Ministers by the sectorial biofuels stakeholders.
- j) Phasing out of inefficient Fossil Fuel subsidies We recall that fossil fuel subsidies are inconsistent with the goals of the Paris Agreement and that phasing out inefficient fossil fuel subsidies is a key



component of delivering on Article 2.1.c of the Paris Agreement, we reaffirm our commitment to the elimination of inefficient fossil fuels subsidies by 2025 or sooner. We also recall our Leaders' calls to all countries to do likewise, noting G20 Leaders' commitment to rationalizing and phasing out such subsidies and stressing the collective effort stated in the first GST under the Paris Agreement in 2023 to phase out inefficient fossil fuel subsidies that do not address energy poverty or just transitions as soon as possible, we note that inefficient fossil fuels subsidies encourage wasteful consumption, reduce energy security, impede investments in the clean energy transition and undermine efforts to deal with the threat of climate change. The recent crisis in the energy sector and the related increased prices for energy that have led many countries to issue temporary policy measures to support vulnerable customers highlights the need to accelerate the transition away from fossil fuels. We stress the importance of a common definition and robust inventory of inefficient fossil fuels subsidies to enhancing transparency on global efforts to phase out such subsidies.

We commit to:

- i. promote a common definition of inefficient fossil fuels subsidies in the context of the G20 relevant work to facilitate comparability and call on relevant international organizations including the OECD and the IEA to work together to further develop such methodologies:
- ii. report in 2025 on progress towards the achievement of our commitment, building on ongoing work at G20, UN, OECD and its subsidies inventories, and other relevant fora to facilitate greater transparency on inefficient fossil fuel subsidies globally, strengthening our actions as necessary, and considering options for developing joint public inventories of fossil fuel subsidies;
- iii. promote cooperation and sharing of best practices with other countries, in particular emerging and developing countries, for the reform, reduction and removal of inefficient fossil fuels subsidies and shifting of financial flows to support reliable and sustainable energy, while assuring protection for vulnerable groups:
- iv. develop best practices to ensure that policy measures taken in response to crisis situations are timebound, transparent, and limited to address vulnerable groups without distortion of the incentives to save energy.
- 4. Just and inclusive transitions We reaffirm that the transition to a net-zero economy should be inclusive and aim to leave no one behind and should be an opportunity for enhancing social development and economic growth, maximising positive benefits for local economies while addressing negative social or economic impacts that may arise from climate action. By mainstreaming just transitions in domestic policies and measures, including through social dialogue and social protection comprising in local communities and by prioritizing human rights including the rights of Indigenous Peoples as outlined in the United Nations Declaration on the Right of Indigenous Peoples (UNDRIP), we can create opportunities that support the creation of decent and quality jobs in sustainable sectors that benefit local supply chains and positively contribute to the development of 1.5°C-aligned national energy transition plans,

- i. take into consideration just transition, recognizing the International Labour Organization's (ILO) just transition principles1, within our countries and at the global level in cooperation with emerging and developing partner countries while implementing existing and preparing new NDCs and LT-LEDs in line with 1.5°C, which will result in the elaboration of context-specific solutions, for example, by adopting policies at the domestic level addressing creation of decent work and quality jobs, reskilling, education and training, economic diversification, social protection measures, recognition of human and labour riahts:
- ii. bring forward lessons learned and best practices to promote the advancement of just and inclusive transitions in different contexts:
- iii. leverage existing multilateral efforts where possible, including the relevant IEA's work and initiatives under the Clean Energy Ministerial that promote equity, inclusivity, and workforce development;
- iv. Champion the empowerment of women as well as LGBTQIA+ persons through creating an innovative and inclusive workforce, equipped with the knowledge and skills needed to support net-zero economies.
- 5. Carbon markets and carbon pricing We reaffirm the importance of high integrity carbon markets and carbon pricing as key measures in promoting an overall 1.5°C pathway to net-zero emissions and underscore their potential contribution to the implementation and enhancement of NDCs and in mobilizing

¹ ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all (2015)



public and private investments in climate action. We stress our commitment to working together, with partners beyond the G7, to accelerate the ambitious use of high integrity carbon markets and carbon pricing while providing capacity building support to countries willing to implement carbon markets underpinned by the robust application of the guidance referred to in Article 6.2 of the Paris Agreement as applicable, and pricing instruments. We recognise that the implementation of the Article 6 rulebook can contribute to the achievement of ambitious NDCs and Paris Agreement long-term goals. To this end,

- i. work jointly towards delivering robust outcomes from the Work Programme on Article 6 at CMA.6;
- ii. enhance the provision of capacity building and technical assistance to countries wanting to implement carbon market and pricing instruments including emphasizing the urgency of capacity-building for initial reporting and authorization consistent with Article 6.2 guidance, and encouraging international coordination among the various initiatives related to capacity building, such as the "Paris Agreement Article 6 Implementation Partnership" and the Global Carbon Pricing Challenge;
- iii. work with the OECD under the Carbon Market Platform to share our experiences with promoting the implementation of the "Principles of High Integrity Carbon Markets" and actions taken to promote the development of carbon markets while ensuring their environmental integrity;
- iv. explore innovative options for carbon markets and carbon pricing to contribute to mobilizing public and private contributions to climate finance and enhancing demand and robust certification standards for carbon dioxide removals.
- 6. International Aviation We recall our commitment to advance global efforts to achieve the International Civil Aviation Organization (ICAO)'s Long-Term Global Aspirational Goal (LTAG) of net-zero emissions in international aviation by 2050. We welcome ICAO's Global Framework for Sustainable Aviation Fuel (SAF), Lower Carbon Aviation Fuels (LCAF), and other Aviation Cleaner Energies, which includes a new collective global aspirational vision to reduce CO₂ emissions in international aviation by 5 percent compared to zero cleaner energy use by 2030 through the use of SAF, LCAF, and other aviation cleaner energies. We reaffirm our support for the ICAO's Finvest Hub, aimed at assisting developing states in accessing private investment capital to decarbonise international aviation and recognize the importance of supporting and strengthening existing bilateral and multilateral assistance programs. We reaffirm our commitment to work across sectors, promote SAF, introduce new technologies into aircraft, equipment, and airport infrastructure, and improve operations to help decarbonize the aviation sector. We stress the importance of broad participation by States around the world and reaffirm our commitment to the implementation of Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and strengthen its periodic reviews at ICAO, with an emphasis on the program's environmental integrity, while enhancing capacity building for countries to put in place the necessary measures for its implementation. We also call for further research to continue improving knowledge around the non-CO₂ warming effects of the aviation sector. On the basis of the results of this research, ICAO should accelerate its work on non-CO2 effects and possible mitigation measures.
- 7. International Shipping We welcome the 2023 IMO Strategy on Reduction of GHG Emissions from Ships, which established a clear goal of reaching net-zero GHG emissions from international shipping by or close to 2050, including the 2030 and 2040 indicative checkpoints. We commit to urgent global action through the IMO to accelerate the uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources to represent at least 5 percent, striving for 10 percent, of the energy used by international shipping by 2030 in order to peak GHG emissions from international shipping as soon as possible and to reach netzero GHG emissions by, or close to, 2050, whilst pursuing efforts towards phasing them out as soon as possible to keep the 1.5°C temperature goal within reach. We will also strive to reduce emissions by 30 percent by 2030 and 80 percent by 2040 to meet 2030/2040 checkpoints. We commit to work toward the approval and adoption of a basket of mid-term measures comprised of both a technical element, namely a goal-based marine fuel standard regulating the phased reduction of the marine fuel's GHG intensity; and an economic element, on the basis of a maritime GHG emissions pricing mechanism, in 2025, for these to come into force in 2027, as indicated in the timelines of the Strategy. We also welcome the steady progress in the discussions on the development of a basket of mid-term measures during the March 2024 session of IMO's Marine Environment Protection Committee. We recall our 2023 pledge to support the establishment of green shipping corridors and now call to accelerate the implementation of green shipping corridors as part of public-private initiatives that support shipping and port decarbonisation.



8. Nuclear energy – We reaffirm G7 Leaders' commitment to reduce reliance on civil nuclear-related goods from Russia including promoting a diversified fuel supply chain free from Russian influence and to assist countries seeking to diversify their supply. We note the ongoing efforts by countries which operate Russian designed reactors to make progress in securing alternative nuclear fuel contracts and to reduce dependencies related to spare parts, components and services. We condemn Russia's seizure continued control and militarization of Ukraine's Zaporizhzhia Nuclear Power Plant, which poses severe risks for nuclear safety and security, with implications for the broader international community. We underscore the importance for all countries and their respective people of upholding the highest standards of safety, security, and safeguards and non-proliferation, particularly as more countries adopt nuclear power as part of their energy mix. We emphasise the important role of the International Atomic Energy Agency (IAEA) in this regard. Those countries that opt to use nuclear energy or support its use recognise its potential as clean/zero-emissions energy source that can reduce dependence on fossil fuels to address the climate crises and improve global energy security. These countries recognise nuclear energy as a source of baseload power, providing grid stability and flexibility, and optimising use of grid capacity, while countries that do not use nuclear energy or do not support its use prefer other options to achieve the same goals. taking into account their assessment of associated risks and costs of nuclear energy. We note the global declaration to triple global nuclear energy capacity by 2050 launched during COP28 and recognise that for countries that opt to use it nuclear energy will play a role in reducing dependence on fossil fuels, supporting the transition to net-zero and ensuring energy security, while other countries choose other energy sources to achieve these goals. We note that advanced reactors and innovative technologies, such as advanced and small modular reactors, including microreactors, and new designs that are under development could bring in the future additional benefits such as improved safety and sustainability, reduced cost of production, reduced project risk, waste management improvement, better social acceptance, opportunities for industry by providing at the same time energy, high temperature heat, hydrogen. In this context,

We commit to:

- i. support multilateral efforts to strengthen resilience of nuclear supply chains;
- ii. continue the cooperation for building robust nuclear supply chain in the framework of G7 and of the Nuclear Energy Working Group established in Sapporo;
- iii. for those countries that opt to use nuclear energy or support its use, promote research and development initiatives on innovative nuclear power technologies;
- iv. for those countries that opt to use nuclear energy or support its use, promote the responsible deployment of nuclear energy technologies including for advanced and small modular reactors, including microreactors, and work collectively to share national best practices, including for responsible waste management, enable greater access to project financing tools, support sectorial collaboration, designing licensing procedures and strengthening coordination on development of commercial projects among interested G7 members and third markets.
- 9. Fusion Energy We recognise that with future breakthroughs in fusion energy technology it has the potential to provide a lasting solution to the global challenges of climate change and energy security in the future. The successful delivery of fusion energy production could offer major social, environmental, and economic benefits, being a source of potentially zero-emission, safe, secure, virtually unlimited clean energy. The potential of commercialising fusion energy has led to demonstrator facilities being developed over the next decade by Governments and commercial companies in many countries and new international collaborations can help accelerate fusion development and demonstration reinforcing the need for global engagement to resolve research challenges, develop international supply chains and workforces. Regulatory approaches ensuring a high level of safety, proportionate to the hazards of fusion technology and that take into account the innovation of this emerging technology will be crucial to enable the potential for the safe development, deployment, and operation of fusion plants. A coordinated approach of

and that take into account the innovation of this emerging technology will be crucial to enable the potential for the safe development, deployment, and operation of fusion plants. A coordinated approach of regulations and their implementation between fusion-forward countries will be sought by international collaborations between Governments including regulators for all fusion plants, taking into account the level of maturity of different designs and stages of development. This can provide the fusion sector with the certain level of predictability and confidence it needs. Industry also has to engage collaboration in the field of research and development. Fusion has always been an international endeavour and strong connections between countries in research and development will be necessary to overcome the remaining technical challenges of fusion and accelerate the commercialisation of fusion energy. We welcome the ongoing engagement of IAEA and its member states in fusion energy. In this context,



- i. promote international collaborations to accelerate the development and demonstration of fusion plants encouraging the rise in private investments and public engagement to resolve research challenges and develop international supply chains and workforces;
- ii. establish a G7 Working Group on Fusion Energy to share best practices and explore areas of mutual cooperation between countries with the aim of strengthening research and development cooperation between countries:
- iii. establish a G7 exchange to promote consistent approaches to fusion regulations, where appropriate.

Fostering global energy security

10. Critical minerals and critical raw materials, including diversification of supply chain - Recalling the G7 Hiroshima communique, we reaffirm the need to address the triple challenge of energy security, climate crisis and geopolitical risk and ensure diverse, resilient, and responsible energy technology supply chains, including manufacturing and critical minerals, that avoid a high degree of geographical concentration and encourage G7 countries to take actions towards establishing diversified clean energy technology supply chain. Recognizing their importance for net-zero energy technologies and recalling the vital role of critical minerals and critical raw materials (CRM) in achieving decarbonization targets set globally, we underline our efforts to implement the Five-Point Plan for Critical Minerals Security adopted in Sapporo. We recognize the importance to ensure at the G7 level and beyond the implementation and development of international partnerships promoting supply chain diversification, transparency and traceability, sustainability and responsible sourcing, resource efficiency and circular economy, local value creation, collaborative approaches to voluntary stockpiling, tackling market distortions, guarding against possible weaponisation of economic dependencies on critical minerals and critical raw materials, promoting free and fair trade, and above all, ensuring that supply chains are in place to keep the world on path to a net-zero future quaranteeing the continuity of their supplies to protect the decarbonization path at global level. We acknowledge that large amounts of new supply will be required in the coming decades while further diversification of value chains is needed, including in Africa, Latin America, and South-East Asia. We also recognize that the extraction and processing of critical minerals and CRM, if carefully managed in a manner consistent with international goals and commitments on climate and environment, human health and human rights, present opportunities for advancing sustainable development, particularly in low-income countries. Appropriate governance is critical for mitigating the adverse impacts of resource extraction and for enhancing its positive economic, social and environmental outcomes. In this context, we recall the commitment by the Members of the Sustainable Critical Mineral Alliance aiming to drive a "nature-forward" approach to the mining and processing of critical minerals that minimizes and mitigates environmental impact, incorporate responsible labour practices, respects the rights of Indigenous Peoples as outlined in the UNDRIP, and the interests of local communities and works to return the land to its natural state, additional commitments include endorsing the Minerals Security Partnership (MSP) Principles for Responsible Critical Mineral Supply Chains and to elevate environmental, social, and governance (ESG) standards across the global minerals sector. In this context we underline the importance to demonstrate responsible stewardship of the natural environment and providing economic benefit for workers and local communities and Indigenous Peoples. We underline the potential for mineral-rich developing countries to develop a sustainable and responsible extractive and raw material sector according to the aforementioned criteria and principles. We further stress the vital role of resource efficiency and circularity of critical minerals and CRM for avoiding supply-demand gaps, mitigating the vulnerability of highly concentrated supply to local shocks and ultimately enhancing the resilience of our economies.

- utilize the Conference on Critical Materials and Minerals (CCMM) in order to accelerate collaboration on critical minerals issues, and implementation of the "Five-Point Plan for Critical Mineral Security", driving work through] the existing fora and initiatives, including the International Energy Agency, the Mineral Security Partnership, the G7 Alliance on Resource Efficiency and the G7 RISE partnership, and the G7 expert-level discussions;
- ii. accelerate implementation of the IEA Critical Minerals Security Program to cooperate on necessary measures to address supply and demand balance consistent with energy transition objectives through forecasting, data, and analysis by the IEA and other relevant organisations and in close consultation with the IEA's new Experts Advisory Group for critical minerals, and the IEA Critical Minerals Working Party;



- iii. promote strong environmental, social, and governance best practices, standards, and incentives to improve supply chain security, sustainability and responsible sourcing including the ILO Tripartite Declaration of Principles concerning Multinational Enterprises (MNEs) and Social Policy, the OECD Guidelines for MNEs International Standard Organisation (ISO), support social, economic and environmental sustainability, including through incorporating climate and environmental risk reduction in critical minerals value chains through the protection of the rights of Indigenous Peoples as outlined in the UNDRIP, and the interests of local communities and Indigenous Peoples;
- iv. build global capacity including through sharing policies, best practices and provide the technical assistance and the capacity building necessary to protect and accelerate growth and development and to ensure sustainable growth in critical mineral supplies;
- v. ensure that our national critical mineral strategies advance strong international environmental, social, and governance (ESG) standards that are transparent and require multistakeholder coalitions, due diligence, and performance-based benchmarks in order to attract investment and support the responsible development;
- vi. re-evaluate and develop our domestic resources and international critical minerals and mining potential, materials recovery and recycling, including mine tailings and mining valuable waste and urban mining;
- vii. promote the competitiveness of sustainable value chains, demand reduction and substitution of critical minerals and CRM in clean energy technologies, by developing products that guarantee recyclability and durability, and exploiting innovation and digitalization along the entire value chain of critical minerals, CRM and products containing critical minerals and CRM, based on measures and instruments like ecodesign, traceability mechanisms including digital product passports, and the development of AI-driven experimental planning and data analysis;
- viii. engage with the private finance sector, including pension funds, investment banks, and development banks, to promote and increase investment into sustainable critical mineral projects across the value chain, and encourage the development of financial instruments to promote such investment, adhering to high ESG standards.
- 11. Natural gas in fostering energy security Reaffirming the commitments in the 2023 G7 Hiroshima Leaders' statement, we note that G7 countries have made significant progress in reducing dependency on Russian fossil fuels including through energy savings and gas demand reduction, in a manner consistent with our Paris commitments, and address the global impact of Russia's war on energy supplies, gas prices and inflation, and people's lives, recognizing the primary need to accelerate the clean energy transition. We recognize that restricting Russian energy revenues is an essential part of our support to Ukraine and are pursuing to end significant dependency on, and to work on transitioning away from imports of Russian gas as soon as possible. In this context, we stress the important role that increased deliveries of LNG can play and acknowledge that investment in the sector can be appropriate in response to the current crisis and to address potential gas market shortfalls provoked by the crisis. In the exceptional circumstance of accelerating the phase out of our dependency on Russian energy, publicly supported investments in the gas sector can be appropriate as a temporary response, subject to clearly defined national circumstances, if implemented in a manner consistent with our climate objectives without creating lock-in effects, for example by ensuring that projects are integrated into national strategies for the development of low-carbon and renewable hydrogen. We call on IEA to enhance its role in advising on global gas security and to facilitate exchange of information, explore and analyses ways to enhance flexibility, transparency, and security of supply, for example through global early alert and gas reserve mechanisms.

Promoting collaboration between G7 and third countries

12. Supporting the energy transition and securing universal access to clean energy for development in developing countries and particularly in Africa – We are committed to secure affordable, sustainable, clean, reliable, and modern energy for all. To this end, we commit to enhance work in a fair and transparent way with developing countries, promoting universal, modern, reliable and sustainable energy access, supporting clean cooking and tackling energy poverty so to ensure just, inclusive and sustainable energy transitions contributing to the achievement of the SDG7 and wider aligned SDGs, CMA.5 GST outcomes, the Nairobi Declaration and a 1.5°C aligned net-zero future. In this context, we underline that according to the latest IEA figures, 675 million people were without reliable access to electricity in 2021 with 2.3 billion people reliant on harmful cooking fuels with significant concentration in Sub-Saharan Africa and disproportionately affecting women. We welcome the upcoming IEA's Summit on clean cooking in Africa.



We will continue working with developing countries particularly in the least developed countries, small islands developing states, and landlocked developing countries to contribute to the CMA.5 goals of tripling renewable energy and doubling energy efficiency improvements by 2030 and transitioning away from fossil fuels. We recognize these countries including those in Africa as an important partner in the just energy transitions and global decarbonization, and we acknowledge the great potential of the African continent in becoming a global powerhouse of the future as outlined in the AU Agenda 2063 development agenda and the Programme for Infrastructure and Development in Africa (PIDA). We recognize national ownership of transition strategies and support developing partners, particularly African countries, to develop and diversify, while taking into account their energy security, their clean energy technologies supply chains and green manufacturing sectors to benefit from their mineral and natural resources, creating economic footholds and employment opportunities for the growing youth of Africa, building mutually and beneficial partnerships as well as maximising local values, supporting just and equitable policies and investments that benefit African people. We recognize the need to increase G7 efforts in developing and in most vulnerable countries, in particular in Africa, and therefore

- strengthening policies for public planning and lower capital cost, improving projects pipeline and increasing and facilitating investment flows in energy efficiency, renewable capacity, including standalone generation, and enabling infrastructures such as storage, networks and off grid minigrids and renewable-led solutions that help increase green growth, expand electricity access and address energy poverty;
- ii. work for an International financial system that delivers more effectively and mobilizes all sources of financing, including official development assistance, domestic resources and private investment, making finance flows consistent with the goals of the Paris Agreement;
- iii. continue our support to the implementation of partnerships such as Just energy transition partnerships (JETPs) and other country platforms and work to shape further country partnerships;
- iv. to significantly increase the use of blended finance and to mobilize private finance in support of climate and development projects in developing and emerging countries, and lift as quickly as possible existing bottlenecks in particular with regards to access to climate finance;
- v. promote national and regional planning for infrastructure investment opportunities for transmission, local distribution and grid interconnection;
- vi. strengthening cooperation on renewable, zero-emission and low-carbon hydrogen as a key factor of the energy transition prioritizing the local energy access and development needs;
- vii. supporting initiatives, including but not limited to, the Accelerated Partnership for Renewable Energy in Africa (APRA) and the Africa EU Green Energy Initiative (AEGEI), and their objectives, in order to particularly support those African countries committed to sustainable development and green industrialisation based on renewable energies;
- viii. promoting clean cooking technologies, including by electrification, sustainable and low GHG biomass biogas, ethanol, and, where alternatives are unavailable, LPG;
- ix. promoting the reduction of methane emissions in producing countries, including through the transfer of technologies, based on voluntary and mutually agreed terms, the utilization of gas from gas flaring to produce energy locally, and prevention and response to methane super emitter events;
- x. supporting a just transition by adopting long-term partnerships and comprehensive approaches to capacity building activities, education/skills exchanges, and training programmes to cultivate a skilled workforce, including those enabling greater participation of women in the energy sector;
- xi. supporting the development and diversification of clean energy supply chains and development and mobilization of clean energy technologies and clean manufacturing sectors in Africa, positioning the continent to reap the economic benefits of the clean energy transition;
- xii. supporting the transfer of technology and capacity-building of national and local authorities in producing countries based on voluntary and mutually agreed terms;
- xiii. work together with a view to maximizing efforts to launch at Leaders level a G7 initiative dedicated to the African continent, "Energy for Growth in Africa" together with IEA and the United Nations Development Programme.
- 13. Reducing methane emissions in third countries oil and gas producing economies In order to promote the cooperation with third country oil and gas producing economies, we underline the need of targeted measures to reduce methane emissions and data consistency and comparability. We support international initiatives to improve methane emissions detection, measurement, monitoring and verification



across oil and gas supply chains, such as UNEP's International Methane Emissions Observatory, to facilitate the rapid methane reductions needed to achieve the objective of the Global Methane Pledge. We highlight the potential of working with development finance partners and the private sector to increase support for methane abatement in oil and gas producing economies, including developing countries, and emerging economies. We underline the importance of implementing national frameworks and associated NDCs that are conducive to long-term planning and investments in methane abatements.

We commit to:

- i. in collaboration with IEA and UNEP IMEO and CCAC, work with interested oil and gas producing countries to deliver deep cuts to methane emissions, including through technical cooperation and transfer of enabling technologies, on voluntary and mutually agreed terms, and to identify best practices, regulatory options and measures and enhance transparency of emissions;
- ii. promote actions to reduce methane emissions along natural gas, LNG and oil supply chains and enhance data transparency, improve methane emissions detection, quantification, source location;
- iii. collectively explore actions to improve the measurement, monitoring, reporting and verification of methane emissions, including through the EU and US-led MMRV International Working Group and the Oil and Gas Methane Partnership 2.0, with a particular focus on the natural gas supply chain.
- 14. Climate finance We welcome that climate finance provided and mobilized by developed countries for climate action in developing countries exceeded the projections for 2021. As reflected in the OECD's 2023 report, we are confident that contributors met the 100 billion in 2022 and we anticipate that the trend will continue upward in 2023. We reaffirm our commitment to the developed country Parties' goal of mobilizing jointly USD 100 billion per year in climate finance by 2020 through to 2025, in the context of meaningful mitigation actions and transparency on implementation and recall efforts collectively made to fulfil the Climate Finance Delivery Plan and its Progress Report published in 2021. The G7, together with other developed countries, have taken the lead in mobilizing climate finance to achieve this goal and continue to do so. We emphasise the continued importance of increasing public, grant based, concessional finance and enhancing access to climate finance and promoting the scale-up of private finance. We underline that these efforts are in the context of the larger global effort to enhance and align public and private finance from all sources to mobilise the trillions needed to meet the goals of the Paris Agreement, and to seize the opportunity to accelerate climate resilient, 1.5°C aligned growth and support the implementation of the outcomes of the GST, and ambitious 1.5°C aligned NDCs and national adaptation plans. We also welcome discussions in the G20 on the way to more effectively harness finance through designing and setting effective policies and enabling environments that will attract investment, and of well-designed country platforms that catalyse domestic and international investments. We further underline the specific challenges faced by least developed countries and small island states and the importance of better targeting public finance to support those most in need, and reducing the barriers to private investment in these countries in order to shift financial flows where they are needed most. We emphasise that the global finance landscape has evolved considerably and that efforts to mobilise finance must evolve to reflect those changes.
- 15. Doubling of Adaptation finance We recognize the key role of public finance as an important enabler for adaptation, particularly in countries that are particularly vulnerable to the adverse effects of climate change such as least developed countries (LDCs) and small island developing states (SIDS). We also acknowledge the importance of mobilizing private finance for adaptation, including by deploying a wide variety of financial instruments available including innovative instruments and approaches.

- i. continue accelerating efforts to respond to the Glasgow Climate Pact's call to developed country Parties to at least double their collective provision of climate finance for adaptation to developing country Parties from 2019 levels by 2025. In this context, we will continue to work with partner contributors to scale-up finance from USD 20 billion in 2019 to USD 40 billion in 2025, in the context of achieving a balance between mitigation and adaptation in the provision of scaled-up financial resources, recalling Article 9.4 of the Paris Agreement;
- ii. responding to the urging from the first GST in Dubai to developed countries to prepare a report on doubling the collective provision of adaptation finance thereby demonstrating transparency of our efforts by CMA.6.
- **16.** Making finance flows consistent with the goals of the Paris Agreement We welcome the recognition in the GST of the importance of Article 2, paragraph 1(c) and note the limited progress towards achieving



this goal. In this context, we stress the need to accelerate efforts to make finance flows consistent with a pathway toward low greenhouse gas emissions and climate resilient development. We acknowledge that such efforts involve the alignment of the domestic and international financial systems, in all countries, to shift public and private finance flows away from emission-intensive activities that are harmful to the climate, towards a low GHG and climate resilient development to reach a net-zero and climate resilient economy as a whole. We recognize that transition finance can support such efforts so long as it is in line with keeping a limit of 1.5°C temperature rise within reach, avoid carbon lock-ins and is based on effective emissions reduction, as described in such documents as the OECD guidance on transition finance and other global best practices. These efforts include both a focus on enhancing international finance flows as well as on domestic policies that attract investments which are aligned with the goals of the Paris Agreement. In this regard, we emphasise that actions to achieve the consistency of finance flows with the goals of the Paris Agreement would lead to significantly scaling-up and mobilizing finance for climate action in all countries, including developing countries. Recognizing the need to advance on the implementation, monitoring and tracking of the alignment of finance flows, and to provide consistent, comparable, and reliable information for market participants,

We commit to:

- i. accelerate action in support to the implementation of clear policies, approaches and strategies relevant to the alignment of finance flows with the goals of the Paris Agreement;
- ii. enhance capacity building efforts in developing countries to support nationally determined approaches towards implementing policies and strategies which simultaneously scale-up domestic resource mobilisation and attract greater investment from international sources;
- iii. follow up to the call for implementation of mandatory climate-related financial disclosures agreed under the Japanese G7 Presidency, recognizing the distinct objective of providing consistent, comparable, and reliable information for market participants;
- iv. enhance efforts to track and monitor the consistency of finance flows with a low GHG emissions and climate-resilient development pathway;
- urgently scale-up efforts to mobilize private sector finance for accelerated action in mitigation and adaptation to achieve net-zero emissions by 2050 and climate resilient development, recognizing the critical role that strong enabling environments, innovative finance vehicles, public and private finance institutions, blended finance, and policies play in this regard;
- vi. ensure our international public support for the energy sector is fully prioritized towards supporting the clean energy transition including scaling-up such support for clean energy and including full implementation of our commitment to end new direct public support for the international unabated fossil fuels energy sector except in limited circumstances clearly defined by each country consistent with a 1.5°C warming limit and the goals of the Paris Agreement, recognizing the importance of national security and geostrategic interests. In this context, we continue to work constructively to reach an agreement on the OECD Arrangement on Officially Supported Export Credits for the unabated fossil fuels energy sector. We continue to call on other major economies, the MDBs and bilateral development finance institutions (DFIs), multilateral funds, public banks, and relevant agencies, including Export Credit Agencies to also adopt these commitments.
- 17. Evolving the International Climate Finance Architecture We welcome the ongoing efforts by multilateral development banks to increase their deployment of climate finance, align lending and operations with the goals of the Paris Agreement, and develop a joint approach to tracking and reporting on climate finance output and results. Taking into account the challenges that vulnerable countries are facing in relation to climate impacts and debt burdens, we recall the positive connection between having sufficient fiscal space and climate action and advancing pathways towards low emissions and climate-resilient development. Also taking into account the outcome of the first GST adopted by the CMA.5 in Dubai, which calls for multilateral development banks and other financial institutions to further scale-up investments in climate action as well as for a continued increase in the scale, and effectiveness of, and simplified access to, climate finance, including in the form of grants and other highly concessional forms of finance,

We commit to:

i. working with the MDBs, IFIs and other climate finance providers in close coordination with the ongoing work of the G20 IFA WG to take a coordinated approach to financing climate action in developing countries, including supporting domestic resource mobilization. As part of this, we will continue to facilitate and encourage MDBs, DFIs and multilateral funds efforts to deploy full suite of instruments,



- from grants to guarantees policy-based financing and non-debt instruments to increase their lending capacity to developing countries;
- ii. cooperate with other shareholders of MDBs, IFIs and the relevant private sector actors to work to ensure the timely, effective and coordinated set up of plans to mobilize private finance, including by de-risking investments and increase adaptation and mitigation finance, harmonize their methodologies and streamline their approaches to scale-up finance for low-greenhouse gas emissions and climate-resilient development pathways, where appropriate. This includes encouraging the MDBs to provide updated climate finance projections to 2025, increase their climate finance targets and to harmonize their methodologies and streamline their approaches, building on existing products such as the G20 CAF Review recommendations.
- 18. New Collective Quantified Goal on climate finance Recalling the deliberations on the new collective quantified goal and relevant mandates, we look forward to working constructively together and with other Parties towards setting a new collective quantified goal at CMA.6. To this end, we recall that the new goal shall be set from a floor of USD 100 billion per year, taking into account the needs and priorities of developing countries. We recognise that the new goal is a unique opportunity to strengthen the international finance climate landscape in this critical decade and the need to develop a new goal that is fit-for-purpose and reflects a scaled up global effort in the mobilization of climate finance capturing evolved global circumstances, the dynamic nature of economic capabilities by mobilizing climate finance from a wide variety of sources, instruments and channels, including innovative sources. We emphasise the G7 countries intend to be leading contributors to a fit-for-purpose goal, underlining the importance of including in any international public finance mobilization element those countries that are capable of contributing. We note the significant role of international public funds as one of the crucial dimensions in supporting developing countries that are particularly vulnerable to the adverse effects of climate change and should remain an integral part of the goal. We stress that the new goal should be multi-layered in its structure, encompassing public, private, domestic and international components. We commit to and call on all countries and stakeholders to further strengthen accessibility, speedy mobilization, impact and transparency of climate finance. We support a new goal that contributes to keep 1.5°C within reach, and build a climate resilient future to this effect, structured to target quality public finance where is most needed, support the development of enabling conditions to stimulate Paris-aligned investment from the financial sector and the implementation of actions that make finance flows consistent with a pathway towards net-zero GHG emissions and climate-resilient development in developing countries.

Supporting the most vulnerable in responding to the impacts of climate change

19. Enhancing adaptation action and support – We welcome the adoption of the UAE Framework for Global Climate Resilience at CMA.5 which should guide and strengthen efforts, including long-term transformational and incremental adaptation, towards reducing vulnerability and enhancing adaptive capacity and resilience, as well as the collective well-being of all people, the protection of livelihoods and economies, and preservation and regeneration of nature. Underlying the urgent need to enhance coordination of efforts among countries and within countries with the aim to foster adaptation action and support, particularly for the most vulnerable along with our commitments and in alignment with other global frameworks toward the achievement of the objectives of the UAE Global Framework on Global Climate Resilience including Emirates Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action.

- i. take appropriate measures to effectively operationalize the UAE Framework for Global Climate Resilience and contribute to achieve its targets, and to promote the integration of adaptation into pertinent strategies and agendas across policy domains throughout the iterative adaptation policy cycle;
- ii. promote synergies among conventions and relevant frameworks such as Sendai and the SDGs to effectively pursue thematic targets and avoid maladaptation as well as fully use the adaptation potential in key sectors including water; food and agriculture; resilient healthcare services; biodiversity and ecosystems management, enhancement restoration and conservation; infrastructure resilience; poverty eradication and livelihoods; human settlements management and protecting cultural heritage;
- iii. identify and implement climate adaptation actions that take into account vulnerable populations and are gender-responsive and inclusive, while striving to avoid or mitigate any adverse social, environmental or economic repercussions that may result from such actions;



- iv. leverage G7 expertise and resources to enable implementation of adaptation strategies, with emphasis on providing capacity building and technology transfer.
- 20. Mobilizing adaptation finance at scale Recognizing the importance of scaling-up mobilization from all sources of finance for adaptation, including by exploring an appropriate deployment of the full range of financial instruments available including innovative instruments, such as inter alia guarantees, equities, concessional borrowing, market rate borrowing, bonds, and internal budget allocation as well as savings in households and insurances. Building on the existing initiatives and approaches, including those undertaken by G7 members

We commit to:

- i. foster adaptation partnerships and collaboration with a range of public and private sector actors to unlock and de-risk investments, and promoting innovation to support adaptation action, including in developing countries that take full account of local conditions, needs and development pathways, in line with countries' National Adaptation Plans (NAPs) and wider climate and development planning;
- ii. take critical steps towards building capacity and enhancing access to finance for adaptation, especially for the most vulnerable groups, women and girls, in all their diversity, Indigenous Peoples and marginalized groups, as well as in regions, and countries;
- iii. support and increase gender-responsive investment in adaptation and resilience to climate change;
- iv. promote efforts to create the conditions to crowd in private capital, improving enabling environments to better manage climate risks in infrastructure and investment decisions, and creating markets for disaster risk finance, early action and preparedness.
- 21. Assisting the most vulnerable developing countries to establish viable investment plans to respond to their adaptation needs We note the findings of the IPCC 6th Assessment Report (AR6) highlighting that, despite progress, adaptation gaps between current levels of adaptation and levels needed to respond to impacts and reduce climate risks exist and that furthermore gaps are partially driven by widening disparities between the estimated costs of adaptation and finance allocated to adaptation, in particular among lower income groups. Stressing that at current rates of adaptation planning and implementation, the adaptation gap is expected to continue to grow, and recognizing the challenges to implementing transformational adaptation for countries that have significant capacity constraints,

We commit to:

- i. support the most vulnerable developing countries to establish comprehensive investment plans, taking into account needs and priorities of developing countries as detailed in the NAPs and other adaptation instruments and effectively mobilize domestic and international finance, including by:
 - adopting fit-for-purpose instruments as well as technologies at project and programme level for leveraging private finance and crowd in private capital;
 - improving enabling environments to better manage physical climate risks in infrastructure and investment decisions:
 - promoting transformative investment pipelines for resilience;
 - enhance access to all available multilateral, bilateral and private sources of finance by reducing transaction costs, building capacity and remove barriers;
- ii. to launch the "G7 Adaptation Accelerator Hub" to promote partnerships to foster actions in developing countries to accelerate the implementation of their national adaptation plans and other national adaptation instruments including by strengthening existing adaptation initiatives such as the NAP Global Network and NDC Partnership, building on the UNSG APA model for collaboration, and facilitating the engagement of a broad set of financial actors, philanthropy and MDBs for resource mobilization, as well as the involvement of our national development or financing institutions, where appropriate.
- 22. Loss and Damage We welcome the operationalization of the funding arrangements, including the fund, for responding to loss and damage in Dubai and related pledges made to date to this end amounting to USD 792 million. We encourage all other parties in a position to do so to also support the funding arrangements, including the fund, for responding to loss and damage. We will work with all Parties, the Board of the fund for responding to loss damage and the World Bank to timely finalize the governance and institutional arrangements of the fund as set out in its Governing Instrument and cooperate to ensure that the fund will also act as the platform for facilitating coordination and complementarity under the funding arrangements, and in this context,



- i. continue to provide support, on a voluntary basis, to the funding arrangements, including the fund, for responding to loss and damage and facilitate support from a wide variety of sources of funding, including public, private and innovative sources, and assist those developing countries that are particularly vulnerable to the adverse effects of climate change in responding to loss and damage;
- ii. strive to increase complementarity between its components through the best use of existing mechanisms, such as the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM) and the Santiago network for averting, minimizing and addressing loss and damage associated with the adverse effects of climate change.

III Environment Section

Stepping up actions for sustainable consumption and production through circular economy and resource efficiency

- 1. Facing the triple crisis climate change, biodiversity loss and pollution that comes with extremely high social, health and economic costs, the world needs unprecedented joint efforts to accelerate, at all levels, shifts towards sustainable value chains and sustainable consumption and production patterns. Resource efficiency and circular economy can reduce pressure on primary resources and play a key role in mitigating the adverse impacts of resource extraction and processing while, at the same time, increasing the resilience of our economies to potential future shocks, fostering innovation, increasing wellbeing, and enhancing positive economic, social, and environmental outcomes.
- 2. As noted in the Global Resources Outlook 2024 report, without urgent and concerted action to change the way resources are used, material resource extraction could increase by almost 60 percent from 2020 levels by 2060. Given rapidly increasing demand, growth in materials use, coupled with the environmental consequences of material resources extraction, processing and waste, will increase pressure on the resource bases of our economies and require careful management to avoid risking future well-being. While extractive activities present economic opportunities and are essential to the energy transition, they also entail risks to the environment, including land degradation, deforestation, biodiversity loss, pollution as well as potential social risks, including damage to human health, human and workers' rights abuses, conflict, and corruption in some instances. Hence, it is essential that these activities follow the highest possible environmental, social and governance standards with full respect of human rights.
- 3. We also recognize that reducing the social, environmental and climate pressures and impacts from textiles and apparel production and consumption, while maintaining economic benefits, will need a systemic change towards circular economies and that the G7 should lead this shift. Textile and apparel production from primary resources causes significant environmental impacts including on water and biodiversity and increasing pollution and greenhouse gas emissions, and textile production quadrupled over the past half century. Throughout the lifecycle, garments shed fibres that are micropollutants including microplastics and clothing is not often recycled in the downstream stage. Moreover, many used garments are exported to low-income countries, including in Africa and in Asia, which can overwhelm local waste management.
- 4. In this context, we will increase resource efficiency and quickly transition towards circular economies including by promoting innovative and scientifically-advanced approaches to alleviate pressure on and reduce primary resource use, as well as systemic approaches across the entire product life cycle and along the entire value chain to advance decoupling economic growth from negative environmental impacts and primary resource use while improving well-being, and reducing inequality and environmental impacts.
- 5. Building upon the best available scientific evidence and knowledge, such as those of the UNEP International Resource Panel, in particular the Global Resources Outlook 2024, and relevant reports and guidelines of OECD, and commending the valuable initiatives carried out through the G7 Alliance on Resource Efficiency,

6. We commit to:

 i. boost Berlin Roadmap implementation by focusing our efforts on high-impact value chains and sectors for which concrete joint actions are needed, such as in particular critical minerals and raw materials and textile and fashion;



- ii. task the G7 Alliance on Resource Efficiency to work, on the development, by the end of 2024, of a common voluntary *Agenda on Circular Textiles and Fashion* among governments, businesses, stakeholders, and partners to take significant and concrete steps to drive systemic and transformative change within the textile and fashion industry by promoting circular economy practices along the entire value chain and fostering the industry's sustainable, ethical, and circular future on a global scale. This Agenda, complementing existing initiatives in this area and avoiding duplication, should aim to define a set of concrete actions to be implemented on a voluntary basis (within a short- to medium-term time horizon), which may include inter alia the enhancement of sustainable design of textile and fashion products, the promotion of reuse and recycling, extended producer responsibility schemes, transparency and traceability of the entire value chain and consumer information aspects, including on online purchases of products;
- iii. promote the development and upgrading of recycling systems and innovative technologies capable of, inter alia, identifying and separating critical minerals and raw materials from waste, across the value chain from mine to finished product, in order to maximize their recovery, thus contributing to securing a supply and reducing the need for primary resources;
- iv. scale-up domestic and international recycling and recovery of critical minerals and raw materials at facilities that operate with best available techniques and technologies and strong ESG standards and that can manage waste containing critical minerals and raw materials in an environmentally- sound and highly efficient manner;
- v. Continue to enforce controls, where applicable, on the transboundary movements of waste, in accordance with applicable international rules and regulations, notably the Basel Convention and the OECD decision of the Council on the control of the transboundary movements of waste destined for recovery operations, and their respective prior informed consent procedures, to promote fair, transparent and traceable trade in waste that is, protective of human health and the environment;
- vi. support low and middle-income countries in transitioning to resource efficient and circular economies, improving waste management and enabling local value addition, including through capacity building and technology transfer, on voluntary and mutually agreed terms;
- vii. continue to support relevant discussions in appropriate fora to facilitate circular businesses, including by improving prior informed consent procedure;
- viii. strengthen the key role of producers and consumers by advancing circular economies through initiatives such as improving product design, promoting extended producer responsibility schemes, supporting circular business models, setting frameworks for the sustainable life cycle of products, and tackling green-washing:
- ix. facilitate CEREP (Circular Economy and Resource Efficiency Principles) implementation by the private sector by building an enabling environment, addressing barriers to scale-up circular economy practices along value chains, including through providing policy guidance, comparable metrics, disclosure schemes, digital platforms, skills development as well as strengthening cross-sectoral and public-private partnerships.

Tackling global pollution for nature and people

- 7. We recognize the urgency of addressing the increasing global pollution crisis as part of the triple crisis. Pollution is causing serious and disproportionate damage to human, animal plant health and the environment and has negative consequences for the global economy, welfare, and development as well. We reiterate our commitment to preventing and reducing pollution risks and the negative impact of pollution from all sources to levels that are not harmful to nature and people.
- 8. We express our concern about the current and projected levels of production and consumption of plastics, and we acknowledge the need to significantly enhance our collective and combined efforts to tackle global plastic pollution that keeps increasing at an alarming rate. We underscore the important role of sound science at all levels and further improving understanding of the global impact of plastic pollution on human health, the environment, animals, plants, and ecosystems. The G7 renews its commitments to end plastic pollution, with the ambition to reduce additional plastic pollution to zero by 2040 and to support the Intergovernmental Negotiating Committee (INC) to complete its work to develop an international legally binding instrument on plastic pollution including in the marine environment by the end of 2024, based on a comprehensive approach that addresses the full lifecycle of plastics and promotes sustainable production and consumption. The INC-4 session in Canada was an important step towards the fulfilment



of the mandate set out in Resolution UNEP/EA.5/Res.14. We call on all the Members of the INC to engage constructively in the INC-5 session in the Republic of Korea, including by working ahead of time on specific aspects and provisions to find convergencies among all on the outstanding issues, and engaging all actors involved to come to an agreement of the highest ambition possible on the text of the instrument.

- 9. We are committed to taking ambitious actions throughout the full life cycle of plastics to end plastic pollution and call on the global community to do the same, with the aspiration to reduce and, as appropriate, restrain the global production and consumption of primary plastic polymers. These actions could include: establishing minimum circularity design performance criteria or requirements for products, including on durability, reuse, repair and recycling; addressing unnecessary, problematic and avoidable plastics products- including single-use plastics- and polymers and chemicals of concern; reducing non-recyclable plastics; as well as managing the risks from chemicals of concern and additives that may pose a significant risk to human health and the environment, including through measures such as phasing out of such products and materials when possible as well as enhancing transparency on the materials and chemical composition along the value chain; applying tools to internalize attributable costs of plastic pollution; addressing the sources, pathways and impacts of microplastics; ensuring environmentally sound waste management of plastic waste, including by establishing or improving extended producer responsibility schemes, as appropriate, and improving separate collection, sorting, and recycling of plastic waste. We also commit to promote the harmonization of science-based plastic pollution monitoring including, inter alia, through the standardization of methods, data collection, and evaluation tools, acknowledging that there are existing efforts and tools, such as guidelines and repositories for data and information. We stress the need for the mobilization of financial support from all sources, both public and private, domestically, and internationally, to effectively end plastic pollution.
- 10. We note with great concern that according to findings presented by the World Bank at ahead of the Fifth International Conference on Chemicals Management (ICCM5), the negative effects of chemical pollution, including pollution from poorly managed chemicals, on human health are associated with considerable impacts on human wellbeing and economic losses and, especially in low- and middle-income countries. We underline the urgent need to strengthen the science-policy interface at all levels to support and promote science-based local, national, regional and global action on the sound management of chemicals and waste.
- 11. We also recall our commitment to further actively preventing chemical pollution, or where not feasible, minimizing its associated risks, including when caused by releases of endocrine disrupting chemicals or by substances whose persistence in the environment is particularly of concern, such as per and polyfluoroalkyl substances (PFAS) of significant concern.

12. We therefore commit to:

- endorse and implement the "Global Framework on Chemicals for a Planet Free of Harm from Chemicals and Waste" (GFC), the Bonn Declaration, and the resolutions adopted at ICCM5 and call on all countries and relevant stakeholders to implement them to strengthen action to tackle the crisis of pollution from chemical and waste;
- actively contributing to the global implementation of the GFC, including through capacity building and financial assistance as appropriate in developing countries. We also urge the governing bodies of relevant international organizations to integrate the goals and targets of the GFC into their programs of work and budgets, as appropriate;
- iii. Continue to support the establishment of an ambitious Science-Policy Panel on Chemicals, Waste and to Prevent Pollution by the end of 2024 to provide scientific assessments and reports that are policy-relevant, without being policy prescriptive, to inform decision making and to support and promote science-based local, national, regional, and global action;
- iv. Propose the inclusion of lead as an issue of concern under the GFC, building on past SAICM work on lead in paint, with a view to minimizing lead pollution and its sources which can be done through national actions to foster capacity building in low and middle-income countries (LMICs) to reduce sources of lead pollution;
- v. welcome further G7 cooperation to reduce exposure to lead in LMICs and build on the Visioning Document advanced through the G7 lead experts.



13. We understand the significant impact of air pollution on the triple global crisis and recognize that it is one of the greatest environmental risks to health. We also recognize that air pollution can move across borders and have far reaching impacts. We need to make significant progress on reducing the impact of air pollution, including transboundary air pollution to reduce risks to human health, to protect ecosystems, and to prevent biodiversity loss.

14. We commit to:

- i. supporting implementation of the UNEA 6 resolution on "Promoting regional cooperation on air pollution to improve air quality globally", including by participating in the cooperation network on air quality and sharing relevant knowledge, information, and expertise through the global online platform and strengthening existing and supporting the development of additional regional cooperation bodies, including United Nations or other regional bodies acting on air pollution with the aim of helping to prioritize further addressing air pollution;
- ii. setting ambitious domestic ambient air quality standards bearing in mind the most recent air quality guidelines of the WHO including the interim targets;
- iii. supporting capacity building through mutual learning and from the available science, technical expertise and information;
- iv. supporting the development and use of integrated climate and air quality management plans and developing and using national strategies to mitigate the impact of pollution and improve air quality.

<u>Strengthening</u> and accelerating protection, conservation, restoration, sustainable use and management of biodiversity and ecosystems

- 15. Biodiversity on land, in freshwater and in the ocean is declining at an alarming and unprecedented rate. The global rate of species extinction is already at least tens to hundreds of times higher than the average rate over the past 10 million years. The 2019 IPBES Global Assessment Report on Biodiversity and Ecosystem Services provides clear and strong evidence of the biodiversity crisis we are facing, and that biodiversity loss is directly driven by human activities through changes in land and sea use, direct exploitation of organisms, climate change, pollution, and—as also presented in the IPBES Thematic Assessment Report on Invasive Alien Species and their Control—invasive alien species. The 2019 report also stresses that rapid human population growth, unsustainable production and consumption and associated technological development are among the main indirect drivers of loss. The Kunming-Montreal Global Biodiversity Framework (KMGBF) provides a comprehensive response. Biodiversity, climate change, pollution and health are interconnected. We therefore promote and support collaboration across sectors and disciplines to improve health of people, animals, plants and ecosystems, through a One Health approach and recognize the guiding role of the Quadripartite (WHO, WOAH, FAO, and UNEP) internationally. We also call on all Parties to the CBD to work towards the adoption of an effective Global Action Plan on Biodiversity and Health at the sixteenth meeting of the Conference of the Parties to the CBD (COP-16) and to further develop and operationalize the multilateral mechanism for benefit-sharing for the use of digital sequence information (DSI) on genetic resources, including a global fund, to be finalized at the Conference in accordance with CBD Decision 15/9.
- 16. We recognize that forests worldwide, including primary forests, as well as old-growth forests, provide multiple ecosystem services. We remain deeply concerned that deforestation, forest loss and forest degradation rates remain alarmingly high and that they must rapidly be halted and reversed if global forests are to help deliver climate change mitigation consistent with a 1.5°C limit and adaptation and biodiversity conservation and protection. Halting global deforestation and forest degradation, and reversing forest loss by 2030 must go hand in hand with promoting sustainable livelihoods and supporting the most vulnerable people and communities, including women, youth, Indigenous Peoples, as well as local communities. We are committed to scaling-up finance for forests from all sources. In this context, we recognize the importance of results-based payments for reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+), while respecting environmental and social safeguards, and payments for ecosystems services, as well as high integrity carbon credits and other innovative financial mechanisms, as appropriate.



- i. the swift, full and effective implementation of the Kunming-Montreal Global Biodiversity Framework (KMGBF) and to the achievement of each of its goals and targets through a whole of government and whole of society approaches that are inclusive of women, youth, and Indigenous Peoples;
- ii. for those G7 Members that are Parties to the CBD, revise and submit updated National Biodiversity Strategies and Action Plans (NBSAPs) in alignment with the KMGBF or to communicate national targets reflecting as applicable all the goals and targets of the KMGBF in advance of the 16th UN Biodiversity Conference and to work with Parties at that Conference on outstanding issues, including resource mobilization and adoption of ambitious and effective mechanisms for planning, monitoring, reporting and review, including the sets of indicators of the KMGBF Monitoring Framework;
- iii. prevent introduction and minimize the impact of invasive alien species (IAS) by working together to enhance international cooperation and through the engagement of business and other sectors to achieve KMGBF Target 6 and manage IAS and their pressures and impacts, including by holding a G7 Workshop on KMGBF Implementation, with a focus on IAS;
- iv. advance the implementation of the global effort to halt and reverse deforestation and forest degradation by 2030, including by working together to promote and continuously enhance forest conservation, sustainable management of forests and other wooded lands, sustainable wood use and improve forest health, including sustainable delivery of ecosystem goods and services, as well as to restore degraded forests, and substantially increase environmentally sustainable afforestation and reforestation globally, in line with the best available science and a focus on ecosystem restoration;
- v. advance sustainable supply chains that decouple agricultural production from deforestation and forest and land degradation, recognizing the importance of demand and supply-side measures and reducing the impact of G7 Members on global deforestation and forest degradation;
- vi. strengthening international cooperation to halt deforestation and forest degradation;
- vii. orient public policies to be forest and nature positive and develop innovative financial solutions for conserving, protecting and restoring standing forests, including by coordinating our offers through Country Packages for Forests, Nature and Climate:
- viii. support the use of inclusive science-driven tools for the restoration of forests and all types of ecosystems, such as the 2024 FAO-SER-IUCN Standards of Practice to Guide Ecosystem Restoration.
- 18. Halting and reversing biodiversity loss by 2030 is not only an ecological necessity but also a social and economic imperative. The continued loss of biodiversity threatens our life support systems, jeopardizes our capacity to address climate change, and undermines sustainable development. It is therefore necessary to provide tools and mobilize means of implementation, from all sources, including, but not limited, to financial means, to achieve international biodiversity targets and goals.
 - In this context, Target 18 of the KMGBF aims at identifying incentives, including subsidies harmful to biodiversity by 2025, and globally reducing them by at least \$500 billion per year by 2030, scaling-up positive incentives, and Target 19 aims at mobilizing at least \$200 billion per year by 2030 for biodiversity from all sources, as well as \$20 billion per year by 2025 and \$30 billion per year by 2030 through international financial resources, optimizing co-benefits and synergies of finance targeting the interconnected biodiversity and climate crises. We are all still concerned about incentives, including subsidies, harmful to biodiversity, and call upon all relevant organizations to continue collaborating with us, including by assisting in identifying such incentives, and we are all working to fulfill our respective applicable commitments, including, inter alia, to identify these incentives by 2025, and redirect or eliminate them, while scaling-up positive incentives for the conservation and sustainable use of biodiversity by 2030 at the latest, taking initial steps without delay.

We recall our commitments to:

- i. substantially increase our national and international funding for nature by 2025;
- ii. ensure that our international development assistance does no harm to nature by 2025, delivers positive outcomes overall for people, climate and nature, and aligns with the KMGBF;
- iii. substantially and progressively increase the level of financial resources from all sources to implement the KMGBF, to achieve our collective mission to halt and reverse biodiversity loss by 2030, and vision to live in harmony with nature by 2050;
- iv. align all relevant fiscal and financial flows with the KMGBF and call on other countries and financial institutions, in particular MDBs and, where appropriate IFIs, to do the same.



19. We stress the importance of leveraging private and philanthropic finance for biodiversity, as well as the key role of International Financial Institutions (IFIs), including Multilateral Development Banks (MDBs), in mobilizing finance and call on them to mainstream climate and environment issues in their policies, investments, operations and governance. UNFCCC COP-26 MDBs committed in a Joint Statement on Nature, People and Planet to mainstream nature in their policies, investments and operation. At CBD COP-15 the Resource Mobilization decision called for MDB and IFI reform to support implementation of the GBF inviting them to identify, increase, report, and simplify access to biodiversity finance. We call on MDBs and, where appropriate, IFIs, in line with their mandates, to support the implementation of the KMGBF and align their portfolios and financial flows with it and increase support for biodiversity, including through leveraging financial resources from all sources, and identifying, tracking and reporting investments that contribute to the implementation of the KMGBF, as soon as possible.

20. We commit to:

- i. urgently accelerate our efforts to meet our ongoing commitments, as referenced above, recognizing the limited time remaining to achieve them, particularly those with a deadline in 2025;
- continue to mainstream biodiversity conservation, restoration and sustainable use in society, within and across all sectors, promoting an integrated approach and cooperation, including through the G7 Alliance on Nature Positive Economies;
- iii. measure biodiversity and its links to the economy through environmental-economic accounting frameworks, as appropriate, and explore how best to take forward nature reporting frameworks, such as inter alia the one produced by the Taskforce on Nature-related Financial Disclosure (TNFD), in line with Target 15a of the KMGBF, as appropriate, and leading international sustainability standards;
- iv. encourage companies and financial institutions to familiarize themselves with leading nature-risk assessment and reporting frameworks, to identify and address the evolving nature-related impacts and dependencies, risks and opportunities;
- v. continue to substantially increase our domestic and international funding for nature by 2025 from all sources, including by providing continued support to the Global Environment Facility (GEF), which hosts the KMGBF Fund to help developing countries implement the KMGBF, stimulate innovative payment schemes, and enhance the effectiveness, efficiency and transparency of resource provision, leverage private finance, promote blended finance, implement strategies for raising new and additional resources, and encourage the private sector to invest in biodiversity, including through impact funds and other instruments;
- vi. continue to dedicate a significant amount of our international climate finance to maximize co-benefits and synergies in addressing climate change and the biodiversity crisis, as appropriate, recognizing that Nature-based Solutions can deliver mitigation, while offering significant benefits for adaptation, and encourage others to do the same;
- vii. stimulate innovative schemes, such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards:
- viii. endorse the Nature Champions Network, which supports continued global ambition on biodiversity and nature and promotes action toward halting and reversing biodiversity loss, to accelerate implementation of the KMGBF;
- ix. provide technical and financial support to implement the KMGBF to developing countries, in particular Least Developed Countries (LDCs) and Small Islands Developing States (SIDS), building on existing initiatives, such as the High Ambition Coalition for Nature and People.
- 21. We acknowledge that climate change and biodiversity loss are interdependent and are two of the most pressing crises of our time. We are convinced that nature-based solutions (NbS), as defined in UNEA Resolution 5/5, deliver multiple benefits for climate, biodiversity and human well-being, while promoting sustainable development. Conservation, protection, restoration, sustainable use, and management of ecosystems contribute, in particular, to halt and reverse biodiversity loss and land degradation, mitigate and adapt to climate change, increase food and water security, improve human and ecosystem health, reduce disaster risk and pollution, and achieve the SDGs.

22. We commit to:

i. foster stronger synergies and coherence in the planning and implementation of national climate, biodiversity and land restoration plans and strategies in support of the CBD, the KMGBF and the Paris Agreement, with specific emphasis on ambition and comprehensiveness and coherence between the



forthcoming revised National Biodiversity Strategies and Action Plans (NBSAPs), the next round of Nationally Determined Contributions (NDCs) and the updated National Adaptation Plans (NAPs), as appropriate, and the implementation of a whole-of-government approach that mainstreams coherence, coordination and the efficient use of resources within and between relevant ministries and departments;

- ii. strengthen the implementation of NbS as defined in UNEA resolution 5/5 and accelerate use of NbS to make progress to reach our climate and biodiversity goals;
- iii. respect, protect and promote human rights of all persons, and the rights of Indigenous Peoples, as outlined in United Nations Declaration on the Rights of Indigenous Peoples and the important role of local communities:
- iv. hold a G7 Workshop on KMGBF Implementation, looking also at how NBS are effectively implemented in practice, working with all interested governments, partners and stakeholders to scale-up the potential of NBS, and paying particular attention to developing countries, particularly most vulnerable ones.
- 23. We reiterate our deep concern about the health of our ocean and seas, as reflected by, inter alia, the Second World Ocean Assessment; the 2019 IPBES Global Assessment Report on Biodiversity and Ecosystem Services; and the Sixth Assessment Report from the Intergovernmental Panel on Climate Change, including its special report "The Ocean and Cryosphere in a Changing Climate", and we are united in the call for transformative action on ocean governance to tackle the triple planetary crisis of climate change, biodiversity loss and pollution. In this regard, we restate our commitment under the G7 Ocean Deal to lead the global effort on the protection, conservation, restoration and sustainable and equitable use of the global ocean, and its resources based on the best available scientific evidence, thus contributing to clean, healthy, and productive ocean with resilient marine ecosystems. We welcome UNEP's work on sustainable blue economy. We also recall our determination to close the financing gap for SDG 14. In this context, we are collectively called to make substantive progress in the implementation of the major multilateral ongoing achievements, in particular the KMGBF, acknowledging ocean as a crosscutting theme through the KMGBF and with focus on its goals and targets relevant to ocean, the Agreement under the United Nations Convention on the Law of Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ Agreement), emphasizing its significant role for achieving the crucial 30x30 target, and the 2023 Strategy on the Reduction of Greenhouse Gas Emissions from Ships by the International Maritime Organization. We have the ambition to accomplish major ongoing ocean related multilateral processes by the third United Nations Ocean Conference (UNOC-3), to be held in Nice, France, in June 2025, as a key contribution to ocean conservation and protection. We also welcome the Global Environment Facility (GEF) Council's decision to authorize the use of up to US\$ 34 million for the funding of ratification support and early action activities for the BBNJ Agreement, the GEF being part of the Financial Mechanism of the BBNJ Agreement.
- 24. We therefore endorse the G7 Declaration on the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction.

25. We also reiterate our commitment to:

- i. combat marine pollution, from both land-based and sea-based sources, including marine plastic litter, pollution from ships, accidental loss of cargo or containers and Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG), and to end Illegal, Unreported and Unregulated (IUU) fishing while promoting sustainable fishing practices, including through active collaboration within the Regional Seas Conventions and Action Plans and Regional Fisheries Management Organizations and Arrangements (RFMOs/As);
- ii. actively promote the acceptance of the World Trade Organization (WTO) Agreement on Fisheries Subsidies, adopted at the 12th WTO Ministerial Conference, for its early entry into force and to accelerate its implementation, and continue WTO negotiations on additional provisions on fisheries subsidies that contribute to overcapacity and overfishing with the ambition to reach a comprehensive and well-balanced agreement as soon as possible;
- iii. promote the global ratification and effective implementation of the Food and Agriculture Organization (FAO) Agreement on Port State Measures (PSMA) to prevent, deter and eliminate IUU fishing, while facilitating efforts to ensure its implementation as well as encouraging non-Parties of the PSMA to join it:



- iv. in view of the 29th UN Climate Change Conference of the Parties, strengthen ocean-based climate related action, based on the best available science, including through the Ocean and Climate Change Dialogue under the United Nations Framework Convention on Climate Change and consider the inclusion of this action in our national climate plans;
- v. ensure the conservation, protection, restoration, and sustainable use and management of marine and coastal biodiversity and ecosystems, including through the promotion of nature-based solutions, as well as blue carbon, recognizing these ecosystems' key role as natural carbon sinks, in contributing to climate change mitigation and reducing disaster risk, while providing multiple benefits in terms of conservation of the environment, and development of local economies, including fishery and tourism;
- vi. support the work of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to establish a representative system of marine protected areas (MPAs) in the Southern Ocean, as soon as possible, based on the best available scientific evidence, in particular the designation of additional Marine Protected Areas in East Antarctica, the Weddell Sea and the Western Antarctic Peninsula;
- vii. actively engage in the development of a regulatory framework on deep seabed mineral exploitation at the International Seabed Authority (ISA) that ensures effective protection of the marine environment from harmful effects which may arise from such activities as required under the UNCLOS reaffirming our commitment to taking a precautionary approach to potential mining of marine minerals in the Area and that a robust knowledge basis on deep sea marine environment and on the risk and potential impacts of deep sea mining operations that is able to demonstrate that the environment is not seriously harmed is critical for considering our consent in the ISA Council and is a precondition for any future mining permits, in line with the approach set out in the G7 Climate, Energy and Environment Ministers' Communiqué, adopted in Sapporo in 2023;
- viii. support the collective effort to advance transformative ocean science and action, in the context of the UN Decade of Ocean Science for Sustainable Development, as agreed under the G7 Ocean Decade Navigation Plan.
- 26. In the context of the celebration of the 50th Anniversary of the Regional Seas Programme, under UNEP, in 2024, ahead of the High Level Event on Ocean Action "Immersed in a Change", hosted by Costa Rica, in June 2024, and the third United Nations Ocean Conference (UNOC-3) to be held in Nice, France, in June 2025, we reaffirm the key role of the Regional Seas Conventions and Action Plans (RSCAPs), and other Regional Action Plans, fostering a regional approach to marine and coastal environmental action as a contribution to the global governance of the ocean. We further reaffirm the role of RSCAPs and other Regional Action Plans in addressing marine pollution and enhancing the conservation and sustainable use of the ocean and its resources, supporting the implementation of the international commitments and processes related to the ocean, for example the ocean related targets of the 2030 Agenda, the BBNJ Agreement, the KMGBF and the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment convened by the United Nations Environment Programme.

We commit to:

i. promote the participation of the Regional Seas Conventions and Action Plans in all relevant global processes and fora on ocean and seas and their key role in their preparatory processes and implementation of the relative outputs.

Sustainable management of natural resources: land and water

- 27. Safe water, healthy soils, and ecosystems are vital for the lives and livelihoods of present and future generations, helping also to prevent and mitigate the adverse effects of climate change, including flooding and drought. Sustainable food production, carbon storage and biodiversity conservation can be improved by conserving, protecting, sustainably managing and restoring natural resources. Unsustainable practices threaten and can contribute to degrade these interconnected systems, accelerating soil erosion, releasing greenhouse gases, increasing pollution, and diminishing biodiversity and productivity, exacerbating with the growing challenges posed by the triple crisis as well as by the interlinkages between land degradation and water scarcity.
- 28. The Global Land Outlook, published by the UNCCD in 2022, recalling the Intergovernmental Panel on Climate Change's (IPCC) Report on Climate Change and Land, reports that over 70 percent of the Earth's



land area has been transformed from its natural state by and for human use, causing unparalleled environmental degradation, contributing significantly to global warming and affecting ecosystem health. If further degradation at this rate continues, the long-term functionality and productivity of terrestrial ecosystems will be at risk, exacerbating climate change impacts and biodiversity loss as well as the pollution impacts. While acknowledging that the conservation and protection of terrestrial ecosystems, along with promoting the sustainable use and management of all type of land and landscapes and accelerating restoration of degraded lands, is crucial to foster sustainable development and to achieve the SDGs and relevant targets across MEAs, we restate our commitment to achieving land degradation neutrality in accordance with the SDG 15.3.

29. We need appropriate sustainable solutions, including nature-based solutions, agroecological and other sustainable approaches, for innovative and unified policy measures geared towards avoiding, reducing, halting and reversing land degradation as well as forest loss, thus improving living conditions and food security and nutrition and promoting the advancement of sustainable livelihoods, while addressing the triple crisis in an integrated and coherent way, including through the achievement of the goals and targets of the KMGBF and the goals of the Paris Agreement. Such solutions can encourage the creation of sustainable jobs and economic opportunities in rural areas, enhancing the community's wellbeing.

30. In this context, we commit to:

- i. continue and accelerate our efforts, under the aegis of the UNCCD, aimed at voluntarily achieving land degradation neutrality (LDN) by 2030 in line with SDG 15.3, by promoting appropriate initiatives to prevent, halt and reverse the loss of healthy soils and to tackle land degradation and desertification, including the effects of droughts, at national as well as global level, recalling also our common objectives under the G20 Global Land Initiative to achieve a 50 percent reduction of degraded land by 2040, on a voluntary basis. In this context, we promote the setting and implementation of voluntary LDN targets at the national level and encourage all other Parties to the UNCCD to do so as well, and to support ambitious results at the upcoming UNCCD COP-16, which will take place in Saudi Arabia in December 2024:
- ii. favor the establishment or the reinforcement of national soil monitoring efforts and the definition of appropriate methods and priorities to evaluate changes and to identify improvements to soil health, including efforts to share data and knowledge in order to better understand how to sustainably manage lands and simultaneously protect communities;
- iii. work towards including and regularly publishing, national environmental economic accounting towards integrating Natural Capital Accounting in our core national economic statistics and promote their use to inform economic and financial decision-making:
- iv. deliver innovative and environmentally sound solutions, community engagement and policy integration to leverage our existing investments as well as promote synergies, as appropriate, between the implementation of the UNCCD, the CBD, the KMGBF and Paris Agreement through mutually supportive approaches that will address climate change, land degradation and biodiversity loss and simultaneously support livelihoods, encouraging the creation of job opportunities in rural areas and the development of sustainable new products, markets and innovative circular value chains, especially in those communities suffering from the effects of land degradation;
- accelerate efforts to halt and reverse land degradation and desertification, deforestation, forest loss and degradation by 2030 while delivering sustainable development, in line with our joint commitment stated in the Glasgow Leaders Declaration on Forest and Land Use and the 2030 Agenda and the SDGs;
- vi. continue to increase our support towards sustainable, legal, transparent, and traceable value chains that decouple agricultural and commodity production from land and forest degradation through appropriate national and international policy measures.
- 31. We welcome the announcement of the Italian Presidency initiative to set up a voluntary *Hub on Sustainable Use of Land* dedicated to promoting a collaborative and common approach to sustainable land use initiatives in Africa and in the Mediterranean Basin, engaging with international organizations such as UNDP and UNCCD, and relevant global and national partners, including from the private sector. This Hub will aim to support on a voluntary basis the implementation of innovative programming geared towards land degradation neutrality (LDN) and halting and reversing deforestation and forest loss and forest degradation, focusing on sustainable livelihoods, enhancement of food security and promotion of land-based employment and life opportunities, with special regard to groups and communities on the



frontlines of land degradation, including Indigenous Peoples, youth and women, avoiding duplication and enhancing synergies with existing initiatives.

- 32. Water resources and aquatic ecosystems are essential for life and to tackle the triple global crisis, given their crucial role for biodiversity, sustainable energy provision, water and food security, nutrition, sanitation, and resilient livelihoods. Environmental degradation, due to, inter alia, exploitation of natural resources, climate change and pollution, is diminishing the availability and quality of water supply and damaging aquatic ecosystems. Therefore, we support the implementation of integrated water resource management (IWRM) at all levels of governance, in a sustainable, inclusive and adaptive way, including at the basin level, to accelerate the achievement of SDG 6 and advancing global water action. The UN Water Conference 2023, which generated significant momentum towards enhancing water action and political commitment at all levels to address water-related challenges, launched the Water Action Agenda with voluntary commitments from governments, partners and stakeholders and other water related high-level fora and events, such as the 10th "World Water Forum" in Bali and the "One Water Summit" in New York as well as the incoming 2024 three COPs, should maintain the focus on the global water agenda in 2024 and beyond.
- **33.** Recognizing the importance of water for sustainable development, prosperity and peace and the need for concrete action, **we commit to** establish a **G7 Water Coalition** as annexed in order to:
 - identify common goals and strategies to catalyze shared ambitions and priorities to tackle the global water crisis and emphasize the role of multi-sectoral approaches;
 - mainstream water and its cross-sectoral relevance in an impactful and coherent way into the existing fora and processes, including by raising the political focus on water at the global level, increasing the impact of the G7 and complementing other global initiatives;
 - promote effective, efficient, inclusive, and just policies to achieve SDG 6 and other international waterrelated goals and targets and to coordinate inputs and positions in preparation of major water events or other events where water issue might be discussed and/or negotiated;
 - engage with the relevant experts as appropriate and report back to the relevant G7 working groups on its activities in 2025.

Furthermore, we commit to

- i. strengthen policy cooperation and research on water to promote the importance of integrated water resource management;
- ii. swiftly and comprehensively implement effective and inclusive solutions for strengthening water policies to achieve sustainable development in the context of climate change, biodiversity loss and pollution. Such policies should call for, among other measures, the implementation of integrated water resources management at all levels, including through transboundary cooperation as appropriate;
- iii. adopt coherent responses to the water crisis across sectors, regions and actors, taking into account, where applicable, the interlinkages of water, ecosystems, energy, food security and nutrition, as well as mainstreaming sustainable water management and the protection, conservation, restoration and sustainable management of aquatic ecosystems into relevant intergovernmental processes, as well as national and local development strategies and relevant policies;
- iv. preserve water resources and reduce water pollution from all sources by promoting resource efficiency and circular economy:
- v. Scale-up investment in sustainable, disaster-proof and climate-resilient water and sanitation infrastructure and nature-based solutions, including to close the investment gap in water and sanitation.

Cross cutting actions

Circular and Sustainable Bioeconomy

34. We highlight that circular and sustainable bioeconomy solutions may contribute to regenerative and restorative benefits for ecosystems, such as preventing land and ocean degradation and regenerating soils, and marginal and desertified lands as well abandoned industrial sites while also bringing innovations to industries and contributing to achieving net-zero. We will thus promote circular and sustainable bioeconomy solutions to contribute to sustainable production of food, raw biological materials, bio-



products, biomaterials, and bioenergy, in line with our overall effort to halt and reverse biodiversity loss, fight climate change and avoid practices that contribute to deforestation, forest loss and land degradation, pollute or harm ecosystems and their services. Continued investment in and access to innovation will be required to ensure these outcomes bring social, economic and environmental benefits on a local scale, particularly in rural areas, as well as on a global scale. Especially, it needs to respect and include local communities, small-scale farmers, and Indigenous Peoples. This includes research and increasing sustainable production efficiencies to manage competing land use pressures arising from growing demand of food, raw biological materials, bio-products, biomaterials, and bioenergy. In this light, we recommit to and highlight the importance enhancing sustainability in agriculture, aquaculture, fisheries, and forestry contributing to the KMGBF.

- **35.** We recognize the need for sustainability criteria adapted to different economic activities producing and using biological resources, where such criteria do not yet exist, particularly respecting the limits of sustainable biomass production so that biological resources: are used sustainably and efficiently, kept in use for as long as possible to achieve waste prevention and minimization, are recovered and recycled to make the material available for another use, and energy is recovered.
- **36.** Recognizing the need to share examples of successful circular and sustainable bioeconomy solutions implemented at national, regional, and global level, we welcome the Italian Presidency initiative to hold a voluntary technical workshop for sharing information and best practices for designing robust and comprehensive bioeconomy indicators, for possible consideration by G20 Initiative on Bioeconomy.

Global Environment Monitoring Technologies

- 37. Digital and Space technologies are key tools to promote climate change mitigation, adaptation, and sustainable management of natural resources and ecosystems: fundamental examples can be found in Earth Observation or image and data analysis solutions to address a wide range of applications, from emergencies management, including wildfire response, to efficient navigation systems. Furthermore, space-based platforms contribute invaluable data for environmental modeling, enabling policymakers to formulate evidence-based policies for sustainable resource management and climate mitigation and adaptation strategies. Therefore, there is a need to keep investing in those tools that efficiently enable the collection, analysis, and use of information from the environment around us. Within this wider framework, cooperation among different actors (institutional and private), such as the activities undertaken in the Group on Earth Observation (GEO) and its space element, the Committee on Earth Observation Satellites (CEOS), is crucial to accelerate the full valorization of this digital value chain.
- 38. Technology and its associated services can have a central role in monitoring, preventing, and reacting to environmental risks. Enhancing our resilience mechanisms and technologies can prevent future socioeconomic costs for our society and industries. Space based technologies can provide a great contribution thanks to their multi-domain applications, including integrated systems for emergency prevention and response, global monitoring services, and quality and timely data analysis from several sources (including satellites, drones, communication systems, sensors and control rooms), based on Artificial Intelligence (AI) techniques for large data processing. Satellite imagery, aerial photography, and other remote sensing techniques, enable the monitoring of weather, air quality, ozone depletion, and climate change, including by measuring emissions of GHGs and ozone depleting substances, as well as enabling the identification of changes in the water cycle, land use, deforestation, habitat loss and other adverse disturbances. The non-invasive nature of remote sensing minimizes ecological disruptions, aligning with sustainability objectives. Through strategic integration into resource management strategies, remote sensing fosters precision monitoring, and transparency reporting, enabling the identification of trends, anomalies, and potential threats to ecosystems. The gathered data should, as far as possible and practical, be made available as open data. Data spaces can assist efficiently with data sharing. It is necessary to take into account the environmental impact of digital applications and work to ensure their use is sustainable.

39. We commit to:

 facilitate the utilization of advanced remote sensing technologies to bolster the sustainable management of natural resources such as land and water, underscoring the complementary advantages that such technologies offer;



- ii. promote transparency through scientific data obtained from Earth Observation including existing and planned satellites, including OCO-3, GOSAT-GW, CO₂M, MicroCarb, and enhancing coordination of activities by the Earth Observation community;
- iii. advocating the widespread adoption of Earth Observation-based services and complementary applications, to conserve, protect and responsibly manage natural resources, safeguarding their integrity for generations to come;
- iv. openly exchange Earth Observation data in the context of the implementation of multilateral environmental agreements, while ensuring data protection standards;
- v. promote and share emerging transformative capacity using artificial intelligence and machine learning to improve the complementary use of remote and in situ environmental data for climate, energy and environment decision making;
- vi. strongly promote continuous innovation and collaboration in the development of Earth Observation as an indispensable tool in safeguarding our planet for future generations, supporting the conservation, protection and restoration of ecosystems and the sustainable management of natural resources.

Promoting collaboration between G7 and developing countries

40. Acknowledging the valuable activities, namely with respect to youth engagement in climate action, energy transition and climate finance carried out by the UNDP Centre for Climate, Energy and Environment established in Rome under the leadership of the Italian G7 Presidency 2017, we welcome its engagement in future voluntary collaboration between G7 members and developing countries including African countries and most vulnerable countries.

Localizing the SDGs in cities and regions to accelerate progress

- 41. Cities play a crucial role as drivers of global transformation to net-zero, climate resilient and nature positive development, better quality of life, resilience to extreme weather and slow onset events, halting and reversing biodiversity loss and combating pollution, as emphasized in the IPCC's Sixth Assessment Report, the recent OECD report titled "A Territorial Approach to Climate Action and Resilience", the IRP's report entitled "The Weight of Cities". Global challenges can stimulate local solutions, while local solutions can be scaled up to drive and orient global strategies, in a circular, just and inclusive way. Strengthening the capacity of local, municipal and other forms of government to act is an important component of scaling-up global efforts to address the triple crisis and ultimately benefits broader sustainable transformation.
- 42. In this context, we recognize the special role of cities and territories in achieving the Sustainable Development Goals (SDGs) of the 2030 Agenda and recall the strong acknowledgement, by G7 and G20 and throughout the United Nations system, to promote effective approaches to SDGs localization which will accelerate progress across the multiple goals at once, by catalysing support for actions that involve all levels, including subnational, regional and territorial governments and actors, promoting national urban development policies, encouraging peer learning, supporting capacity building, promoting city to city cooperation.

43. In this context, we commit to:

- i. in collaboration with G7 Urban Development Ministers, explore priority actions in the built environment to reduce the impact of climate change, biodiversity loss and pollution, including nature-based solutions and green and blue infrastructure measures whilst striving to eradicate poverty and boosting social and economic outcomes:
- ii. discuss with G7 Development Cooperation Ministers and G7 Urban Development Ministers the implementation of relevant actions in countries most in need, including through a Partnership Platform on Localizing the SDGs that Italian Presidency plans to launch in the second half of 2024 in cooperation with UN-Habitat and in line with the UN High Impact Initiative on SDGs Localization, the UN Local 2030 Coalition and the G20 Platform on Local and Intermediary Cities.

Sustainable value chains

44. We recall our commitment to continue our efforts to reduce risk of deforestation and forest and land degradation linked to the production of relevant commodities. We also recall our commitment to



strengthening our efforts to implement and promote a mix of effective binding and non-binding policy measures that incentivize sustainability and resilience in value chains to support sustainable and efficient use of resources, sound management, conservation and protection of forests, and biodiversity, improved water quality, access and management, and by fostering circular economy, promoting sustainable agricultural productivity growth and organic farming, and utilizing agroecological and other innovative approaches.

45. Coffee value chains span 50 countries on 11 million hectares, with over 25 million small scale farmers often unable to achieve a fair living income labor, faces environmental challenges exacerbated by climate change and biodiversity loss which are already affecting quality, yields, and long-term sustainability generating socio-economic and development threat. Recognizing these environmental and development challenges, we welcome the announced setting up by the Italian Presidency of a public-private partnerships initiative for sustainable, resilient, circular and regenerative value chains of coffee. The proposed initiative, which is open to G7 members on a voluntary basis, will draw on the expertise of international partners such as FAO, UNDP, UNIDO, and the International Coffee Organization (ICO) and its Coffee Public-Private Task Force (CPPTF). It will avoid duplication of efforts and foster public and private partnership engagements as well as efforts of producing countries to transform their coffee sector to be future fit, climate resilient, environmentally sound, equitable and a driver of sustainable economic growth.