

IAEA ANNUAL REPORT 2021

Article VI.J of the Agency's Statute requires the Board of Governors to submit "an annual report to the General Conference concerning the affairs of the Agency and any projects approved by the Agency".

This report covers the period 1 January to 31 December 2021.

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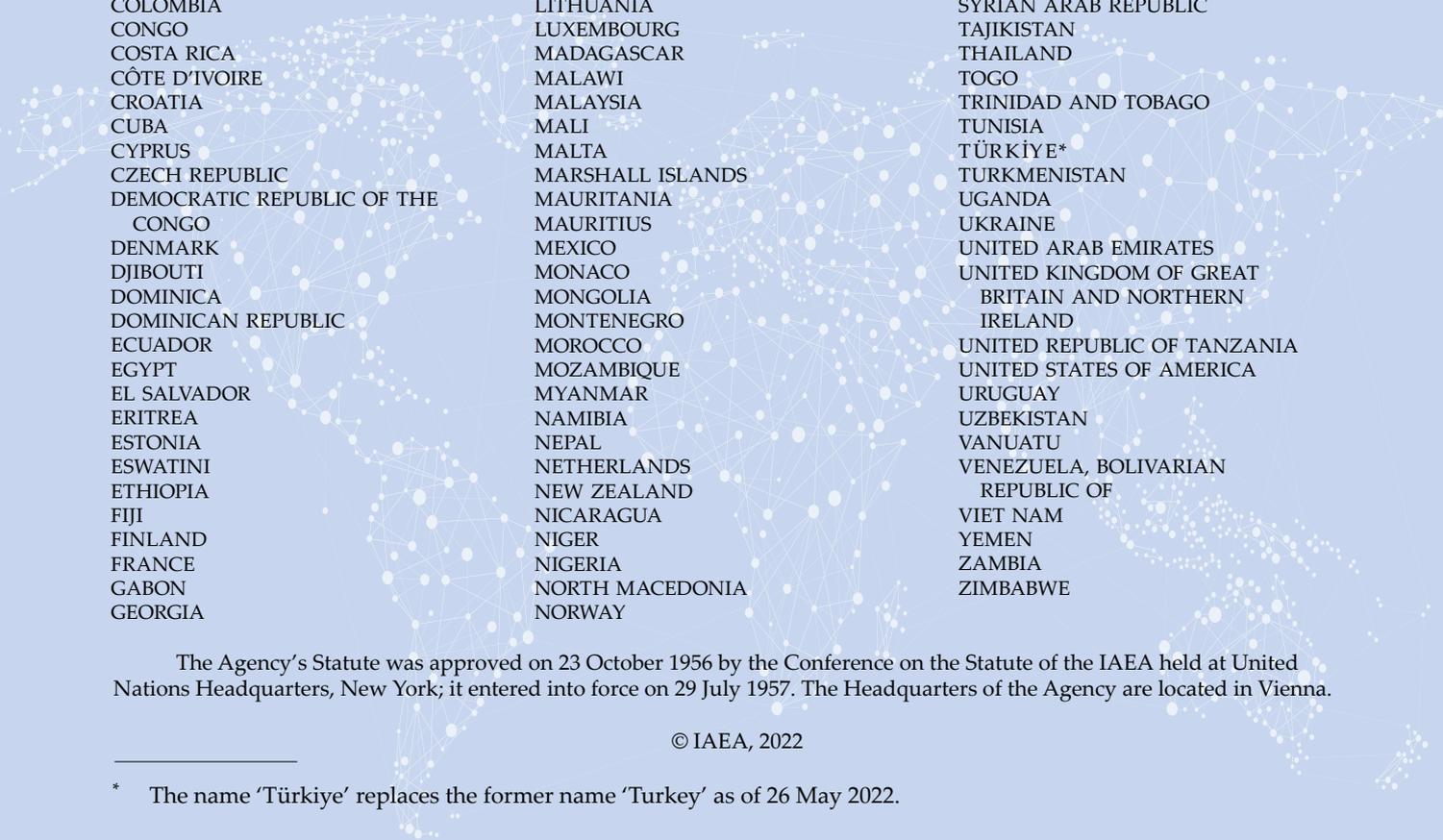
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Member States of the International Atomic Energy Agency

(as of 31 December 2021)



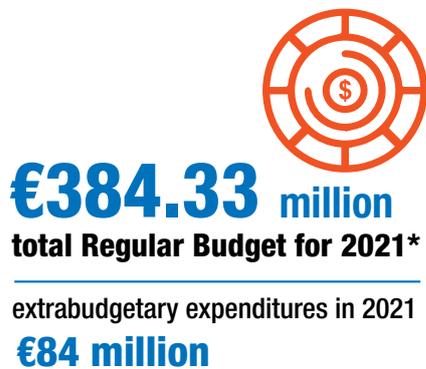
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|-------------------------------------|-------------------------------------|--|
| AFGHANISTAN | GERMANY | OMAN |
| ALBANIA | GHANA | PAKISTAN |
| ALGERIA | GREECE | PALAU |
| ANGOLA | GRENADA | PANAMA |
| ANTIGUA AND BARBUDA | GUATEMALA | PAPUA NEW GUINEA |
| ARGENTINA | GUYANA | PARAGUAY |
| ARMENIA | HAITI | PERU |
| AUSTRALIA | HOLY SEE | PHILIPPINES |
| AUSTRIA | HONDURAS | POLAND |
| AZERBAIJAN | HUNGARY | PORTUGAL |
| BAHAMAS | ICELAND | QATAR |
| BAHRAIN | INDIA | REPUBLIC OF MOLDOVA |
| BANGLADESH | INDONESIA | ROMANIA |
| BARBADOS | IRAN, ISLAMIC REPUBLIC OF | RUSSIAN FEDERATION |
| BELARUS | IRAQ | RWANDA |
| BELGIUM | IRELAND | SAINT LUCIA |
| BELIZE | ISRAEL | SAINT VINCENT AND THE GRENADINES |
| BENIN | ITALY | SAMOA |
| BOLIVIA, PLURINATIONAL STATE OF | JAMAICA | SAN MARINO |
| BOSNIA AND HERZEGOVINA | JAPAN | SAUDI ARABIA |
| BOTSWANA | JORDAN | SENEGAL |
| BRAZIL | KAZAKHSTAN | SERBIA |
| BRUNEI DARUSSALAM | KENYA | SEYCHELLES |
| BULGARIA | KOREA, REPUBLIC OF | SIERRA LEONE |
| BURKINA FASO | KUWAIT | SINGAPORE |
| BURUNDI | KYRGYZSTAN | SLOVAKIA |
| CAMBODIA | LAO PEOPLE'S DEMOCRATIC REPUBLIC | SLOVENIA |
| CAMEROON | LATVIA | SOUTH AFRICA |
| CANADA | LEBANON | SPAIN |
| CENTRAL AFRICAN REPUBLIC | LESOTHO | SRI LANKA |
| CHAD | LIBERIA | SUDAN |
| CHILE | LIBYA | SWEDEN |
| CHINA | LIECHTENSTEIN | SWITZERLAND |
| COMOROS | LITHUANIA | SYRIAN ARAB REPUBLIC |
| COLOMBIA | LUXEMBOURG | TAJIKISTAN |
| CONGO | MADAGASCAR | THAILAND |
| COSTA RICA | MALAWI | TOGO |
| CÔTE D'IVOIRE | MALAYSIA | TRINIDAD AND TOBAGO |
| CROATIA | MALI | TUNISIA |
| CUBA | MALTA | TÜRKİYE* |
| CYPRUS | MARSHALL ISLANDS | TURKMENISTAN |
| CZECH REPUBLIC | MAURITANIA | UGANDA |
| DEMOCRATIC REPUBLIC OF THE CONGO | MAURITIUS | UKRAINE |
| DENMARK | MEXICO | UNITED ARAB EMIRATES |
| DJIBOUTI | MONACO | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND |
| DOMINICA | MONGOLIA | UNITED REPUBLIC OF TANZANIA |
| DOMINICAN REPUBLIC | MONTENEGRO | UNITED STATES OF AMERICA |
| ECUADOR | MOROCCO | URUGUAY |
| EGYPT | MOZAMBIQUE | UZBEKISTAN |
| EL SALVADOR | MYANMAR | VANUATU |
| ERITREA | NAMIBIA | VENEZUELA, BOLIVARIAN REPUBLIC OF |
| ESTONIA | NEPAL | VIET NAM |
| ESWATINI | NETHERLANDS | YEMEN |
| ETHIOPIA | NEW ZEALAND | ZAMBIA |
| FIJI | NICARAGUA | ZIMBABWE |
| FINLAND | NIGER | |
| FRANCE | NIGERIA | |
| GABON | NORTH MACEDONIA | |
| GEORGIA | NORWAY | |

The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are located in Vienna.

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* The name 'Türkiye' replaces the former name 'Turkey' as of 26 May 2022.

The Agency



* At the United Nations average rate of exchange of US \$0.843 to €1.00. The total Regular Budget was €392.85 million at the US \$1.00 to €1.00 rate.

973



**active technical
cooperation projects**

133



**active coordinated
research projects
to develop new technology**

186



**States with safeguards
agreements in force** of which

138

**States had additional
protocols in force**

56



**active
IAEA Collaborating Centres
designated Member State institutions
supporting Agency activities**

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The Board of Governors

The Board of Governors oversees the ongoing operations of the Agency. It comprises 35 Member States and generally meets five times a year, or more frequently if required for specific situations.

In the area of nuclear technologies, in the course of 2021 the Board considered the *Nuclear Technology Review 2021*.

In the area of safety and security, the Board discussed the *Nuclear Safety Review 2021* and the *Nuclear Security Report 2021*.

As regards verification, the Board considered the *Safeguards Implementation Report for 2020*. It approved two additional protocols. The Board considered the Director General's reports on verification and monitoring in the Islamic Republic of Iran in light of United Nations Security Council resolution 2231 (2015). The Board kept under its consideration the issues of the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) Safeguards Agreement in the Syrian Arab Republic and the application of safeguards in the Democratic People's Republic of Korea. The Board also considered the issue of the NPT Safeguards Agreement with the Islamic Republic of Iran.

The Board discussed the *Technical Cooperation Report for 2020* and approved the Agency's technical cooperation programme for 2022–2023.

The Board considered reports on the Agency and the COVID-19 pandemic and on Agency emergency assistance to Member States.

The Board approved the recommendations contained in the *Proposal to the Board of Governors by the Co-Chairs of the Working Group on the Regular Budget and the Technical Cooperation Fund Targets for 2022–2023*.



Composition of the Board of Governors (2021–2022)

Chair:

HE Mr. SHIN Chae-hyun
Governor from the Republic of Korea

Vice-Chairs

HE Mr. Miguel Camilo RUÍZ BLANCO
Governor from Colombia

HE Ms. Dominika Anna KROIS
Governor from Poland

Argentina
Australia
Austria
Brazil
Burundi
Canada
China
Colombia
Czech Republic
Egypt
Finland
France
Germany

Guatemala
India
Ireland
Japan
Korea, Republic of
Libya
Malaysia
Mexico
New Zealand
Pakistan
Peru
Poland
Russian Federation

Senegal
Slovenia
South Africa
Spain
Switzerland
United Arab Emirates
United Kingdom of
Great Britain and
Northern Ireland
United States of America
Viet Nam



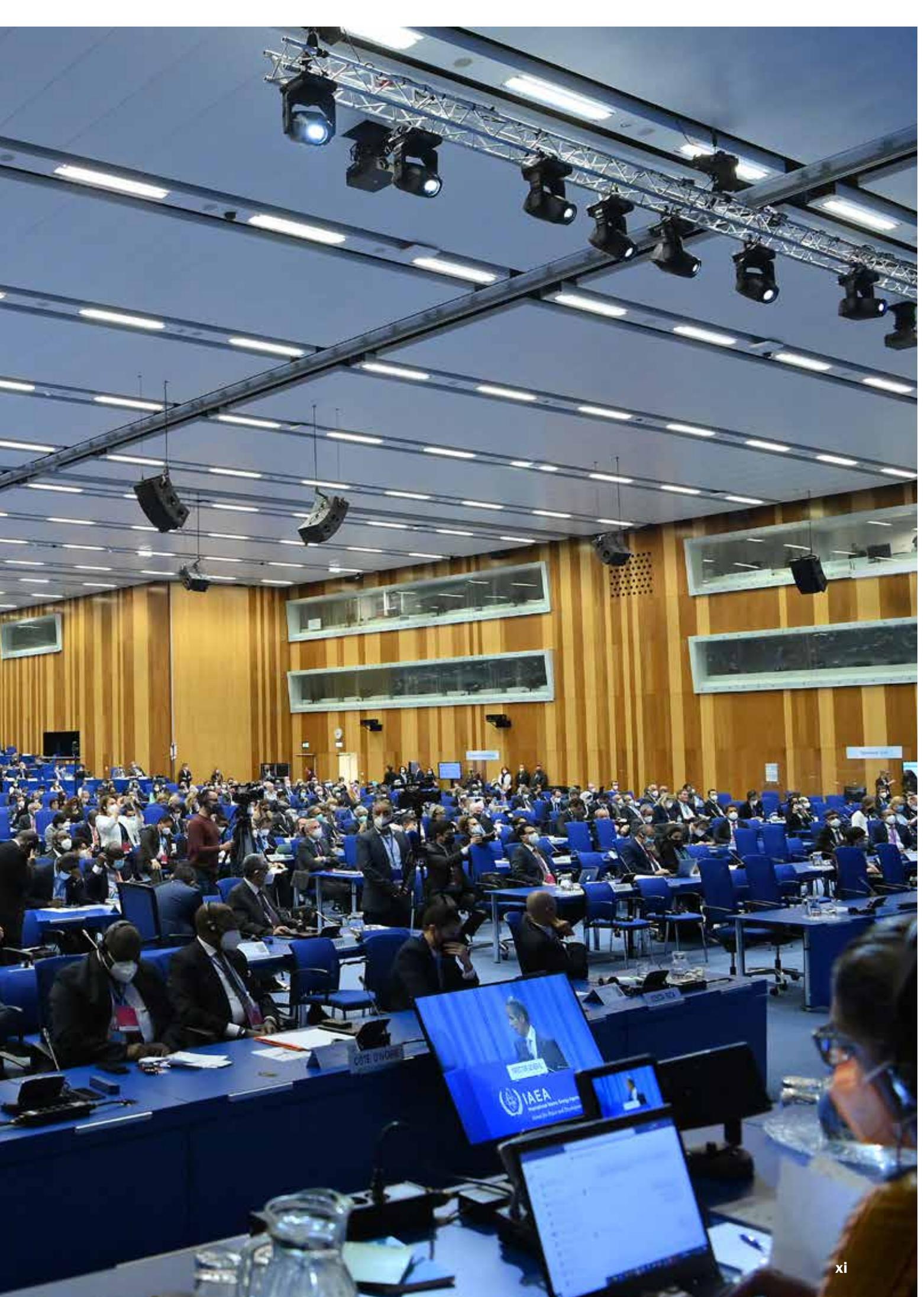
The General Conference

The General Conference comprises all Member States of the Agency and meets once a year in regular session.

The Conference — upon the recommendation of the Board of Governors — approved the Federation of Saint Christopher (Saint Kitts) and Nevis for membership of the Agency. At the end of 2021, the Agency's membership was 173.

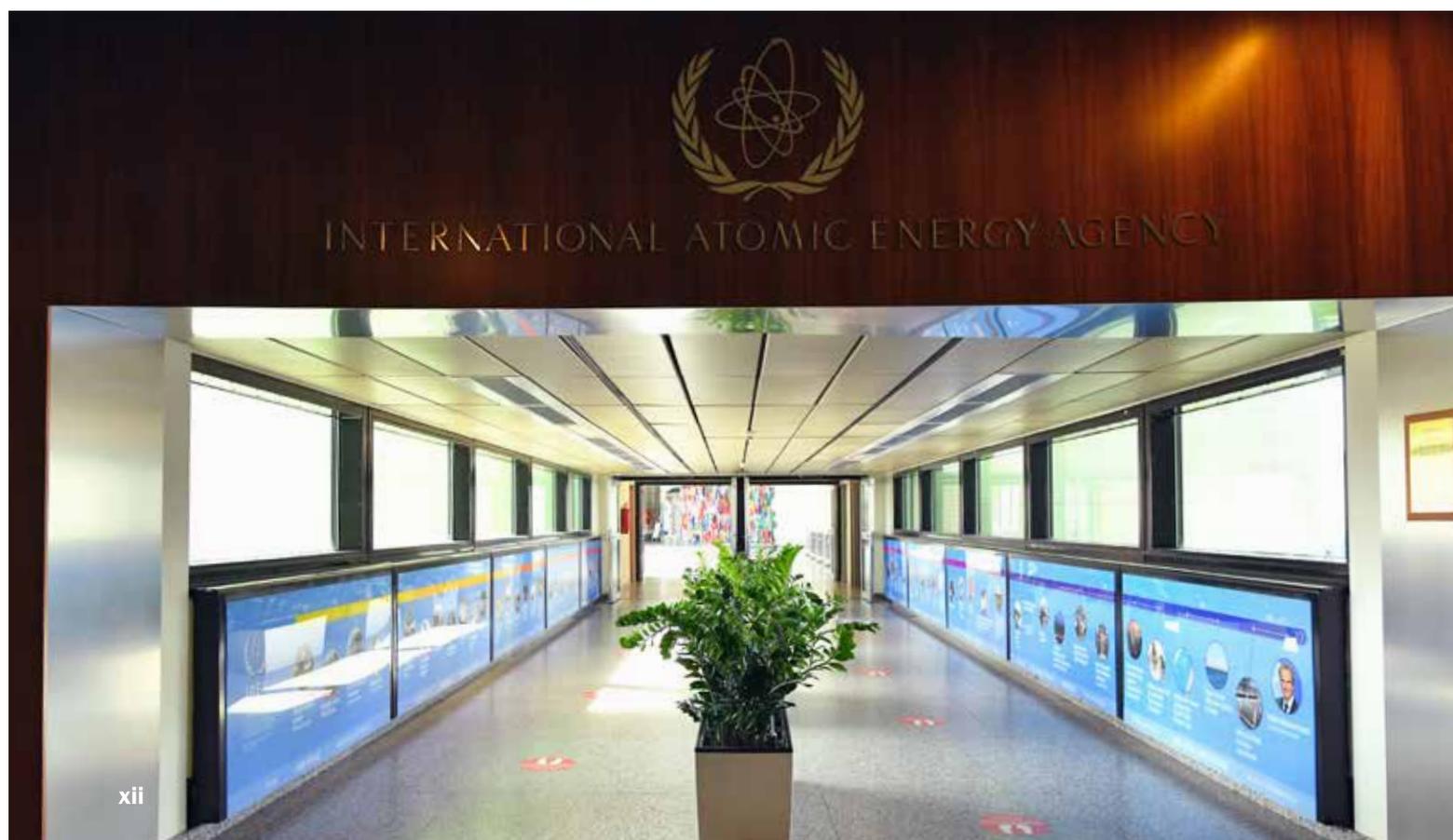
The Conference adopted resolutions on the Agency's financial statements for 2020 and budget for 2022; on the Agency and the COVID-19 pandemic; on nuclear and radiation safety; on nuclear security; on strengthening the Agency's technical cooperation activities; on strengthening the Agency's activities related to nuclear science, technology and applications, comprising non-power nuclear applications, nuclear power applications and nuclear knowledge management; on strengthening the effectiveness and improving the efficiency of Agency safeguards; on the implementation of the NPT Safeguards Agreement between the Agency and the Democratic People's Republic of Korea; on the application of Agency safeguards in the Middle East; and on personnel matters, comprising the staffing of the Agency's Secretariat and women in the Secretariat. The Conference also adopted decisions on the progress made towards the entry into force of the amendment to Article XIV.A of the Statute of the Agency, approved in 1999; on the report on the promotion of the efficiency and effectiveness of the Agency's decision making process; on the report on the restoration of the sovereign equality of all members of the Agency; and on the progress made towards the entry into force of the amendment to Article VI of the Statute of the Agency, approved in 1999.





Notes

- The *Annual Report for 2021* aims to summarize only the significant activities of the Agency during the year in question. The main part of the report, starting on page 41, generally follows the programme structure as given in *The Agency's Programme and Budget 2020–2021* (GC(63)/2). The objectives included in the main part of the report are taken from that document and are to be interpreted consistently with the Agency's Statute and decisions of the Policy-Making Organs.
- The introductory chapter, 'Overview', seeks to provide a thematic analysis of the Agency's activities within the context of notable developments during the year. More detailed information can be found in the latest editions of the Agency's *Nuclear Safety Review*, *Nuclear Security Report*, *Nuclear Technology Review*, *Technical Cooperation Report* and the *Safeguards Statement and Background to the Safeguards Statement*.
- Additional information covering various aspects of the Agency's programme is available, in electronic form only, on iaea.org, along with the *Annual Report*.
- The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.
- The mention of names of specific companies or products (whether or not indicated as registered) does not imply any intention to infringe proprietary rights, nor should it be construed as an endorsement or recommendation on the part of the Agency.
- The term 'non-nuclear-weapon State' is used as in the Final Document of the 1968 Conference of Non-Nuclear-Weapon States (United Nations document A/7277) and in the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The term 'nuclear-weapon State' is as used in the NPT.
- All the views expressed by Member States are reflected in full in the summary records of the June Board of Governors meetings. On 6 June 2022, the Board of Governors approved the *Annual Report for 2021* for transmission to the General Conference.



Abbreviations

| | |
|---------|---|
| AI | artificial intelligence |
| AFRA | African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology |
| ALPS | Advanced Liquid Processing System |
| AP | additional protocol |
| ARASIA | Co-operative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology |
| ARCAL | Regional Co-operation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean |
| ARTEMIS | Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation |
| CGULS | Coordination Group for Uranium Legacy Sites |
| CLP4NET | Cyber Learning Platform for Network Education and Training |
| COMPASS | IAEA Comprehensive Capacity-Building Initiative for SSACs and SRAs |
| CPF | Country Programme Framework |
| CPPNM | Convention on the Physical Protection of Nuclear Material |
| CRP | coordinated research project |
| CSA | comprehensive safeguards agreement |
| EPR | emergency preparedness and response |
| FAO | Food and Agriculture Organization of the United Nations |
| FRAMES | Framework for Modelling Electricity Systems |
| GNIP | Global Network of Isotopes in Precipitation |
| HLW | high level waste |
| IACRS | Inter-Agency Committee on Radiation Safety |
| IARC | International Agency for Research on Cancer |
| ICARO | International Conference on Advances in Radiation Oncology |
| ICTP | Abdus Salam International Centre for Theoretical Physics |
| INIR | Integrated Nuclear Infrastructure Review |
| INIS | International Nuclear Information System |
| INLEX | International Expert Group on Nuclear Liability |
| INMA | International Nuclear Management Academy |
| INPRO | International Project on Innovative Nuclear Reactors and Fuel Cycles |
| IPPAS | International Physical Protection Advisory Service |
| IRRS | Integrated Regulatory Review Service |
| JCPOA | Joint Comprehensive Plan of Action |
| KMAV | Knowledge Management Assist Visit |
| MSSP | Member State Support Programme |
| NCCP | national cancer control plan |

| | |
|-----------------|--|
| NEM School | Nuclear Energy Management School |
| NKM School | Nuclear Knowledge Management School |
| NPT | Treaty on the Non-Proliferation of Nuclear Weapons |
| NUTEC Plastics | Nuclear Technology for Controlling Plastic Pollution |
| OSART | Operational Safety Review Team |
| PACT | Programme of Action for Cancer Therapy |
| PPAR | Project Progress Assessment Report |
| RCA | Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology |
| ReNuAL/ReNuAL2 | Renovation of the Nuclear Applications Laboratories |
| RSTS Laboratory | Radiation Safety Technical Services Laboratory |
| RT-PCR | reverse transcription–polymerase chain reaction |
| SALTO | Safety Aspects of Long Term Operation |
| SDG | Sustainable Development Goal |
| SIT | sterile insect technique |
| SLA | State-level safeguards approach |
| SMR | small modular reactor |
| SQP | small quantities protocol |
| SRA | State or regional authority responsible for safeguards implementation |
| SSAC | State system of accounting for and control of nuclear material |
| TR4 | tropical race 4 |
| VETLAB Network | Veterinary Diagnostic Laboratory Network |
| WHO | World Health Organization |
| ZODIAC | Zoonotic Disease Integrated Action |