

2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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Peaceful uses of nuclear energy

Working paper submitted by Brazil

Peaceful uses of nuclear energy and the Treaty on the Non-Proliferation of Nuclear Weapons

1. The Treaty on the Non-Proliferation of Nuclear Weapons, in article IV, recognizes the “inalienable right” of State parties to “nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II”, as well as the right to “facilitate” and “participate in” the “fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy”.
2. The right to the peaceful uses of nuclear energy predates and precedes the Treaty. Article IV recognizes that right. In fact, the right to use any technology for peaceful uses is self-evident. Consequently, peaceful uses are not part of the grand bargain that underpins the Treaty.

Centrality of the International Atomic Energy Agency in promoting the peaceful uses of nuclear technology for sustainable development

3. The International Atomic Energy Agency (IAEA) plays a central role in the promotion of peaceful uses of nuclear technology. In this regard, it is worth stressing its mandate to “seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world”, according to article II of its statute.
4. The peaceful application of nuclear technologies in today’s world no longer remains an exclusive remit of developed countries. These technologies have become a central part of the nuclear global agenda in the light of their various contributions to sustainable social and economic development.
5. Nuclear power constitutes an important option, not only for countries with existing nuclear programmes, but also for developing countries with growing energy needs. IAEA should continue to carry out its mandate to provide the necessary support to member States interested in launching and expanding nuclear power programmes.
6. Nuclear technology is in a position to play a role in both effectively mitigating and adapting to the increasingly severe consequences of the climate crisis. The efforts undertaken by IAEA to raise awareness regarding the importance of nuclear energy



in the decarbonization of the global economy are a case in point. The Agency should be encouraged to continue to engage in high-level dialogue on nuclear energy and nuclear techniques and applications at the twenty-seventh session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, to be held in Sharm el-Sheikh, Egypt, in 2022.

7. IAEA also plays a key role in the application of nuclear technologies and, specifically, in the assistance provided to member States in this regard. Nuclear technologies and applications make an important contribution to sustainable development. In this respect, IAEA assistance to member States should be further encouraged, promoted and provided with the necessary means.

8. IAEA develops various activities in the field of nuclear science, such as nuclear data, research reactors and accelerator technologies.

9. IAEA should enhance its assistance in developing the nuclear science application capabilities of member States as a tool for their technological and economic development, including in the field of small and medium-sized or modular reactors. Nuclear and isotopic techniques have various important applications in the field of food and agriculture, human health, management of water resources, environment, industry and radioisotope and radiation technology.

10. The ReNuAL, ReNuAL+ and ReNuAL2 projects, as well as the Zoonotic Disease Integrated Action initiative and NUTEC Plastics, are commendable achievements by IAEA. Likewise, its nuclear application laboratories have proved invaluable to member States as they seek to promote sustainable human development.

11. The Review Conference should encourage further transfer of nuclear technology to, and sharing of nuclear knowledge with, developing countries, including through capacity-building.

Advancing peaceful uses

12. The promotion and transfer of nuclear technology for sustainable socioeconomic progress in developing countries is the main statutory function of IAEA. Its technical cooperation programme is the main delivery vehicle for this statutory function.

13. Broad access to nuclear medicine, radiation medicine techniques and radiotherapy remains a challenge, and the Review Conference should encourage IAEA to collaborate with relevant international organizations in order to continue to build capacities in developing countries.

14. Technical cooperation activities could make a relevant contribution to the achievement of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, as well as the Paris Agreement. However, alignment with the Goals should not constitute a limitation or become a precondition for technical cooperation projects. Even less should such alignment be a tool for their reprioritization.

15. Despite the increasing number of developing countries receiving technical cooperation from IAEA, the resources for the technical cooperation programme, both financial and human, have not increased in tandem.

16. The Technical Cooperation Fund is the primary funding mechanism to ensure a stable and strategic technical cooperation programme, supplemented by extrabudgetary contributions.

17. It is also evident that developing countries and, most of all, least developed countries should be given priority when allocating the shares of the Fund.

18. The ownership of technical cooperation programmes should always be shared with the recipient countries, irrespective of the level of resources provided by donor countries, in keeping with the rules governing technical cooperation in the United Nations system.

19. The Review Conference should call for the strengthening of the promotional activities of IAEA, including technical cooperation and coordinated research projects, through the provision of sufficient, assured and predictable resources, so as to properly respond to the increasing number of member States and their growing needs, as well as to enhance the use of nuclear technology for sustainable development.

Peaceful uses and nuclear safety and security

20. Member States should spare no efforts to meet the requirements related to safety, security and safeguards.

21. The responsibility for nuclear safety within a State rests entirely with that member State. IAEA can provide, upon request, assistance, through its expertise and advice, to member States.

22. IAEA plays a central role in that regard, coordinating international efforts to strengthen nuclear safety globally and promoting nuclear safety standards in line with article III of its statute.

23. Likewise, nuclear security should not be a condition or prerequisite for technical cooperation projects. Nuclear security considerations should not hamper international cooperation in the field of peaceful nuclear activities, the production, transfer and use of nuclear and other radioactive material, the exchange of nuclear material for peaceful purposes and the promotion of peaceful uses of nuclear energy, and should not undermine the established priorities of the IAEA technical cooperation programme.

24. In order to enhance the safety and security of civilian nuclear facilities, the Review Conference should call for further support for IAEA efforts in conducting capacity-building activities across its programme of work for nuclear, radiation, transport and waste safety, and emergency preparedness and response, as well as in strengthening global, regional and national safety networks and forums.

25. The Review Conference should support IAEA provision of assistance to developing countries embarking on nuclear power programmes, as well as the Agency's provision of support to member States, upon request, in developing and strengthening their nuclear safety infrastructure.

26. While supporting the strenuous work of IAEA in the current situation in Ukraine, the Review Conference should underscore the international community's grave concerns about the safety and security conditions of the nuclear installations in that country. It should call upon the States concerned to comply fully with their international obligations with regard to nuclear safety and security, including the seven pillars of nuclear safety and security, as presented by the Director General to the IAEA Board of Governors in March 2022.

Nuclear technologies and applications in Brazil

27. The technical cooperation activities carried out by IAEA constitute an important tool for expanding access to a wide range of nuclear applications in developing countries. In search of greater efficiency in the use of resources allocated to technical cooperation activities, the Agency strives to identify countries and institutions qualified to contribute to the multiplication of the activities developed.

28. With renowned medical institutions, wide availability of equipment and facilities, and qualified professionals, Brazil is considered by the Agency to be an important partner in regional and interregional projects aimed at providing training in specialized procedures and good practices.

29. Through the Regional Cooperation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean, IAEA has long contributed to the development and dissemination of various techniques in a multitude of areas in Brazil and the region.

30. An example of the most successful nuclear applications in Brazil is the adaptation, with support from the Agency, of the sterile insect technique at the MOSCAMED biofactory in the north-east of Brazil. Traditionally applied to fight fruit flies, the sterile insect technique is being used to fight mosquitoes as vectors of diseases such as dengue, yellow fever, chikungunya and Zika.
