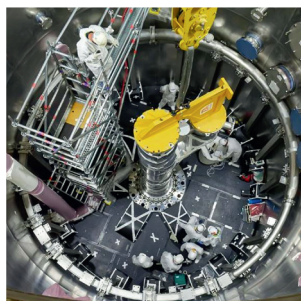
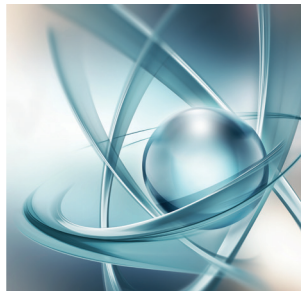


THE STRATEGIC PLAN OF THE NUCLEAR ENERGY AGENCY 2 0 2 3 - 2 0 2 8



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Nuclear Energy Agency
Organisation for Economic Co-operation and Development

Foreword

The purpose and structure of the Strategic Plan of the OECD Nuclear Energy Agency

The OECD Nuclear Energy Agency (NEA) Strategic Plan serves as a guiding instrument that reflects the priorities of its member countries as the Agency addresses evolving needs in the exploration and application of nuclear science and technology. This Strategic Plan document includes a description of the context in which the Plan is written, with consideration to global changes in policies, requirements, priorities and technologies. The document sets out the NEA mission and vision, general strategy, and strategic goals. The Plan then highlights the governance of the Agency and explains its interactions within the OECD family and with external organisations and groups, including academia, civil society, non-member countries, and the nuclear industry. The basis of authority for the Nuclear Energy Agency and its activities is presented in the Annex.

The evolution of the NEA Strategic Plan

The NEA adopted its first Strategic Plan in 1999 as a central element of its reform process at that time. This original plan provided important guidance for NEA activities from 1999 to 2004.

The second Strategic Plan provided guidance for the 2005-2009 period, with the Steering Committee for Nuclear Energy agreeing in October 2008 to extend the Plan by one year, through December 2010, to align it with the OECD and the NEA biennial programme of work and budget cycles.

The third Strategic Plan was approved in April 2010 for the 2011-2016 period. In 2011, the Plan was reviewed in light of the Fukushima Daiichi Nuclear Power Plant accident and found to be both sufficiently relevant and flexible to enable the Agency to meet the member countries' highest priorities and information needs.

The fourth Strategic Plan was approved in November 2016 for the 2017-2022 period and was a largely evolutionary document that reflected a period of policy stability.

This fifth Strategic Plan, adopted for the period 2023-2028, is written in the context of a quickly evolving global environment, in which significant changes are anticipated in both nuclear technology and the international policy framework in light of the current and potential future contribution of nuclear energy to the global abatement of carbon emissions.

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Executive summary

The **Nuclear Energy Agency (NEA)** is an intergovernmental agency which operates within the framework of the Organisation for Economic Co-operation and Development (OECD). The Agency facilitates co-operation among countries with advanced nuclear technology infrastructures to seek excellence in nuclear safety, technology, science, related environmental and economic matters and law.

The **2023-2028 NEA Strategic Plan** sets out the Nuclear Energy Agency's mission statement, operating framework, outlines NEA focus areas and related strategic goals, and describes the governance of the Agency and its interactions with external stakeholders – particularly non-member countries, other international organisations (including those within the OECD family), academia, the private sector and civil society.

Nuclear power can play an important role in climate change mitigation as a pillar of energy security in future energy mixes that will become ever-more dependent upon reliable and low-carbon supplies of electricity. Because nuclear energy generates plentiful quantities of electric energy or heat for industrial or residential purposes without emitting air pollutants or greenhouse gases, many countries view it as an indispensable component of their plans to decarbonise their economies. Moreover, nuclear energy has great capacity to play a vital role in future, hybrid energy systems in combination with variable renewable energy and other sources, and providing a range of unconventional products and services such as heat, low-carbon hydrogen, clean water, and isotopes for medical and industrial purposes, for those countries that opt for it.

In this respect, regulatory frameworks – from nuclear power plant licensing to electricity markets – need to adapt to meet the needs of the evolving policy environment and rapidly changing technologies. Refinements in regulatory frameworks shall not only consider large reactors but also challenges arising from the global digital transformation and the advent of advanced nuclear technologies, such as small modular reactors (SMRs) and Generation IV nuclear energy systems, which could provide new, advanced energy production options to address long-term energy security and environmental challenges. Equally important is the need to successfully address long-term operation of the existing nuclear fleet, the decommissioning of retired facilities and the safe management of radioactive waste and closing the nuclear fuel cycle. To enable the continued exploration of new technologies, it is of paramount importance to maintain critical research infrastructures and to construct new ones to respond to evolving needs and priorities. The sector must also expand and diversify its human resources by attracting and developing a new generation of experts and assuring the fullest participation of women and a diversity of representation in the field. Governments, regulators, and the private sector must also be prepared for disruptive events as learned from

the experience of the COVID-19 pandemic. The NEA Strategic Plan was updated with the aim of enabling the NEA to better serve its member countries amid these trends.

The NEA is a centre of excellence, capable of meeting new challenges and adapting to circumstances by providing expert analyses and recommendations in a timely manner to its member countries and the global community as a whole. As reflected by this Strategic Plan, the NEA is a platform for co-operation among countries with advanced nuclear energy infrastructures for developing policies, data, best practices and joint actions to address issues of mutual interest. The NEA's mission is to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally sound and economical use of nuclear energy for peaceful purposes. The Agency provides authoritative, fact-based assessments and forges common understandings on key issues as input to government decisions on nuclear energy policy, and to broader OECD policy analyses in areas such as energy, education and the sustainable development of low-carbon economies.

To fulfil this mission, the NEA serves as a forum for sharing and analysing information and experience among member countries and select partners; fostering international co-operation in the nuclear field; helping member countries pool and maintain their human assets and expertise as well as their scientific and technical infrastructures; and providing authoritative technical and economic analyses.

The NEA's work is conducted along both Strategic Programme Areas and Vital Infrastructure and Enablers, with on-going adjustment of priorities in line with member requirements and guidance. NEA's Strategic Programme Areas include: Nuclear Safety Technology and Regulation; Human Aspects of Nuclear Safety; Nuclear Science; Development and Innovation in the Civil Use of Nuclear Energy; Radiological Protection of People and the Environment; Radioactive Waste and Spent Fuel Management; and Nuclear Decommissioning and Legacy Management. **Vital Infrastructure and Enablers include:** Dissemination of Information to Build Understanding and Awareness of Nuclear Matters; Supporting the development of a Next Generation of Nuclear Scientists and Technologists; Economics and Resources for Nuclear Development; Nuclear Law; Management, Preservation and Validation of Nuclear Data Assets and Codes.

The NEA pursues co-operation and co-ordination with the OECD family, the International Atomic Energy Agency, the European Commission, and other international bodies to enhance efficiency, identify areas of synergy, clarify roles and areas of focus and avoid duplication of effort.

The centre of gravity in nuclear expertise, research and development, and innovation has shifted from the government sector to more in the direction of the private sector. Many governments now encourage the private sector to take the lead in addressing nuclear energy challenges. As a result, the NEA will engage with the private sector more proactively with the guidance of its members while providing full and transparent reporting regarding the co-operation undertaken. The Agency engages with the industry associations regarding matters of converging interest and liaises with the industry to obtain information, knowledge and data relevant to NEA's work. Under the guidance of the Steering Committee for Nuclear Energy, the NEA will also explore broader mechanisms to engage and exchange with the private sector, including the finance and investment community.

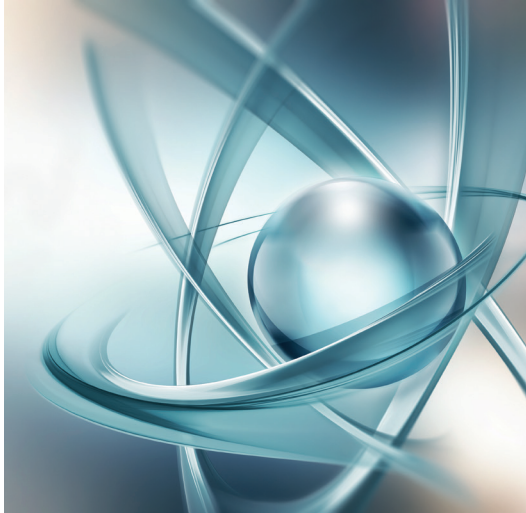
As a result of the **growing concern of member countries regarding the long-term need for talented, well-trained people to serve in various roles related to the nuclear sector, the Agency is developing more avenues for communication and co-operation with the academic community.** NEA engagement with academia has been occasional over the years and has not provided opportunities for closer co-operation. With the establishment of the NEA Global Forum on Nuclear Education, Science, Technology and Policy, engagement will be intensified with universities and other training organisations to both advance policies to develop human capital and to receive academia's perspective on the many policy and technology challenges the world faces today. The NEA will continue to facilitate access to research infrastructures via international partnerships and to encourage the realisation of the next generation of research reactors.

The NEA must also develop approaches to engage civil society in a more comprehensive fashion. The perspective of the general public and civil society groups is essential in supporting the NEA's work to promote members' efforts to improve the incorporation of all stakeholders in key nuclear decisions. The NEA will strive to enable effective communication on nuclear energy matters to the broader society, such as nuclear energy's contributions to decarbonisation and energy security.

The NEA will remain proactive in developing mutually beneficial relationships with partner countries. Some of these partners may one day apply for NEA membership while others may participate in selected activities of the Agency. That being stated, the work of the NEA provides great value to any country interested in nuclear safety, economics, technology and other aspects of the peaceful use of nuclear energy.

Finally, **the NEA will also strive to make its work products widely available, in a timely manner,** and upon request and as appropriate, share its expertise and fully utilise the evolving digital technologies.

The **NEA Secretariat, in close collaboration with the Steering Committee for Nuclear Energy, the NEA standing technical committees and the Management Board for the Development, Application and Validation of Nuclear Data and Codes (MBDAV) will ensure the Agency's effectiveness** by establishing and carrying out a programme of work that meets the needs of member countries consistent with this Strategic Plan and the prioritisation of activities. Accomplishing the goals set out in the Strategic Plan presumes an adequate and sustainable level of financial resources and their transparent management. Where resources are constrained, the NEA management will allocate funds and personnel in accordance with priorities approved by the Steering Committee; seek further efficiencies; and supplement its resources with voluntary contributions and grants and by additional staff on loan from member and partner countries.



I. Introduction

Energy demand and the security of energy supplies

Modern civilisation requires plentiful, reliable and affordable energy to allow people to achieve and maintain a desirable quality of life. Economic growth has historically tracked closely with increased use of energy – particularly energy from fossil fuels. The industrial and economic expansion that saw many millions across the world lifted from poverty during the 20th century was powered largely by oil, natural gas, and coal. Nuclear energy became a part of this story in the latter part of the century, particularly in the world’s most developed economies, and it provided significant quantities of reliable electricity for decades – without emitting greenhouse gases. Nuclear energy became and remains the largest source of low-carbon electricity in OECD countries.

Today, two decades into the 21st century, nations across the globe are striving to reduce their reliance on fossil fuels, with a general goal to reach net zero emissions by 2050. This is an ambitious and extraordinarily challenging objective. According to the latest figures of the International Energy Agency (IEA), by mid-century, global electricity demand is expected to increase by a factor of about 1.5 from today, with much of the growth in the world’s emerging economies, accelerated by social and economic progress and population growth, and with projected electricity generation growing by more than 130% in non-OECD countries. A shift towards electrification in OECD countries is also anticipated. Moreover, the world’s experience with the **COVID-19 pandemic has reinforced the vital importance of reliable and affordable electricity.** Meeting global environmental goals in this context will require a major evolution of policies and practices as well as a significant surge in innovation.

The security and affordability of energy supplies is a growing concern, particularly for countries that depend heavily on energy imports due to limited indigenous fuel resources or little opportunity to expand interconnection with exporting neighbours. On the one hand, recent years have witnessed remarkable changes in energy markets, with oil and gas prices falling in the last five years driven by increased production of non-conventional fossil fuels, in particular shale gas. On the other hand, and as far as electricity markets are concerned, NEA analyses demonstrate that **certain policies undermine the viability of dispatchable sources of electricity**¹, including low emission sources such as nuclear energy and hydroelectric generation. This can lead in some cases to postponement of investments into low-carbon nuclear generating capacity, and sometimes even premature closure of existing nuclear plants, despite their value as low-carbon energy sources and their contribution to electricity security.

1. *The Costs of Decarbonisation: System Costs with High Shares of Nuclear and Renewables*, NEA, 2019.

Combining nuclear and variable renewable energy can ensure a stable energy supply.

iStock, Ron and Patty Thomas



Throughout NEA member countries, **governments have invoked a variety of strategies related to their energy supplies**, encouraging demand-side measures and other energy conservation and efficiency measures, investing in energy infrastructure and energy R&D, developing policies supporting variable renewable energy sources, nuclear energy or other technologies in order to generally diversify their portfolios of energy supplies.

Sustainability and affordability: a 21st century global challenge

At the 21st United Nations Climate Change Conference (COP 21) in Paris in December 2015, governments across the world agreed to hold the increase in the global average temperature to “well below” 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. The power sector, which is responsible for about 40% of global emissions will be the focus of most of the efforts.

Countries around the world are **turning to low-carbon energy technologies** such as wind, solar and nuclear energy as part of their strategies to decarbonise the power sector. Each country will develop approaches that best meets its individual needs and circumstances. While a number of countries have decided against the use of nuclear energy, others view **new nuclear capacity operating in concert with variable renewable energy sources as a pathway to a reliable, affordable low-carbon energy future**.

According to the World Nuclear Association, as of January 2021 there were around 100 reactors ordered or planned with a total gross capacity of about 110 GWe, including about 50 reactor units currently under construction.

It is clearly demonstrated that **nuclear energy can be a ready and expandable option for countries to provide long-term, reliable, economic, and low-carbon power generation** to support their economic and environmental objectives. Like hydroelectric capacity or renewables, nuclear reactors emit no sulphur dioxide or greenhouse gases as they generate electricity.² Nuclear power plants are a reliable source of baseload electric power that also provide flexibility during the course of the season, the week, and within some limits, the day.

2. Technical assessment of nuclear energy with respect to the ‘do no significant harm’ criteria of Regulation EU 2020/852 (‘Taxonomy Regulation’) European Commission Joint Research Centre, Petten, 2021, JRC124193.

According to recent studies³ nuclear power is the dispatchable low-carbon technology with the lowest costs; only large hydro reservoirs can provide a similar contribution at comparable costs (and which are constrained by geographic, societal, and environmental factors). **Electricity produced from the continued, long-term operation (LTO) of existing nuclear power plants is the world's least cost option for low-carbon generation.** This capacity is, therefore, very competitive provided that adequate policies (such as carbon pricing) are in force for the emissions generated by coal- and gas-fired power plants.

Current nuclear energy innovation trends

Several significant developments over the last five years collectively contribute to the positive outlook for the future of civil nuclear energy.

The **emergence of an international advanced reactor industry, comprised of both new start-up companies and legacy nuclear vendors, is central to the recent surge in nuclear energy innovation.** This new nuclear industry, which includes various small modular reactor (SMR) technologies, is being embraced by governments and private sector power producers seeking to ensure sustainable pathways to decarbonising their economies. In addition to new, smaller light water reactor-based plants, the advanced reactor industry is pursuing Generation IV technologies such as high temperature gas reactors, liquid metal fast reactors and molten salt reactors. Developers believe their innovative designs open new possibilities in nuclear operations – such as fewer nuclear facility personnel for operations and reductions – or even elimination – of emergency planning zones. The industry is also developing innovative fuel designs to power these new machines. The sizes of these next generation reactor designs range from portable and stationary units of 1 MWe or less to stationary modules of up to 300 MWe. With smaller physical footprints, new coolant and moderator technologies, and advanced safety characteristics, many of the most advanced reactor designs are enabling a reimagining of the regulatory structures most associated with Generation III light water reactor plant designs.

Governments and industry today are working in an integrated manner to meet the technical and regulatory needs of this emerging industry. Government assets, including national laboratory experimental capabilities, historic databases from past research, development, and demonstration (RD&D) programmes and access to world-class computational resources are being made available to private sector researchers to reduce the technology barriers and capital expense to new nuclear development and assure timely licensing and deployment. In some countries, the emergence of the advanced reactor industry has helped maintain and grow the number of students pursuing nuclear science and engineering degrees.

In a few NEA member countries, technology-neutral regulatory frameworks are under development by independent regulators to ensure the safety of these next generation nuclear facilities while providing a stable and predictable regulatory environment within which the industry can successfully innovate. The evolving regulatory frameworks are being informed by the results of RD&D programmes undertaken by government and industry. International co-operation in nuclear research greatly expands the base of knowledge and experience, thereby enhancing the capacity for addressing safety concerns, and supporting efforts to maintain safety

3. *Projected Costs of Generating Electricity: 2020 Edition*, IEA/NEA, OECD Publishing, 2020.

performance and regulation at the highest levels in participating countries. Some countries and regulators have already started to consider a degree of regulatory harmonisation and increased regulatory co-operation related to certain innovative designs.

Studies dedicated to the performance and reliability of nuclear fuel have remained a high priority in research portfolios. New developments in the areas of passive safety include the development of **advanced, or “accident-tolerant” fuels (ATF)**. The industry is moving towards the final stages of the development of ATF concepts with irradiation programmes ongoing in fuels and materials test reactors and lead test assemblies being loaded in commercial reactors. Considering the variety of cases arising from different combinations of cladding, pellets and control rod concepts, the problem calls for a co-ordinated international effort to be implemented in order to guarantee substantial improvement of current knowledge.

From advanced manufacturing and welding technologies to instrumentation, control and integration systems, **innovative technologies** are being introduced into and adopted by the nuclear industry. Many new technologies have already been introduced into other industries – such as aerospace – and now work is underway to consider their introduction into the nuclear sector. **National regulators are taking appropriate steps to address these innovations while ensuring appropriate nuclear safety and security.**

The COVID-19 pandemic has expedited the adoption of innovation and adjustments to how regulators maintain oversight despite the pandemic. Regulators developed innovative ways to fulfil their missions during the pandemic, ensuring the health and safety of the public and environment. **Nuclear plant operators and safety regulators have successfully implemented workplace protocols** to enable critical infrastructure, such as nuclear facilities, to continue to operate safely and securely. This is an example of innovation in regulatory oversight and the successful use of alternative methods for inspections demonstrates that it is possible to rely on remote monitoring and enhanced data analysis to enhance plant safety and security.

In the longer term, continued **research related to proliferation-resistant recycling of spent fuel and advanced nuclear systems with innovative fuel cycle approaches** remain of interest to many member countries. Advanced partitioning and transmutation technologies are being developed with the intention of further improving overall safety of the high-level waste and spent fuel management. Joint international efforts to study these technological approaches may be needed to advance this area.

The NEA assists its member countries to advance research, innovation and deployment of new technologies notably by facilitating the development, organisation and co-ordination of internationally funded research projects and other joint undertakings; by promoting an open dialogue among research and development specialists, government policy specialists, industrial specialists, operators, regulators, international organisations and other stakeholders in the energy field.

Factors for future nuclear development

Many countries have stated that they view nuclear energy as an essential element in their future energy plans – generally operating in concert with variable renewable energy sources. Four important factors will come into focus for countries that choose to rely on nuclear energy for the long-term.

First, it will be essential for markets to be modernised to support economic and environmental goals. Today, little economic credit is provided to capacity that is non-emitting in most markets and no credit is afforded to generation sources that are dispatchable. With legislative or regulatory requirements set to encourage other technologies, some current nuclear plants are no longer economically viable – despite the significant contribution they could make to meet the world’s decarbonisation targets. Financing these capital-intensive infrastructures remains challenging, especially in deregulated electricity markets. Lowering the cost of capital for nuclear new build by allocating a different risk to those parties best able to manage them and providing long-term visibility on prices and revenues are essential in this context. In some markets, particularly those with balanced, regulated structures, nuclear plants continue to operate with adequate returns and plans are proceeding for their safe long-term operation – up to 60 or 80 years and possibly longer.

Second, for near-term expanded capacity, building on lessons from first-of-a-kind projects to build new Generation III plants. First-of-a-kind (FOAK) reactors of this generation of nuclear power plants have, at least in most OECD countries, experienced difficulties in implementation, with cost overruns and construction delays having proved to be the rule rather than the exception. Analysis shows that these issues were due to key aspects of typical large infrastructure construction (e.g. the lack of practiced, established supply chains, project management, and regulatory infrastructures) rather than inherent characteristics of nuclear construction. Also, successful projects in other parts of the world reinforce that new Generation III plants can be built reliably and cost-effectively.⁴

Nuclear energy reimagined.

www.flickr.com/photos/thirdwaythinktank/



4. Building on lessons from FOAK projects, improvements in design maturity, project structure and organisation of the supply chain and enhanced harmonisation of codes and standards as well as regulatory requirements should help reduce construction costs in the coming years. Source: *Unlocking Reductions in the Construction Costs of Nuclear: A Practical Guide for Stakeholders*, OECD Publishing, 2020.

Third, many countries are also exploring a range of small modular reactors (SMRs) and Generation IV technologies. These exciting technologies might also provide new market opportunities as well as specific economic drivers, such as design simplification, modular construction, enhanced standardisation, and could open new frontiers in the peaceful use of nuclear energy once they are proven successful. These advanced technologies are being developed by innovators around the world. Currently about 70 technology development projects are underway for SMRs and several advanced reactor companies have already initiated formal engagement with their respective regulatory authorities. Ongoing work is needed from both government and private industry to enable these technologies to come to the market in time to support countries' 2050 decarbonisation goals.⁵

Fourth, while considering the potential for nuclear energy to serve long-term energy requirements, it is essential to assure that the sector manages appropriately the “back-end” of the nuclear fuel cycle – including the management of radioactive waste and spent fuel and the decommissioning of retired facilities. Most countries already have effective strategies and infrastructure for short- and medium-term management and disposal of spent nuclear fuel and other radioactive wastes, while many governments are still developing their long-term strategies **including advanced fuel cycle options.** While a broad international scientific consensus confirms the safety and effectiveness of deep geological repositories (DGRs) for the final disposition of spent nuclear fuel and high-level radioactive waste, each country must obtain a sustainable social licence to site and construct a DGR. Although important progress made in Canada and some European countries light the way forward, many countries face difficult challenges. With many nuclear facilities likely to be retired in the coming decade, questions are being raised in some countries regarding decommissioning costs and their funding. These questions have been complicated by the shifting ground under decommissioning programmes – changing regulatory requirements, shifting societal expectations, and emerging technologies. More effective public communication about the facts related to nuclear waste management and disposal will be vital – in particular, by reassuring stakeholders that there is a strong international scientific consensus supporting national plans for nuclear waste disposal.

Whatever technologies are utilised, society's demand for very high levels of nuclear safety is a prerequisite for any expansion. In that respect, greater focus on human aspects of nuclear safety is essential, as well as more effective and comprehensive stakeholder engagement. Success by governments and industry in managing the back-end of the fuel cycle and the decommissioning of old plants is important to build the public trust needed to support the continued operation of existing nuclear plants and the construction of new nuclear power facilities.

5. Continuous investment from government and private industry is required to ensure that SMRs are deployed in time to support decarbonisation goals. Source: *Small Modular Reactors: Challenges and Opportunities*, OECD Publishing, 2021.

II. The mission of the Nuclear Energy Agency



The NEA serves as a platform for co-operation among those countries with advanced nuclear energy infrastructures for developing policies, data, best practices and joint action to address issues of mutual interest. The Agency serves as a centre of excellence, capable of reacting to new challenges and circumstances by providing expert analyses and recommendations in a timely manner to member countries and other interested stakeholders.

The careful management of resources at the Agency is of paramount importance – particularly its human resources. Maintaining a highly-qualified staff is essential to ensuring the Agency’s ability to carry out the goals of the Strategic Plan, and to ensure that its work remains highly relevant to the needs of member countries. Further, in today’s world, robust and evolving application of digital technology is also essential to enable the NEA to meet its mission objectives.

Accomplishing the goals set out in the Strategic Plan presupposes a predictable level of adequate financial resources. Where resources are constrained, NEA management will apply funds and personnel in accordance with priorities approved by the Steering Committee for Nuclear Energy, while continuously seeking efficiencies and improvements in its operations. The NEA Secretariat will continue to ensure the proper management of resources and will also seek to supplement its resources with voluntary contributions and encourage loaned expert staff from member and partner countries.

A. Mission statement

The mission of the NEA is to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological, and legal bases required for a safe, environmentally sound and economical use of nuclear energy for peaceful purposes. It strives to provide authoritative assessments and to forge common understandings on key issues as input to government decisions on nuclear energy policy and to broader OECD analyses in areas such as energy and the sustainable development of low-carbon economies.

B. Operating Framework

To fulfil its mission, the Agency will:

Serve as a forum for sharing and analysing information and experience among member countries, by:

- maintaining an efficient communications network among experts of nuclear energy and that of other related fields;
- promoting an open dialogue among research and development specialists, government policy specialists, industrial specialists, operators, regulators, international organisations and other stakeholders in the energy field;
- involving selected non-member partner countries with established non-proliferation credentials, particularly those that are significant players in the nuclear field and that can provide added value to the Agency’s activities;
- alerting policymakers and regulators to significant scientific developments and their implications;
- preparing state-of-the-art reports that summarise current knowledge in specific technical or regulatory policy areas;
- striving to closer engage member countries for an enhanced data exchange;
- ensuring appropriate dissemination of the scientific and technical results of its work to different audiences including the public; and
- elevating its visibility in member countries, in the international community and towards the general public as a science- and evidence-based organisation.

Foster international co-operation in the nuclear field, by:

- helping to identify common issues, lessons and opportunities, including with selected non-member partner countries as described above;
- facilitating the development of consensus positions, including “collective opinions”, among member countries;
- developing best practices, common strategies and joint approaches to address pressing issues;



- identifying and addressing gaps in scientific knowledge and research infrastructures needing to be filled in support of policy, regulatory and technical decisions;
- facilitating the development, organisation and co-ordination of internationally funded research projects and other joint undertakings; and
- pursuing strategic collaboration with international organisations and associations in areas of mutual interest.

Help member countries to pool and maintain their technical expertise, infrastructure and nuclear skills and support their nuclear activities, by:

- assessing developments in the state of the art, documenting experiments and maintaining databases across a range that serves the needs of technical specialists, policymakers, opinion leaders and stakeholders, using, when appropriate, economic tools;
- collaborating on joint events and activities with the IAEA and other relevant organisations on topics of mutual interest in the nuclear energy field;
- providing advice as a scientific, technical, economic and legal centre of nuclear competence;
- contributing to the management and preservation of nuclear knowledge developed through past member country and NEA programmes and experience;
- supporting member countries in their efforts to secure qualified human resources; nuclear skills capability building for educators, students and the public, and; improving gender balance in the nuclear sector and developing a diverse and inclusive new generation of nuclear experts; and
- organising peer reviews.

Provide member countries with nuclear policy analyses, by:

- carrying out studies on fundamental aspects of current and future use of nuclear technologies, including life cycle regulation and economic analyses;
- contributing to studies on broader issues, including those carried out by the OECD on energy and green growth;
- drawing on the expertise, products and analytical methods of the OECD; and
- taking into account human and societal issues as well as concerns of the general public.

C. Nuclear Energy Agency Principal Focus Areas

Its general strategy and strategic goals shall enable the NEA to best serve its member countries amid the changing global technological and socio-economic realities. The NEA mission statement frames the main Principal Focus Areas of the Agency's work, while certain areas emerged in response to member countries' evolving needs. All of the Principal Focus Areas are of high importance to the continued practice and pursuit of nuclear energy technologies in NEA member countries.

Recognising that certain Principal Focus Areas are prerequisites to others that may result in tangible outcomes to fulfil this vision, and mirroring these specificities, the NEA will direct its activity equally in two sets of Principal Focus Areas: the "vital infrastructure and enablers" which provide the crucial foundation for the forward-looking "strategic programme areas".

To fulfil its mission the NEA will pursue work within the following framework:

Strategic Programme Areas:	Vital Infrastructure and Enablers:
Nuclear Safety Technology and Regulation	Dissemination of Information to Build Understanding and Awareness of Nuclear Matters
Human Aspects of Nuclear Safety	Supporting the Development of a Next Generation of Nuclear Scientists and Technologists
Nuclear Science	Economics and Resources for Nuclear Development
Development and Innovation in the Civil Use of Nuclear Energy	Nuclear Law
Radiological Protection of People and the Environment	Management, Preservation and Validation of Nuclear Data Assets and Codes.
Radioactive Waste and Spent Fuel Management	
Nuclear Decommissioning and Legacy Management	

The Principal Focus Areas – based on the needs and priorities of member countries – are central to the fulfilment of the NEA mission, with areas related to nuclear safety constituting a leading programmatic priority. Each Principal Focus Area is elaborated individually in Chapter III (NEA Strategic Goals and Actions). The introduction to each focus area sets out the goal of NEA work in that area and explains its importance as a NEA Principal Focus Area. In addition, cross-cutting activities are co-ordinated across programmatic areas as summarised in Chapter IV (Governance).

In addressing the Principal Focus Areas, the NEA staff pursues a wide range of activities such as identifying and addressing common technical issues; establishing and improving vital databases used in the scientific, technical, regulatory, legal, economic and policy analysis; producing high-quality technical, legal and economic analyses and assessments; as well as many others. NEA activities, including cross-cutting activities, are described in the biennial Programme of Work and Budget, which is approved by the NEA Steering Committee and submitted for final approval to the OECD Council in the context of the Programme of Work and Budget of the Organisation as a whole.

A standing technical committee (STC) structure has been established by the Steering Committee to carry out the NEA mission. This structure does not strictly mirror the focus areas of the Strategic Plan. Rather, it is designed to make the best use of existing competencies across the STCs, while maintaining flexibility in carrying out the Programme of Work.

NEA management allocates resources in accordance with Agency mandates and the priorities assigned to the strategic focus areas, taking into account additional demands that may arise from member countries and NEA participation in relevant OECD cross-cutting activities. Budgetary constraints require the NEA to prioritise its activities in line with the NEA Strategic Plan and the Agency’s prioritisation process in order to manage its resources so as to maintain and grow its unique strengths while addressing the evolving global outlook for nuclear energy.

III. NEA Strategic Goals and Actions

1. Strategic Programme Areas

A. Nuclear Safety Technology and Regulation

The goal: *to assist member countries in their efforts to ensure high standards of safety in the use of nuclear energy, by helping to maintain and advance the scientific and technological knowledge base, and by supporting the development of effective and efficient regulation and oversight of nuclear installations and activities.*

The NEA assists its member countries in maintaining and continuously improving the scientific, technical, management and regulatory knowledge base required to ensure the safety of design, construction, operation, maintenance and decommissioning of nuclear reactors and other civilian nuclear installations as well as the safety of nuclear activities. International nuclear co-operation greatly expands the base of knowledge and experience, thereby enhancing the capacity for addressing safety concerns, and supporting efforts to maintain safety performance and regulation at the highest levels.



Aerial view of Darlington Nuclear Power Plant in Ontario, Canada.

Ontario Power Generation (OPG)

To achieve this goal, the Agency will:

- facilitate an effective exchange of safety-relevant information among member countries, in order to identify significant generic issues and trends and to develop common understanding and approaches with a view to anticipate the resolution of such generic issues;
- assist member countries in the resolution of safety issues and strengthen confidence in the solutions and their implementation;
- help maintain an adequate level of capability and competence, including research infrastructures and tools in member countries necessary to ensure the safety of existing facilities, in particular their long-term operation, and future nuclear facilities and activities;
- support the enhancement of the efficiency and effectiveness of the regulatory process, including absorbing lessons from disruptive events such as the COVID-19 pandemic; and
- support the evolution and harmonisation of regulatory processes related to the assessment of existing and new, emerging technologies.

B. Human Aspects of Nuclear Safety

The goal: *to assist member countries in their efforts to ensure high standards of safety in the use of nuclear energy by promoting enhanced safety culture, greater understanding of human and organisational aspects, effective training policies and practices, effective public communication and stakeholder engagement, and a full consideration of the importance of leadership, diversity of knowledge and experience, and gender balance in nuclear organisations.*

The NEA provides its member countries with flexible and responsive approaches to address a range of topics related to the safe operation of nuclear energy facilities that are not directly associated with the science and technology aspects of safety. These human aspects have gained greater understanding as the key to informed and sustainable decision-making, central to safe operations, and vital to the long-term viability of the nuclear sector and the social licence it must enjoy to operate around the world. The NEA has been at the forefront of many of these areas and supports its member countries in addressing these highly complex matters in a comprehensive manner.

To achieve this goal, the Agency will:

- foster the continuous enhancement of the knowledge base associated with the understanding and treatment of safety issues related to human and organisational factors within the nuclear industry; facilitate the development of common positions on important issues;
- assist member countries in advancing the collective knowledge regarding safety culture and security culture and its impact on nuclear safety – e.g. in operating organisations and in nuclear regulators – as well as the role played by leaders in the development and maintenance of a healthy safety culture;
- assist member countries to enhance the approaches for engaging stakeholders in nuclear decision-making and the building of trust, which is essential for the sustainability of any important decision;

- facilitate information exchange and capacity building related to the effective use of public communication in nuclear safety; and
- engage member countries in advancing practices and policies related to capacity building and improving gender balance, to attract and retain more women in the technology and science fields including by promoting education and development in those areas and by ensuring its leadership in assuring gender balance in the NEA staff.

C. Nuclear Science

The goal: *to help member countries identify, collate, develop and disseminate the basic scientific and technical knowledge required to ensure the safe, reliable and economic operation of current and next-generation nuclear systems and to promote innovations.*

Research capability and technical expertise in basic disciplines, such as nuclear data, reactor physics, thermal hydraulics, neutronics, fuel cycle physics and chemistry, criticality studies, radiation physics, and material science are needed to develop nuclear programmes and to maintain and enhance a high level of performance and safety. Advancing this body of knowledge is central to addressing issues of importance for current-generation nuclear facilities and used fuel management policies, but it is just as essential to the design, construction and operation of new reactors, fuel cycles and other nuclear application facilities as well as the acceleration of the development and deployment of innovations in the nuclear sector. Experts working on future nuclear technologies will also greatly benefit from the systematic accumulation of knowledge in these areas. Fostering the active preservation and development of this knowledge in an international framework and enhancing the dissemination of the scientific results are vital to the effective performance of nuclear activities. Finally, the development of a new generation of scientists and engineers is an essential objective of this area.

To achieve this goal, the Agency will:

- help advance the existing scientific knowledge needed to enhance the performance and safety of current nuclear systems;
- contribute to building a solid scientific and technical basis for the development of future-generation nuclear systems and deployment of innovations;
- support the identification, evaluation and collection of experimental data to be used for validation purposes;



The North Carolina State University PULSTAR reactor neutron powder diffraction instrument.

NCSU, United States

- support the preservation of and generational transfer of essential knowledge in the field of nuclear science; and
- support innovation and the maintenance and development of essential skills, particularly through education and training of a new generation of nuclear scientists and technologists.

D. Development and Innovation in the Civil Use of Nuclear Energy

The goal: *to provide member countries and other relevant stakeholders with authoritative, reliable information on current and future nuclear technologies. To provide information and analyses to decision makers regarding the future of nuclear energy – including on public opinion, advances in nuclear power and fuel cycle technologies – as well as to provide assessment on the potential role of nuclear energy in a sustainable development perspective and within the context of national and international energy policies aiming to support low-carbon electricity cost-effectively and at high levels of security of supply.*

Energy, particularly in the form of electricity, is a vital public good, essential to modern life. The NEA member countries strive to ensure that energy is supplied economically, securely and sustainably. Nuclear energy generates an important share of the total electricity produced in NEA member countries (about 18% in 2019) and has the potential to play an even greater role in ensuring security of supply in the future as governments move to increase the use of low-carbon means of electricity generation to reach their emission reduction commitments.

To achieve this goal, the Agency will:

- promote international co-operation on the development of innovative nuclear energy systems;
- analyse the existing and potential contribution of nuclear power to resilient low-carbon electricity systems, including integrated energy systems that foster nuclear-renewables complementarities;
- review the role of research and development in innovative nuclear technologies and their potential impact in electricity generation and non-power applications; and
- assist member countries, upon request, in identifying and addressing emerging opportunities and concerns related to nuclear technology and radioactive materials, including medical radioisotopes.

Worker at a power plant inspecting output.

Shutterstock, Marcin Balcerzak



E. Radiological Protection of People and the Environment

The goal: *to assist member countries in the policy, regulation, implementation and further development of the system of radiological protection by identifying and effectively addressing conceptual, scientific, policy, regulatory, operational and societal issues.*

In order to reap the benefits of peaceful uses of nuclear energy and assure the safe use of nuclear technologies and materials, NEA member countries proactively establish systems to ensure the radiological protection of people including workers and the environment. New scientific and societal issues continue to arise in this area. In recent years, this has included the consideration of issues such as the radiological protection of non-human species and the application of modern, risk-informed “optimisation” approaches to radiological protection decision-making. In response, the international system of radiological protection, international standards, and national policies and regulations are also evolving. Member countries have also identified the need for continued research related to the effects of ionising radiation, particularly at low doses, and a growing need to assure the development and maintenance of a new generation of high-level radiological protection experts.

To achieve this goal, the Agency will:

- identify emerging issues in radiological protection science and facilitate the application of new scientific knowledge for practical uses by creating a fast track between research results and science-based policies and regulations;
- assist policymakers in developing and improving radiological protection policies to best reflect state-of-the-art science and technology;
- assess and comment on selected draft recommendations and standards to identify their possible implications for the regulation and implementation of radiological protection; facilitate rapid progress in areas where international consensus on radiological protection concepts, regulatory issues and practices is sought;
- contribute to reaching a harmonised framework for regulatory issues in radiological protection, including related public and occupational health and environmental issues; help link national policy and regulatory needs to the development of international recommendations;
- help member countries improve their radiological emergency preparedness and management as well as their operational radiological protection capabilities; and enhance the development of post-emergency recovery matters;
- assist member countries in tackling the societal challenges related to radiological protection including effective public communications and public understanding of risk; further facilitate effective engagement with relevant stakeholders and industry, including their involvement in decision making as appropriate;
- continue to promote an integrated approach to radiological protection, taking into account socio-economic and other factors and risks; and
- help ensure the management of radiological protection knowledge and experience between generations of radiological protection experts.

F. Radioactive Waste and Spent Fuel Management

The goal: *to assist member countries in the development of safe, sustainable and broadly acceptable strategies for the long-term management of all types of radioactive waste and spent nuclear fuel.*

Radioactive waste in various forms exists in countries with and without nuclear power programmes as a result of past and present activities and from retired nuclear facilities. Radioactive materials that no longer serve a needed purpose and waste products resulting from nuclear activities must be managed responsibly and in an integrated fashion, for the sake of present and future generations. Significant progress has been achieved on the scientific and technological aspects of radioactive waste and spent fuel management, and considerable experience is available in NEA member countries on radioactive waste and materials processing, conditioning, storage, transport and disposal. The long-term management of all kinds of radioactive waste is an area of particular focus in terms of how best to integrate technical advances with societal demands in decision-making, and correspondingly how to refine regulatory and policy frameworks. International co-operation amongst waste management agencies, nuclear operators, regulators, policymakers and R&D specialists is essential to fostering a broader understanding of the issues at hand and formulating more widely acceptable and innovative solutions.

To achieve this goal, the Agency will:

- advance a shared and broad-based understanding of the management of all kinds of radioactive waste and spent fuel, taking into account legal, societal and economic considerations;
- identify best practices, technologies and methodologies to ensure effective management of radioactive waste and spent nuclear fuel, including in terms of costs and their financing;
- facilitate the elaboration and implementation of waste and spent nuclear fuel management strategies and methodologies at national and international levels, including innovative approaches such as those associated with the implementation of new nuclear technologies;

Transport containers for the shipment
of spent fuel.
Nuclear Regulatory Authority (NRA)



- help elaborate common understanding of regulatory approaches in the management of radioactive waste and spent nuclear fuel;
- provide for international peer reviews to ensure that best practices are a continued feature of regulatory and technical approaches in waste management and spent nuclear fuel management;
- support the preservation of and generational transfer of essential knowledge in the field of nuclear waste and spent fuel management;
- exchange experiences and share approaches to the engagement of stakeholders and the general public in decisions and approaches to the management of radioactive waste;
- explore the implications of very long time frames and the related challenges of generational transfers of responsibilities and knowledge; and
- identify specific issues of interest in which involved institutions and other stakeholders can learn from each other, and provide a platform for discussing those issues.

G. Nuclear Decommissioning and Legacy Management

The goal: *to assist member countries in the development of safe, sustainable and broadly acceptable strategies and regulatory considerations for decommissioning nuclear installations and managing the long-term environmental legacy associated with former nuclear sites, and to provide relevant stakeholders with authoritative information on the strategic and regulatory aspects of decommissioning nuclear installations.*

Retired facilities must be managed responsibly and in an integrated fashion that takes into account the welfare of both present and future generations. The management of waste from decommissioning nuclear facilities also gives rise to unique technical, economic, and policy issues. In some countries, specific experience exists in managing the decommissioning of nuclear facilities, managing complex historic nuclear sites and handling the resulting waste streams. International co-operation among operators, regulators, policymakers and R&D specialists is essential to fostering a broader understanding of the issues and formulating sustainable and widely acceptable solutions.



Dismantling of the Dounreay fast reactor research and development centre, United Kingdom.

Dounreay Site Restoration Limited (DSRL) and Nuclear Decommissioning Authority (NDA)

To achieve this goal, the Agency will:

- identify best practices, technologies and methodologies to ensure effective conduct of decommissioning and legacy management activities, including in terms of costs and their financing;
- identify lessons learnt, technologies and methodologies that should be addressed from the design stage to the licensing of nuclear installations to ensure effective decommissioning in the future and minimise cost;
- facilitate the elaboration and implementation of decommissioning strategies and methodologies at national and international levels;
- provide for international peer reviews to ensure that best practices are a continued feature of regulatory and technical approaches in decommissioning and long-term environmental stewardship of legacy sites;
- support the preservation and generational transfer of essential knowledge in the field of decommissioning;
- exchange experiences and share approaches to the engagement of stakeholders and the general public in decisions and approaches to the conduct of decommissioning activities and the management of legacy issues;
- explore the implications of very long time frames and the related challenges of generational transfers of responsibilities and knowledge; and
- identify specific issues of interest in which involved institutions and other stakeholders can learn from each other, and provide a platform for discussing those issues.

2. Vital Infrastructure and Enablers

A. Dissemination of Information to Build Understanding and Awareness of Nuclear Matters

The goal: *to provide member countries, other major stakeholders and the public with information resulting from NEA activities and to enhance awareness and understanding of the scientific, technical, economic and legal aspects of nuclear activities as well as awareness of the work of the NEA itself.*

The development and dissemination of authoritative information and rigorous analyses to policymakers, other interested stakeholders and the public is key to well-informed, credible and transparent decision-making in the nuclear energy field. Improving the visibility of the NEA and its ability to convey the results of its work to member countries contributes to this endeavour. As an element of collecting such information, it is essential to promote appropriate engagement with various external parties in order to understand their views and perspectives and reflect these learnings in the Agency's policy development activities.

To achieve this goal, the Agency will:

- provide governments, political decision-making circles, opinion leaders and other major stakeholders with specialised scientific, technical, legal and economic information, analyses and policy recommendations in a timely manner;
- engage with civil society organisations and other stakeholders to assure an understanding of their perspectives and reflect this understanding in the work of the Agency;
- meet the evolving information needs of a diverse audience by producing publications, technical reports, policy briefs and other materials as useful;
- promote NEA reports and findings widely in member countries and beyond, including at major international conferences;
- increase the visibility of the NEA through participation in major international fora and conferences in member countries and elsewhere, and by developing communication materials targeted to various audiences;
- continue enhancement and strengthening of all NEA communications platforms, including the NEA website and social media channels, and maintain appropriate contacts with the media;
- engage with the social sciences community and build understanding of the factors related to the social acceptance of nuclear activities under different policy configurations; and
- reinforce its corporate identity by presenting the NEA as a science-based source of high-quality information and rigorous analyses, and a repository of scientific and technical know-how on key aspects of nuclear energy to advance co-operation in the safe and economical use of nuclear power and non-power applications.

Mentoring a Future Generation
of Female Leaders
in Science and Engineering.



B. Supporting the Development of a Next Generation of Nuclear Scientists and Technologists

The goal: *to support member country efforts to build and maintain diverse and inclusive cadres of subject matter experts who will be needed by countries pursuing nuclear technology policies and programmes.*

Countries will need highly trained experts whether they aspire to develop, build and deploy next-generation nuclear energy facilities and strategies; focus on decommissioning and waste management, including innovative options; take full benefit of current and emerging nuclear medicine technologies for the treatment and diagnosis of serious illnesses; or need experts to understand global trends and developments to inform policymaking. None of the goals that member countries have regarding the application of nuclear science and technology can be accomplished safely and effectively without the availability of key experts to lead the development and application of the technologies and methodologies necessary to implement their strategic goals. In recent years, NEA member countries have noted that the current generation of experts are at or approaching retirement age and some have found that the numbers of young people entering related disciplines is insufficient to replace those expected to depart the workforce. Moreover, in all countries, more needs to be done to enhance the attractiveness of careers in nuclear science and technology and related fields while ensuring more diversity in the sector.

To achieve this goal, the Agency will:

- promote international co-operation to encourage and support the development of a new generation of highly-trained experts in fields related to nuclear science and technology;
- develop youth awareness of the societal value of nuclear energy, and its importance in energy transition issues;
- support the development of a new generation of highly-trained experts in fields related to nuclear science and technology;
- support preserving and continuing operation of key research facilities and jointly developing new ones;
- engage academic institutions within member countries to strengthen the nuclear energy-related aspects of their activities in support of well-trained future workforce and leadership;

- support member country efforts to improve the diversity and gender balance of the next generation of nuclear experts;
- promote international co-operation in the improvement and modernisation of nuclear technology education; and
- provide mechanisms for greater information exchange, collaboration, and joint action by institutions in member countries working to develop human capacity in the nuclear science and technology area.

C. Economics and Resources for Nuclear Development

The goal: *to provide member countries, policymakers and other major stakeholders with authoritative, reliable information and analyses regarding the future of nuclear energy – including on economic and resource analyses and electricity production data.*

The NEA serves as a central point in the collection and understanding of information related to key inputs and outputs of nuclear activities. In particular, and in co-operation with international partners, the NEA collects and compiles key data related to fuel supplies, electric generation, isotope production, and other areas. Such information and analyses are vital to inform both future NEA work and national decision-making.

To achieve this goal, the Agency will:

- analyse the costs and economics of nuclear power at the level of the individual plant, the fleet as well as at the level of integrated low-carbon electricity systems; this includes evaluating the contribution of dispatchable nuclear capacity to system resilience and the security of electricity supply;
- assess the role of nuclear energy in the context of broader global energy trends and identify its full potential and real contribution to climate change mitigation and sustainable development;
- study the conditions for optimising the financing cost of building new nuclear power plants through optimal risk allocation and specific policy support schemes; this includes also taking into account environmental, societal, policy and governance criteria – including taxonomies – in different financing environments;



Maintenance of a low pressure section of a steam turbine at the Balakovo Nuclear Power Plant.

CPI BalNpp, Alexander Seetenky/Creative Commons

- assess the specific role of different sources of financing, including international financial institutions, to contribute to the financing of nuclear facilities;
- assess the availability of uranium resources and the nuclear fuel infrastructure required for the operation of existing and future nuclear power facilities and identify capability gaps;
- identify the full internal and external costs of electricity provision over the full lifecycle of different sources taking into account their non-market impacts on human health, and the environment, as well as on energy security and analyse measures to encourage deployment of technologies that support policy imperatives;
- contribute to the understanding of the costs and economics of different solutions for the back-end of the nuclear fuel cycle including advanced fuel cycles, long-term storage and disposal while reflecting both internal and external costs under different time horizons;
- study the industrial and business cases of innovative nuclear reactor types, designed to contribute to the production of heat, hydrogen or medical radio-isotopes;
- analyse strategies for the operational performance of existing nuclear power plants, including the implementation of long-term operation (LTO);
- collect, analyse and disseminate information on the long-term security of supply of vital medical radioisotopes; and
- support member countries as appropriate in assuring the long-term security of supply of radioisotopes and promote the full-cost recovery principle.

D. Nuclear Law

The goal: *to help create sound national and international legal regimes required for the peaceful uses of nuclear energy, including as regards nuclear safety, international trade in nuclear materials and equipment, public engagement, issues of liability and compensation for nuclear damage, and to serve as a leading centre for nuclear law information and education.*

Achieving confidence in the peaceful uses of nuclear energy requires the existence of comprehensive and effective national and international legal regimes whose goals are to protect the public, the nuclear workers and the environment from the risks inherent in those uses.

Ratification ceremony of the Protocols to amend the Paris and Brussels Conventions, 17 December 2021.

Andrew Wheeler



These regimes include regulation at a national level, co-operation at bilateral and multilateral levels and international harmonisation of national policies and legislation through adherence to international binding instruments. They need to be strong enough to set and enforce limits, and flexible enough to keep pace with technological advances and changing public concerns.

To achieve this goal, the Agency will:

- assist member countries in the development, strengthening and harmonisation of nuclear legislation and regulation in areas such as nuclear safety, radioactive waste management and environmental law (as applied to nuclear activities) based upon internationally accepted principles and in line with international binding instruments for the safe and peaceful use of nuclear energy;
- contribute to the modernisation of the international nuclear liability regimes and encourage the strengthening of treaty relations between interested countries to address nuclear liability and compensation for nuclear damage; and
- collect, analyse and disseminate information on nuclear law generally and on topical nuclear legal issues in particular.

E. Management, Preservation and Validation of Nuclear Data Assets and Codes

The goal: *to be the international centre of excellence for advancing best practices in the management, preservation, validation and utilisation of nuclear data and computer codes, through collaboration, integration with other NEA outputs and dissemination of relevant data and products.*

Modelling and simulation of complex nuclear systems and processes presents innumerable possibilities to improve the safety and cost-effectiveness of nuclear energy and to provide important insights to inform technology development and scientific research. This important work is taking place in research and academic institutions around the world and depends on computer codes and input physics data that have been internationally validated against experiments that are trusted and representative of their applications of interest. The NEA provides co-operative frameworks to foster the joint development and validation of these assets and to co-ordinate their distribution to members.

NEA activities in these areas are very cross-cutting, but are led by the Data Bank. The Data Bank is the hub that integrates the overall NEA programme of work with the communities that develop computer codes and nuclear data, leveraging the insights and general capabilities of the NEA to provide key services to its members. The NEA Data Bank was established by the decision of the Steering Committee based on Articles 5.b and 12.b of the NEA Statute and in succession to the Computer Program Library and the Neutron Data Compilation Centre. Although a part of the NEA, it has a separate group of participants and budget. The Management Board for the Development, Application and Validation of Nuclear Data and Codes (MBDAV) oversees the Data Bank activities and directly reports to the Steering Committee for Nuclear Energy.

The NEA undertakes focused efforts to make the best use of Data Bank resources and capabilities and magnify its impact for the benefit of Data Bank participating countries and NEA activities through appropriate co-operation and collaboration with other elements of the NEA.



NEA Data Bank servers.

To achieve this goal, the Agency will:

- provide, through the Data Bank, technical services to support, integrate and streamline the processes of code and data development and validation by organisations in Data Bank member countries;
- integrate the outputs of the wider NEA programme of work with Data Bank code and data development communities to maintain alignment and set consistent objectives;
- provide, through the Data Bank, a cross-disciplinary forum for clients and stakeholders to offer feedback and set priorities for code and data development;
- maintain and distribute to Data Bank members a continuously updated collection of verified and validated nuclear data, computer programs and other relevant products, and organise workshops on their use; and
- provide support for knowledge preservation efforts to ensure that NEA outputs are optimised for use in validation processes in line with users' expectations.

IV. Governance

In its 65 years of service to date, the NEA has provided its member countries with a responsive and flexible framework for co-operation, information exchange, education, and joint action. This framework rests on the direct engagement and leadership of senior leaders, officials, and experts who participate in the Agency's many varied activities – most importantly the Steering Committee for Nuclear Energy, the standing technical committees and subsidiary bodies. The work of the NEA covers all aspects of the civilian application of nuclear energy (as detailed in Chapter III) and provides the capability to rapidly mobilise member country expertise to address emerging issues. In 2021, approximately 80 groups of experts – some long-term, many with short-term mandates – were active within the NEA framework.

The work of the Agency is facilitated by a highly expert staff which serves as secretariat to the Steering Committee for Nuclear Energy, the standing technical committees, the Management Board for the Development, Application and Validation of Nuclear Data and Codes (MBDAV), and their subsidiary bodies (working parties and expert groups). These experts, many of whom work with the NEA for limited periods and return to their original organisations in their home countries, provide the capability to identify key areas of interest and interface to assure vibrant horizontal engagement, provide expert support, input, and services to members, and assure appropriate co-ordination with partner organisations.

The staff of the Agency is overseen by the Director-General who assures that work of the NEA is conducted in an effective manner, in full compliance with the Steering Committee's guidance, including the allocation of resources in accordance with the priorities approved by the Steering Committee. The Director-General also provides appropriate co-ordination with the OECD, particularly the OECD Council, the OECD Budget Committee, and the OECD Secretary-General. It is the Director-General's task to plan for and maintain a strong team of experts who have the ability to bring experience, knowledge, and creativity to support member countries.

The policies and overall guidance under which the NEA operates are set by the Steering Committee for Nuclear Energy and key areas of work are overseen by the standing technical committees and the MBDAV. The roles of these bodies are described in detail below.

A. The Role of the Steering Committee for Nuclear Energy

The Steering Committee for Nuclear Energy provides oversight to ensure that the Agency carries out its activities in a manner that is in conformity with the provisions of the NEA Statute and OECD Council decisions, responsive to the needs of NEA member countries and within the framework established by the Steering Committee.

To achieve this goal, the Steering Committee will:

- approve, monitor and evaluate the implementation of the Strategic Plan;
- guide the preparation of the Programme of Work, consistent with the continuous prioritisation of activities, discuss and approve Programme of Work and Budget (PWB) while ensuring that the Programme of Work can be realised within the agreed budget.
- identify cross-cutting issues, and periodically review the NEA's mission statement and mandates of the standing technical committees (STCs) to help ensure that both the NEA's broader objectives and specific activities continue to respond to the needs of member countries;
- assess, monitor and provide guidance in the implementation of the Programme of Work;
- provide policy guidance on broad energy, economic and environmental policy issues affecting nuclear energy;
- seek opportunities for greater efficiency and cross-cutting activities across the Agency and in co-ordination with other OECD elements and other international organisations; and
- maintain close ties with its standing technical committees, in particular to address cross-cutting issues by developing joint policy approaches and outputs in the Programme of Work.

The Bureau of the Steering Committee for Nuclear Energy engages periodically with the Secretariat to provide reflections on Steering Committee policies and requirements, and can advise on whether matters should be referred to the full Steering Committee for deliberation.

NEA Steering Committee, October 2019.



B. The Role of the Standing Technical Committees

A standing technical committee (STC) structure has been established by the Steering Committee to efficiently carry out the NEA Programme of Work, and to strengthen the Agency as a key international instrument of co-operation. Composed of member country experts, the STCs constitute a unique feature and important strength of the NEA, providing flexibility for adapting to emerging issues and helping to achieve consensus rapidly.

In addition to the STCs, the NEA Data Bank, which has a separate membership, is overseen by the Management Board for the Development, Application and Validation of Nuclear Data and Codes (MBDAV), directly reports to the Steering Committee and serves a similar function to an STC.

To achieve these goals, working with the NEA's expert staff, the STCs and MBDAV will:

- foster international co-operation under the guidance of the Steering Committee, with a view to advance a common knowledge base and to develop common approaches and consensus by exchanging information and experience, proposing prioritised activities for the future Programme of Work and pursuing the widest possible dissemination of the results of their work;
- ensure proper management of their subsidiary bodies in order to help deliver their outputs as planned, by the end of their mandates;
- with the support of the Secretariat, optimise the implementation of the Programme of Work and seek opportunities to conduct horizontal activities by co-operating on joint studies or joint groups as necessary, and ensuring that the existing expertise in the other NEA bodies is taken into account and not duplicated;
- enhance their efficiency by periodically reviewing the structure of their subsidiary bodies in light of the Agency's Strategic Plan and Programme of Work and co-ordinate their meetings with those of other international organisations;
- prioritise work activities to assure the best use of resources; and
- ensure that the Programme of Work, in their respective areas, is established and carried out in a manner that is consistent with the goals and objectives of the NEA priorities defined by the Steering Committee by monitoring activities, evaluating the level of achievement and reporting to the Steering Committee every year.

C. Cross-cutting Issues

Many NEA activities are cross-cutting in nature and concern more than one STC. These include, for example, the nuclear energy and society nexus, stakeholder involvement, knowledge management and data and infrastructure preservation, education, and future research needs.

To support these activities, the NEA Secretariat must:

- identify cross-cutting issues in the biennial Programme of Work, including the relevant activities;
- identify and exploit opportunities for horizontal co-operation, among STCs, in the course of ongoing work activities;
- support the interaction of STC bureaus and chairs as appropriate to address cross-cutting issues; and
- identify and implement the organisational arrangement of the Secretariat for supporting all these activities in an optimised manner.

V. Interactions

The field of nuclear energy is vast and complex. No single government body, international organisation or industry group can, by itself, provide all the necessary policy, regulatory, scientific and technical guidance needed to ensure the safe, environmentally sound and economical use of nuclear energy for peaceful purposes. Through its interactions, the NEA benefits from outside input and experience, and enhances the value of its work in assisting its members.

Authoritative, balanced NEA involvement in the international nuclear energy arena, drawing on the Agency's competence and experience, brings value to member countries. NEA participation in studies of other relevant organisations should be organised when appropriate, as should NEA exchanges with relevant actors of academic institutions, industry and civil society, including non-governmental organisations. Good co-operation and co-ordination with other international organisations results in greater efficiency by identifying areas of synergistic effort, clarifying roles and areas of focus, and helping to avoid duplication. The help of member countries is key to ensuring consistency and complementarity of the activities of the relevant international organisations when approving their respective programmes of work.

A. Working with the OECD

The goal: *to bring NEA expertise and the results of its work into the OECD's broader energy, socio-economic and environmental efforts and to help provide member countries with a consistent and balanced view on energy issues.*

Given the significant economic and environmental benefit nuclear energy can provide as an important low-carbon source of electricity and heat and the global availability of the natural resources of nuclear fuel materials, discussions with the OECD on the contributions of nuclear energy to sustainable development will be continued and expanded. The case for nuclear energy as a potential contributor to the development of low-carbon economies will be robust if certain conditions are met to demonstrate that this form of energy is being properly managed. The NEA can provide the OECD with the necessary input on the various aspects of nuclear power for further analyses in a broad context. More generally, the NEA will strive to actively participate in any OECD co-ordinating group in which the nuclear energy option and the Agency's expertise might be beneficial, or when NEA activities can benefit from interaction with OECD experts.

To achieve this goal, the Agency will:

- interact with the OECD as a whole by, in particular, participating in cross-cutting work in areas such as green growth, the contribution of nuclear energy to emissions abatement and sustainable development and the impact of market liberalisation;

Shin Kori NPP units 3 and 4, Korea,
March 2015.
KINS, Korea



- interact with the International Energy Agency (IEA) in clearly defined areas of competence by organising systematic cross-participation in the respective relevant committees and governing bodies, mutually exchanging analyses of common interest and developing joint studies and publications;
- interact with the OECD Environment Directorate by exchanging analyses of common interest for incorporation in studies and work; and
- interact with the OECD Economics Department and OECD Directorates for Science, Technology and Innovation; Trade and Agriculture; Public Governance; and Education and Skills (and the Centre for Educational Research and Innovation); by participating in general debates of common interest and providing NEA expertise in the field of nuclear energy.

B. Working with other international bodies

The goal: *to ensure complementarity and increase synergy with the International Atomic Energy Agency (IAEA), the European Commission and other international bodies as well as to optimise resources, capitalise on NEA expertise and disseminate the results of NEA work to a wider audience.*

Various other international bodies work in similar areas as the NEA, although their objectives and membership are different. It is therefore important to co-ordinate efforts to ensure they complement each other, and that duplication of effort is avoided and the results are properly conveyed to other organisations.

To achieve this goal, the Agency will:

- continue its co-operation with the IAEA by undertaking efforts to co-ordinate and consult as provided for in the existing Agreement between the two agencies, ensuring cross-participation in relevant committees and governing bodies and by undertaking activities, meetings and conferences jointly in appropriate areas and thereby ensure efficiency, effectiveness and the greatest value for NEA member countries;
- enhance interaction with other relevant international organisations, such as the World Health Organisation, the Food and Agriculture Organisation and the International Labour Organisation, as appropriate, and with other bodies, such as the United Nations Scientific Committee on the Effects of Atomic Radiation, on a case-by-case basis;
- enhance interaction with other groups by co-operating with the G20, G7, the Clean Energy Ministerial and its Nuclear Innovation: Clean Energy Future initiative, and other bodies, on a case-by-case basis; and

- enhance co-operation with international associations of nuclear regulators, such as the Western European Nuclear Regulators' Association (WENRA) and radiological protection groups such as the International Commission on Radiological Protection (ICRP), on a case-by-case basis, ensuring cross-participation in relevant committees and by undertaking activities, meetings and conferences jointly in appropriate areas and thereby ensure efficiency, effectiveness and the greatest value for NEA member countries.

C. Engagement through NEA-Serviced Bodies

The goal: *to provide, with the approval and guidance of the Steering Committee, support for unique international initiatives that conduct activities in areas that leverage NEA competencies and, through engagement with these initiatives, magnify and enhance the scope, quality, and impact of NEA work.*

Countries often find that standing international bodies do not carry out activities that apply to particular, though related interests. On occasion, interested countries – including NEA members, partners, and non-members – decide to develop special international initiatives to approach areas of special interest. They have often found the NEA, with its deep technical expertise, flexible and responsive framework, and key position as an enduring framework for co-operation, to be a vital partner in supporting, managing and sustaining the activities of these initiatives.

Currently, the Agency serves as Technical Secretariat for the Generation IV International Forum (GIF), the International Framework for Nuclear Energy Co-operation (IFNEC) and the Multinational Design Evaluation Programme (MDEP). The work of these bodies is highly complementary with the work of the NEA.

To achieve this goal, the Agency will:

- continue to support NEA-Serviced Bodies and optimise collaboration of these bodies with relevant committees and governing bodies, by undertaking activities, meetings and conferences jointly in appropriate areas;
- maximise synergies by co-ordinating with these bodies to assure the most efficient conduct of their work in the context of the broader activities of the NEA, the IAEA, and other bodies;
- exchange insights gained from both the support of NEA-Serviced Bodies and the conduct of NEA Programmes of Work in order to enhance the conduct of both, to the extent appropriate.

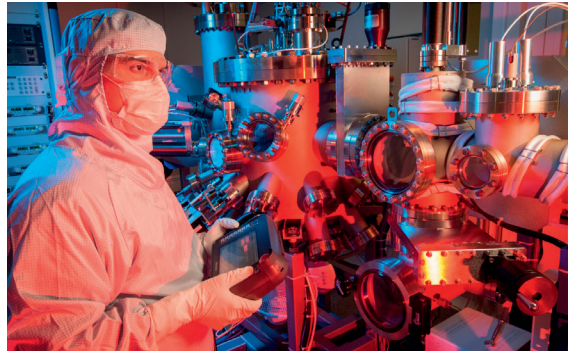
D. Working with academia, research organisations, industry and civil society

The goal: *to maintain contacts with academia, research organisations, private sector and civil society, and to collect and utilise relevant information and data in NEA work, as appropriate.*

The NEA, while an intergovernmental organisation, interacts with its member countries' academic, industrial and other stakeholder groups in consultation with the member countries and in the context of the substantive activities described in the Strategic Plan.

Education-Research Center “Nanocenter”
training in the method of pulsed laser
deposition.

MEPHI, Russia



The liberalisation of electricity markets, the privatisation of production capacities (including as concerns nuclear medicine), shifting trends in R&D and new technologies deployment are giving a major role to industry in many NEA member countries. Technical and economic aspects of nuclear power and health applications in the future are largely in its hands.

Transparent **engagement with industry** through memoranda of understanding with organisations such as the World Nuclear Association (WNA), the World Association of Nuclear Operators (WANO), the CANDU Owners Group (COG), the Electric Power Research Institute, Inc. (EPRI) and the Japanese Central Research Institute of Electric Power Industry (CRIEPI) provide important synergisms that benefit NEA member countries. Direct engagement with industry will also provide the NEA with important insights into the nuclear technologies, energy policies and trends in economics and finance that are shaping the future of nuclear energy development, regulation and deployment. Additional fora providing for transparent engagement with diverse industry representatives will also be considered.

Likewise, **engagement with academic and research institutions** within member countries can provide important insight into short- and long-term advances being realised across the myriad of nuclear sciences and technologies which underpin a safe and secure nuclear energy enterprise. Engagement with academic and research institutions would impact human resources trends with respect to the next generation of scientists and engineers who will carry out the civil nuclear mission of governments, industry, and research organisations. The NEA will engage with a range of academic partners in member countries to ensure its work benefits from a diversity of views.

In support of the development of nuclear technologies and the next generation of scientists, NEA will engage in facilitating the use of research infrastructures in the member countries and promoting collaborative efforts for joint programmes in existing and new research infrastructures. NEA will play a facilitating role in preserving the necessary research infrastructure.

The NEA Global Forum on Nuclear Education, Science, Technology and Policy provides a platform for sustained co-operation amongst academic and research institutions, policymakers and key stakeholders in the nuclear energy sector and civil society. The Global Forum enables global academic and research organisations working to build a new generation of nuclear



**Barakah Nuclear Power Plant,
United Arab Emirates.**

Emirates Nuclear Energy Corporation (ENEC),
United Arab Emirates

science and technology experts to collaborate to meet common goals and to provide input into NEA technical and policy activities.

Engagement with civil society and non-government organisations within member countries can also provide important insight into the socio-economic, environmental and regulatory issues associated with existing nuclear facilities and operations, as well as future facilities.

Engagements also provide an important opportunity for the open and transparent exchange of technical, regulatory and financial information to ensure more fully informed discussions regarding nuclear energy's role in civil society.

The NEA can benefit further from the contributions that the industry and industry organisations, the academic community and non-government organisations may be able to provide to the work of the standing technical committees.

To achieve this goal, the Agency will:

- establish and maintain useful interaction with key organisations and groups in member countries, and other stakeholders at the international level, to explore appropriate co-operation and systematically exchange information;
- increase exchanges with industry, industrial organisations, research organisations and academic institutions that could be beneficial to NEA activities by encouraging participation in a task-oriented and flexible way, taking care not to enter into commercial activities but respecting competence of different actors, and by co-ordinating with member countries the appropriate participation of industry, research organisations and a range of academic bodies in specific NEA activities, in general excluding their participation in regulatory activities beyond informing regulatory discussions and analysing potential impacts;
- in consultation with the member countries and through the NEA standing technical committees and their working groups, provide fora for interactions with civil society and other stakeholder groups; and
- provide factual information and objective analyses to a diverse audience by producing publications, technical reports, policy briefs and other materials as useful, and disseminating this information widely in member countries and beyond.

E. Co-operating with Partner Countries

The goal: *to establish effective relationships with partner countries whose participation in the NEA programme can be mutually beneficial and can make a significant contribution to the Agency.*

Additional countries are expected to apply for NEA membership in the future. It is recognised that new membership or outreach should provide significant added value to NEA member countries, provided certain conditions are met. Any proposal for co-operation or membership will be considered by the Steering Committee on the basis of a careful evaluation of potential mutual benefit and of possible impacts on the NEA's traditional strengths.

To achieve this goal, the Agency will:

- consider indications of membership interest by those countries that can provide significant added value to the Agency's activities;
- carefully analyse the credentials of non-member countries that indicate an interest in joining the Agency;
- evaluate a potential member according to criteria such as the nature and extent of its nuclear activities; its international commitments, especially regarding non-proliferation, and co-operative activities in the nuclear field; the organisation of its nuclear programme, including in particular the viability and independence of the nuclear regulatory authority; its domestic nuclear legislation; its resources, including whether it is receiving technical and financial assistance; its ability to provide technical specialists who can contribute to NEA activities; its contribution as a participant in NEA activities; and its approach to public information; and
- discourage membership applications from countries about which serious questions are likely to be raised with respect to the above criteria.

The NEA may also establish forms of co-operation with other countries which help the latter and provide added value to the Agency's programme, consistent with financial, political and practical realities, the OECD policy on outreach, and specific guidance from the Steering Committee, including:

- indicating openness to involving on a step-by-step basis selected countries with established non-proliferation credentials, particularly those that are significant players in the nuclear field and that can provide added value to the Agency's activities, with specific guidance of the Steering Committee and taking into account OECD accession and partner country priorities, budgetary constraints and the anticipated abilities of countries to contribute to NEA activities and finance their own participation;
- assisting member countries in their efforts to improve nuclear practices in non-member countries;
- working with the IAEA in areas where non-member countries can benefit from co-ordinated action by the two agencies; and
- developing co-operation with select strategic partner countries on a step-by-step basis, with a view to achieving mutually beneficial results.

Annex

Authority for the Nuclear Energy Agency (NEA) and its activities

Authority for the NEA

Under Article 9 of the Convention of the Organisation for Economic Co-operation and Development (succeeding the Organisation for European Economic Co-operation), the Council establishes subsidiary bodies for the achievement of the aims of the Organisation. Bodies set up by the Council include main committees reporting directly to it, as well as other subsidiary bodies known by other names.

This is the case of the OECD Nuclear Energy Agency (NEA), which was established by a Decision of the Council of the Organisation for European Economic Co-operation (OEEC) of 17 December 1957 [C(57)255], embodying its Statute, and subsequently approved by the OECD Council on 30 September 1961 [C(61)5]. The Statute of the NEA was amended by subsequent Decisions of the Council [C(65)17(Final), C(72)106(Final), C(75)68(Final), C(76)172(Final), C(77)183(Final), C(92)220 and C(95)157(Final)].

The Statute (Article 1.b) sets out the purpose of the Agency as follows:

“Taking due account of the public interest and mindful of the need to prevent the proliferation of nuclear explosive devices, the purpose of the Agency shall be to further the development of the production and uses of nuclear energy, including applications of ionizing radiations, for peaceful purposes by the participating countries, through co-operation between those countries and a harmonization of measures taken at the national level.”

Authority for the Steering Committee for Nuclear Energy

The Statute (Article 2) establishes the authority for the Steering Committee for Nuclear Energy as follows:

“The tasks assigned to the Agency shall be carried out, under the authority of the Council, by the Steering Committee for Nuclear Energy, by the bodies which the latter has established... to assist it in its work or perform tasks of common interest to a group of countries, and by the Secretariat of the Agency which shall form part of the Secretariat of the Organisation.”

In addition, Article 3 of the Statute specifies that:

“The Steering Committee shall be competent to deal with any question relevant to the purpose of the Agency under conditions resulting from the provisions set forth below and from other applicable decisions of the Council.”

Authority for the NEA standing technical committees

The creation and the terms of reference of such committees is dealt with under Article 12.a of the Statute:

“The Steering Committee may establish such commissions and working parties as it may consider necessary to assist it in the performance of its duties and entrust them with the execution of any task relevant to the purpose of the Agency.”

The mandates of the NEA standing technical committees are approved by the Steering Committee.

Authority in respect of NEA main areas of activity

The NEA areas of activity are based on three articles of the Statute:

Article 4.a

“The Agency shall promote technical and economic studies and undertake consultations on the programme and projects of participating countries relating to the development of research and industry in the field of the production and uses of nuclear energy for peaceful purposes, in collaboration with other bodies of the Organisation in matters falling within their competence.”

Article 7.a

“The Agency shall encourage the development of research into the production and uses of nuclear energy for peaceful purposes in participating countries.”

Article 8.a

“The Agency shall:

- (i) contribute to the promotion, by the responsible national authorities, of the protection of workers and the public against the hazards of ionising radiations and of the preservation of the environment;*
- (ii) contribute to the promotion of the safety of nuclear installations and materials by the responsible national authorities;*
- (iii) contribute to the promotion of a system for third party liability and insurance with respect to nuclear damage;*
- (iv) ...”*

Authority in respect of NEA joint undertakings

NEA Statute Article 5.a

“The Agency shall, where appropriate, promote the formation of joint undertakings for the production and uses of nuclear energy for peaceful purposes, endeavouring to secure the participation of the greatest possible number of countries.”

Authority in respect of NEA restricted bodies

NEA Statute Article 12.b

“ Restricted bodies may be established to study questions or execute functions of interest to a group or participating countries, in accordance with the conditions set forth in Article 5 above or in a decision of the Council. Special expenditure assignable to the work of these bodies, such as the cost of studies or the remuneration or experts, shall be chargeable to the countries concerned.”

Authority for the Data Bank

The Data Bank was created by decision of the Steering Committee on 7 December 1977 based on Articles 5.b and 12.b of the NEA Statute. At the same meeting, the Steering Committee adopted its terms of reference [NE(77)28].

Institutional documentation

The following institutional documentation is produced regularly by the NEA in respect of its programme, budget, results and committee activities:

- biennial programme of work, prioritisation and estimates of expenditure and reports of progress;
- reports by the Director-General to the Steering Committee (twice a year);
- annual report on the activities of the Nuclear Energy Agency;
- NEA section in the *OECD Annual Report*;
- *NEA News* magazine (twice a year);
- NEA brochure; and
- NEA monthly e-bulletin.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where the governments of 38 democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, Colombia, Costa Rica, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Korea, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Commission takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

This work is published under the responsibility of the Secretary-General of the OECD.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the member countries of the OECD or its Nuclear Energy Agency.

NUCLEAR ENERGY AGENCY

The OECD Nuclear Energy Agency (NEA) was established on 1 February 1958. Current NEA membership consists of 34 countries: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Poland, Portugal, Korea, Romania, Russia, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Commission and the International Atomic Energy Agency also take part in the work of the Agency.

The mission of the NEA is:

- to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally sound and economical use of nuclear energy for peaceful purposes;
- to provide authoritative assessments and to forge common understandings on key issues as input to government decisions on nuclear energy policy and to broader OECD analyses in areas such as energy and the sustainable development of low-carbon economies.

Specific areas of competence of the NEA include the safety and regulation of nuclear activities, radioactive waste management and decommissioning, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability, and public information. The NEA Data Bank provides nuclear data and computer program services for participating countries.

Also published in French under the title:

Le plan stratégique de l'Agence pour l'énergie nucléaire 2023-2028

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NEA publications and information

The full **catalogue of publications** is available online at www.oecd-nea.org/pub.

In addition to basic information on the Agency and its work programme, the **NEA website** offers free downloads of hundreds of technical and policy-oriented reports.

An **NEA monthly electronic bulletin** is distributed free of charge to subscribers, providing updates of new results, events and publications. Sign up at www.oecd-nea.org/bulletin.

Visit us on **Facebook** at www.facebook.com/OECDNuclearEnergyAgency or follow us on **Twitter** @ OECD_NEA.



The Strategic Plan of the Nuclear Energy Agency 2023-2028

This Strategic Plan is intended to guide the NEA as it seeks to meet the evolving needs of member countries in the application and exploration of nuclear science and technology. Reissued every five years, the Strategic Plan sets out the NEA mission statement and general strategies, before going on to describe specific NEA activities, sector by sector. The plan then highlights the governance of the Agency and explains interactions with external organisations and groups, including those within the OECD family. The basis of authority for the Nuclear Energy Agency and its activities is included in the Annex.

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