STUDY GUIDE

EKMUN 2025

IAEA

Topic A: Balancing the Peaceful Use of Nuclear Energy and the Prevention of Nuclear

Topic B: Weapons Proliferation
-The right of states to nuclear energy vs. the risks of nuclear proliferation,
-The role of nuclear energy in addressing the global energy crisis.

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Dear Delegates,

As the Secretary-General of EKMUN’2025, it is my greatest honor to welcome you to this year’s conference. Soon, we will come together to engage in discussions that mirror the complexity and importance of real-world diplomacy. Each one of you brings a unique perspective, a distinct voice, and an ambition to create change and it is exactly this diversity that makes Model United Nations such a powerful experience.
Over the upcoming days, you will find yourself not only debating international matters but also stepping into the shoes of world leaders, policymakers, and diplomats. The preparation, dedication, and curiosity you bring to this conference will shape not just your experience, but the overall atmosphere of cooperation and respect that defines EKMUN’2025

Throughout this conference, you will not only have the opportunity to discuss global issues but also to develop essential skills such as critical thinking, teamwork, and negotiation. Remember that Model United Nations is not just about reaching resolutions it is about understanding perspectives, fostering respect, and finding common ground among differences.

I strongly encourage each one of you to be bold, respectful, and solution-oriented during your sessions. Let this conference be a place where your voices are heard, and your ideas make an impact.

I wish you all productive debates and unforgettable memories.

Warm regards,
Ayliz Çolak
Secretary-General of EKMUN’2025

1. Introduction to the Committee

a. History

The **International Atomic Energy Agency (IAEA)** was officially established on **29 July 1957** as an **autonomous international organization within the United Nations family**, following the approval of its Statute by 81 nations in 1956. The Agency's creation stemmed from a growing international realization after **World War II** that atomic energy possessed a dual potential: while it could serve as a source of prosperity and progress, it also carried the unprecedented capacity for destruction, as demonstrated by the bombings of **Hiroshima and Nagasaki** in 1945.

The origins of the IAEA are deeply tied to U.S. President **Dwight D. Eisenhower's** famous **"Atoms for Peace"** speech, delivered before the **United Nations General Assembly** on **8 December 1953**. In this address, Eisenhower proposed that the world should channel nuclear technology toward peaceful purposes such as energy production, medicine, and agriculture, and that an international body should be established to supervise and encourage this cooperation. His vision laid the intellectual foundation for what would become the IAEA. (Source: *United Nations Archives, Eisenhower "Atoms for Peace" Address, 1953; iaea.org*)

Negotiations over the following years led to the drafting of the **Statute of the IAEA**, which entered into force in 1957. This Statute clearly defined the Agency's objectives:

1. To promote the peaceful use of atomic energy,
2. To ensure that nuclear materials are not used for military purposes, and
3. To encourage the exchange of scientific and technical knowledge among nations.

   The Statute also established the IAEA's dual relationship with the United Nations — it operates independently but reports annually to the **UN General Assembly** and, when necessary, to the **UN**

Security Council on matters related to nuclear safeguards. (Source: *Statute of the IAEA, Articles II–XVI, iaea.org/statute.pdf*)

During the 1960s and 1970s, the IAEA became a cornerstone of the emerging **global non-proliferation regime**, especially after the adoption of the **Treaty on the Non-Proliferation of Nuclear Weapons (NPT)** in 1968. Under the NPT, the Agency was assigned a crucial role in verifying that non-nuclear-weapon states were not diverting nuclear materials for weapons purposes — a function carried out through its **safeguards inspections system**.

Beyond verification, the IAEA expanded its **technical cooperation programs**, offering developing countries assistance in nuclear medicine, agriculture, and energy management. It also became a key international platform for developing **nuclear safety standards**, responding to accidents such as **Chernobyl (1986)** and **Fukushima (2011)** by strengthening global safety frameworks. (Source: *IAEA Technical Cooperation Programme History, iaea.org*)

The Agency's diplomatic and technical engagement has often placed it at the center of sensitive international issues. It has overseen inspections and negotiations involving **Iran's nuclear program**, **Iraq in the 1990s**, and **North Korea's withdrawal from the NPT**. In recognition of its "efforts to prevent nuclear energy from being used for military purposes and to ensure that nuclear energy for peaceful purposes is used in the safest possible way," the IAEA and its Director-General **Mohamed ElBaradei** were jointly awarded the **2005 Nobel Peace Prize**. (Source: *NobelPrize.org, Nobel Peace Prize 2005 Citation*)

Today, the IAEA stands as the world's central intergovernmental forum for scientific and technical cooperation in the nuclear field. It continues to balance its dual mission: **to advance nuclear science and technology for sustainable development while ensuring that these same technologies do not contribute to the spread of nuclear weapons.**Through its safeguards, safety, and security frameworks, the Agency plays an indispensable role in promoting both **global peace and technological progress**.

b. Scope

The **International Atomic Energy Agency (IAEA)** operates within a unique and multifaceted scope that blends **science, diplomacy, and international law**. It serves simultaneously as a **technical agency**, a **watchdog for global security**, and a **platform for international cooperation** on nuclear issues. According to its Statute, the IAEA's mission is to "accelerate and enlarge the contribution of atomic energy to peace, health, and prosperity throughout the world" while ensuring that its assistance is not used to further any military purpose. (*Statute of the IAEA, Article II, iaea.org/statute.pdf*)

This dual nature — **promoting peaceful uses while preventing proliferation** — makes the IAEA one of the most complex institutions within the United Nations system. Its scope extends across **three core pillars** that define all of its operations:

1. Safeguards and Verification

The IAEA is entrusted with implementing a comprehensive system of **safeguards** to verify that nuclear materials and technologies in member states are used solely for peaceful purposes. This verification process includes **on-site inspections**, **remote monitoring systems**, **environmental sampling**, and **satellite imagery analysis**. These activities ensure compliance with the **Non-Proliferation Treaty (NPT)** and other international agreements.

The Agency conducts safeguards under more than **180 agreements** worldwide, covering over **1,400 nuclear facilities**. Inspectors verify nuclear material inventories, review operational data, and ensure that declared nuclear material has not been diverted for weapons use. (Source: *IAEA Safeguards Overview, iaea.org/safeguards*)

Beyond traditional verification, the IAEA has expanded its tools through the **Additional Protocol**, which allows for broader access to information and sites, enhancing transparency and building international confidence. The safeguards system not only helps prevent proliferation but also **supports trust and stability in international relations**, as nations can base policy decisions on verified facts rather than speculation.

2. Nuclear Safety and Security

Another essential pillar of the IAEA's mandate is ensuring the **safety and security** of nuclear facilities and materials. The Agency develops and promotes a set of **international safety standards** that address the design, construction, and operation of nuclear reactors; the handling and transport of radioactive materials; and emergency preparedness and response.

The **Chernobyl (1986)** and **Fukushima (2011)** accidents highlighted the global consequences of nuclear incidents, leading to the strengthening of the IAEA's **Incident and Emergency Centre** and the creation of the **Convention on Nuclear Safety** (1994). (Source: *IAEA Convention on Nuclear Safety, iaea.org*)

In addition to safety, **nuclear security** has become increasingly important in the post-9/11 era. The IAEA assists member states in protecting nuclear facilities and materials against theft, sabotage, and terrorism through specialized guidance documents such as the **Nuclear Security Series**, training programs, and advisory missions. The combination of safety and security aims to ensure that nuclear technologies contribute to human development without endangering people or the environment.

3. Science, Technology, and Technical Cooperation

While safeguards and safety mechanisms form the regulatory side of its mission, the IAEA is equally a **scientific and development-oriented organization**. Through its **Technical Cooperation Programme (TCP)**, the Agency provides financial, technical, and educational support to developing countries seeking to harness nuclear technology for peaceful purposes.

Applications include **nuclear medicine and radiotherapy**, **agricultural improvements through mutation breeding**, **water resource management via isotope hydrology**, and **industrial innovations using radiation techniques**. (Source: *IAEA Technical Cooperation Programme History, iaea.org/services/technical-cooperation-programme/history*)

For many developing nations, the IAEA acts as a gateway to sustainable progress allowing them to access nuclear knowledge and build capacity under safe, internationally monitored conditions. In this way, the Agency bridges the gap between advanced and developing economies, promoting global equality in science and innovation.

The IAEA's Institutional Reach

The IAEA currently has **178 Member States**, making it one of the largest technical agencies within the UN system. Its headquarters are located in **Vienna, Austria**, with regional offices in **Toronto, Tokyo, and Geneva**.

Within the UN framework, the IAEA reports **annually to the General Assembly** and, when necessary, to the **Security Council** — especially when cases of non-compliance or proliferation concerns arise. This reporting structure gives the Agency both a **technical** and a **political** role: it provides scientific expertise while serving as an impartial mediator in sensitive nuclear matters.

The Agency also collaborates closely with other international organizations, such as the **World Health Organization (WHO)**, the **Food and Agriculture Organization (FAO)**, and the **Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)**, to ensure the peaceful use of nuclear technologies across sectors.

A Dynamic and Evolving Mandate

Over the decades, the IAEA's scope has evolved in response to global challenges. From addressing **climate change through low-carbon energy solutions** to responding to **public health crises** with nuclear medicine technologies, the Agency's activities have expanded far beyond the initial Cold War context in which it was founded.

In the 21st century, the IAEA's role in the **United Nations Sustainable Development Goals (SDGs)** particularly Goals **7 (Affordable and Clean Energy)**, **13 (Climate Action)**, and **3 (Good Health and Well-Being)** has become central. Its initiatives demonstrate that nuclear science, when responsibly managed, can be a cornerstone of **sustainable global development**. (Source: *IAEA and the SDGs, iaea.org/topics/sustainable-development-goals*)

In summary, the IAEA's scope is both technical and political, preventive and promotional. It strives to ensure that **the power of the atom serves humanity, not harms it** — a delicate balance that defines the Agency's continuing mission.

c. Members

The **International Atomic Energy Agency (IAEA)** is one of the most globally representative technical organizations within the United Nations system, currently comprising **178 Member States** (as of 2025). Membership is open to any state that is a **member of the United Nations or one of its specialized agencies**, as well as to any state that the **IAEA General Conference** decides to admit by a **two-thirds majority vote**. (Source: *IAEA Membership Overview, iaea.org/about/governance/general-conference/members*)

This broad membership reflects the universal importance of nuclear technology and the shared responsibility of all nations to ensure its safe and peaceful application. The diversity of the IAEA's members — ranging from major nuclear powers to small developing countries — gives the Agency a unique platform where scientific cooperation and political dialogue intersect.

1. Structure of Membership

IAEA Member States participate in two main policymaking bodies:

- the **General Conference**, which is the plenary body of all members; and
- the **Board of Governors**, which functions as the executive organ responsible for more frequent decision-making and oversight.

This dual structure allows both **inclusivity** and **efficiency**: the General Conference provides a democratic forum for all states, while the Board ensures the day-to-day governance and operational supervision of the Agency's work.

2. The General Conference

The **General Conference** is the IAEA's highest policy-making organ. It consists of representatives from all Member States and convenes **annually at the Agency's headquarters in Vienna**.

The General Conference:

- Approves the IAEA's budget and major policy directions;
- Elects members to the **Board of Governors**;

- Considers and adopts resolutions related to nuclear safety, safeguards, and technical cooperation; and
- Discusses reports submitted by the **Director General** and the **Board of Governors**.

Each Member State has **one vote**, and most decisions are made by **simple majority**, although certain matters, such as the admission of new members or amendments to the Statute, require a **two-thirds majority**. (Source: *Statute of the IAEA, Articles V–VI*)

In practice, the General Conference also serves as an annual diplomatic gathering where countries present their national progress, express policy positions on non-proliferation and energy, and engage in bilateral and multilateral discussions under the umbrella of the IAEA.

3. The Board of Governors

The **Board of Governors** acts as the executive arm of the IAEA. It meets **five times a year** and is responsible for directing the Agency's activities between General Conferences. The Board comprises **35 Member States**, selected according to a formula that ensures both **technological representation** and **geographical balance**.

- **13 members** are designated by the outgoing Board based on their "advancement in the technology of atomic energy."
- **22 members** are elected by the General Conference to represent different geographical areas, ensuring equitable participation of both developed and developing nations.

The Board's key functions include:

- Approving safeguards agreements and technical cooperation projects;
- Making recommendations on policy and budget to the General Conference;
- Appointing the **Director General**, subject to approval by the General Conference; and
- Reporting to both the **United Nations General Assembly** and the **Security Council** on matters of non-compliance or security concern.

This structure allows the Board to act as both a **technical steering committee** and a **political mediator**, striking a balance between scientific objectivity and diplomatic negotiation. (Source: *IAEA Board of Governors Overview, iaea.org/about/governance/board-of-governors*)

4. The Secretariat

The **Secretariat**, headed by the **Director General**, carries out the day-to-day administrative and operational work of the IAEA. It includes scientists, engineers, legal experts, and diplomats from over **100 nationalities**, reflecting the global nature of the Agency's mission.

The Director General is appointed for a **four-year renewable term**. As of 2025, the position is held by **Rafael Mariano Grossi** of Argentina. Under his leadership, the Secretariat coordinates over 2,500 staff members working in various technical departments, including:

- **Safeguards**,
- **Nuclear Energy**,
- **Nuclear Safety and Security**,
- **Technical Cooperation**, and
- **Nuclear Sciences and Applications**.

The Secretariat ensures that the Agency's activities are implemented effectively and transparently, in accordance with both the IAEA Statute and international law. It also supports emergency response missions, publishes scientific reports, and provides expertise to member states seeking guidance in nuclear policy development. (Source: *IAEA Secretariat Overview, iaea.org/about/organizational-structure/secretariat*)

5. Observers and Partnerships

Beyond its 178 Member States, the IAEA also cooperates with numerous **observer entities** and **international organizations**, including:

- The **United Nations**, **World Health Organization (WHO)**, and **Food and Agriculture Organization (FAO)**;
- Regional groups such as the **European Union (EU)** and **African Union (AU)**;
- Specialized agencies like the **Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)** and **OECD Nuclear Energy Agency (NEA)**.

These partnerships allow the IAEA to integrate nuclear science into broader fields of global governance — such as **public health**, **food security**, and **climate change mitigation**.

6. Balancing Equality and Expertise

One of the Agency's enduring challenges is balancing the **equal sovereignty of its members** with the **technical asymmetries** that exist between nuclear-advanced and nuclear-developing states. Wealthier countries often possess advanced technology and infrastructure, while others rely heavily on the IAEA for guidance and assistance.

To address this, the Agency promotes a **spirit of mutual assistance and non-discrimination**: all states are equal under the IAEA Statute, yet the Agency acknowledges the need for differentiated support based on capability and need. This principle ensures that access to peaceful nuclear benefits remains a **universal right**, not a privilege limited to a few nations.

In essence, the IAEA's membership structure mirrors its mission: it is both **inclusive and selective**, combining universal participation with specialized expertise. Through its General Conference, Board of Governors, and Secretariat, the Agency ensures that every nation — regardless of its level of nuclear development — has a voice in shaping the peaceful and secure future of atomic energy.

D. Mandates and Functions

The International Atomic Energy Agency (IAEA) operates under the guiding principle **"Atoms for Peace and Development"**, reflecting its dual mission of promoting the benefits of nuclear technology while preventing its misuse. As the USG of the IAEA committee, it is important to understand the scope and depth of the Agency's mandates and functions, which can be broadly categorized as follows:

1. **Promotion of Peaceful Uses of Nuclear Energy**
    - The IAEA supports member states in harnessing nuclear energy for civilian purposes such as power generation, medical applications, agriculture, water management, and industrial development.
    - It provides guidance, technical expertise, and standardized practices to ensure that nuclear technologies are applied safely, efficiently, and sustainably.

    - Programs include supporting research reactors, advancing nuclear medicine, and helping countries establish nuclear infrastructure.
2. **Nuclear Safeguards and Non-Proliferation**
    - One of the IAEA's core responsibilities is to **prevent the spread of nuclear weapons**. This is achieved through its comprehensive safeguards system, which involves:
        - Monitoring nuclear materials to ensure they are not diverted to weapons programs.
        - Conducting inspections, audits, and verification measures in member states.
        - Reporting findings to the UN and relevant stakeholders.
    - These efforts help maintain international trust and transparency regarding the use of nuclear technology.
3. **Nuclear Safety and Security**
    - The IAEA sets global standards and provides guidance for the safe operation of nuclear facilities, ensuring protection against accidents, radiation exposure, and environmental hazards.
    - It assists member states in building robust emergency preparedness systems and response protocols.
    - Security mandates include protecting nuclear materials from theft, sabotage, or terrorism, ensuring that nuclear technologies do not become a global security threat.
4. **Technical Cooperation and Capacity-Building**
    - The IAEA actively engages in **technical cooperation programs** to strengthen the capabilities of member states.
    - Activities include training scientists, engineers, and regulatory personnel; providing access to nuclear technologies; and facilitating research collaboration between countries.
    - This function ensures that both developed and developing nations can safely benefit from nuclear science and technology.
5. **Support for International Treaties and Global Norms**

- The Agency assists member states in implementing and complying with international treaties such as the **Non-Proliferation Treaty (NPT)** and the **Comprehensive Nuclear-Test-Ban Treaty (CTBT)**.
- It plays a key advisory role in shaping global norms on nuclear safety, non-proliferation, and disarmament.
- Through its reports, recommendations, and policy guidance, the IAEA fosters multilateral cooperation and diplomatic dialogue around nuclear governance.

6. **Advisory and Research Functions**
   - Beyond its operational roles, the IAEA conducts research on emerging nuclear technologies, energy sustainability, and nuclear policy.
   - It serves as an **expert advisory body** for governments, the UN, and other international organizations, helping shape nuclear strategy, environmental policy, and scientific development.

In summary, the IAEA is not just a regulatory body—it is a multifaceted organization that balances technological advancement with global security, fostering cooperation among states while safeguarding humanity from the dangers of nuclear proliferation.

2. Introduction to the Agenda Item

The question of **how to balance the peaceful use of nuclear energy with the prevention of nuclear weapons proliferation** lies at the very heart of the International Atomic Energy Agency's mission. Since the dawn of the atomic age, the world has faced a paradox: the same scientific discoveries that allow humanity to harness the atom for electricity, medicine, and agriculture can also enable the creation of weapons of mass destruction.

This duality often referred to as the **"nuclear dilemma"** has defined global security and international cooperation for more than seven decades. Today, as nations seek sustainable and low-carbon energy sources to combat climate change, nuclear power is once again being promoted as part of the global energy transition. Yet, this renewed interest has revived fundamental questions: **Can nuclear energy be safely expanded without increasing the risk of proliferation?** And how can the international community ensure that the pursuit of peaceful nuclear technology does not inadvertently fuel the spread of nuclear weapons?

a. Key Terms and Definitions

Before analyzing the agenda item in depth, it is essential to clarify several key concepts frequently used in this debate:

- **Peaceful Use of Nuclear Energy:** The application of nuclear science and technology for non-military purposes, such as electricity generation, medical imaging and treatment, food preservation, and agricultural research. This principle is enshrined in **Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)**, which recognizes the "inalienable right" of all states to develop nuclear energy for peaceful purposes under appropriate safeguards.
- **Nuclear Proliferation:** The spread of nuclear weapons, weapons-usable materials, and related technology to states that do not currently possess them. "Horizontal proliferation" refers to

the increase in the number of nuclear-armed states, while “vertical proliferation” refers to the expansion or modernization of existing arsenals.

- **Safeguards:** Verification measures implemented by the IAEA to ensure that nuclear material is not diverted from peaceful uses to weapons programs. Safeguards include inspections, remote monitoring, and analysis of nuclear material flows.
- **Nuclear Fuel Cycle:** The series of industrial processes involved in producing nuclear power — from uranium mining and enrichment to fuel fabrication and waste management. Some steps in the fuel cycle, such as enrichment and reprocessing, are particularly sensitive because they can produce materials usable in weapons.
- **Non-Proliferation Regime:** The network of treaties, agreements, and institutions (including the NPT, IAEA, and Nuclear Suppliers Group) that aim to prevent the spread of nuclear weapons while promoting peaceful nuclear cooperation.
- **Global Energy Crisis:** The ongoing challenge of meeting rising global energy demand while reducing carbon emissions, maintaining affordability, and ensuring energy security. Nuclear power, as a low-carbon energy source, is often presented as part of the solution.

b. Historical Background

The roots of the current debate stretch back to the **post–World War II era**, when the discovery of nuclear fission revolutionized both science and international politics. In 1945, the atomic bombings of Hiroshima and Nagasaki demonstrated the unprecedented destructive capacity of nuclear energy. In the aftermath, global leaders faced an urgent choice: to either ban nuclear technology entirely or to find a framework that could enable its peaceful use while preventing its misuse.

In 1946, the **United Nations Atomic Energy Commission (UNAEC)** was established to address these concerns, but Cold War rivalries between the United States and the Soviet Union quickly undermined progress. The superpower competition triggered an **arms race**, as both nations sought nuclear dominance, and by the early 1960s, multiple

countries — including the United Kingdom, France, and China — had developed nuclear weapons.

Recognizing the growing risks of proliferation, the international community sought to create a binding legal framework. This effort culminated in the **Treaty on the Non-Proliferation of Nuclear Weapons (NPT)**, adopted in 1968 and entering into force in 1970. The NPT rests on **three pillars**:

1. **Non-proliferation:** preventing the spread of nuclear weapons;
2. **Disarmament:** pursuing the eventual elimination of existing arsenals; and
3. **Peaceful use of nuclear energy:** guaranteeing states the right to access nuclear technology for peaceful purposes.

The IAEA was designated as the **verification body** of the treaty, responsible for ensuring that civilian nuclear programs do not serve military objectives.

Throughout the Cold War, the IAEA played a vital role in monitoring compliance, though challenges persisted — including **India's 1974 nuclear test**, which demonstrated that civilian nuclear technology could be diverted to weapons use. This event led to the creation of the **Nuclear Suppliers Group (NSG)**, a coalition of states that coordinate export controls to prevent the transfer of sensitive materials and technologies.

c. Peaceful Use vs. Proliferation Risks

The peaceful use of nuclear energy has been promoted as a driver of **technological advancement, economic growth, and energy independence**, especially for developing nations seeking to diversify their energy mix. However, nuclear energy's inherent link to weapons technology makes it one of the most tightly regulated areas of international relations.

Civilian nuclear programs require **uranium enrichment** and **spent fuel reprocessing**, processes that can yield fissile materials like

uranium-235 or plutonium-239 — the same elements used in nuclear weapons. This **technological overlap** between civilian and military applications fuels the proliferation debate.

Supporters of nuclear energy argue that denying access to peaceful nuclear technology violates the **sovereign rights of states** and deepens global inequality, as only a handful of countries currently dominate nuclear energy markets. On the other hand, proliferation concerns have grown due to **non-compliance cases** — notably Iran's undeclared enrichment activities and North Korea's withdrawal from the NPT in 2003 — which highlight how civilian nuclear programs can serve as cover for weapons development.

The IAEA safeguards system is designed precisely to manage this balance, allowing states to pursue peaceful nuclear energy under transparent conditions while ensuring that any deviation is promptly detected and reported to the **UN Security Council**.

d. Nuclear Energy and the Global Energy Crisis

In the 21st century, the context of the nuclear debate has shifted. The **global energy crisis**, fueled by population growth, industrialization, and the need to decarbonize energy systems, has revived interest in nuclear power. As a **low-carbon, high-output energy source**, nuclear power offers an alternative to fossil fuels, helping countries reduce greenhouse gas emissions and meet their **Sustainable Development Goals (SDGs)** — particularly **Goal 7 (Affordable and Clean Energy)** and **Goal 13 (Climate Action)**.

Countries such as **France, Japan, South Korea, and China** have made nuclear power a cornerstone of their energy strategies. Meanwhile, developing nations — including **Turkey, Egypt, and the United Arab Emirates** — have launched new nuclear programs to enhance energy security and economic growth.

However, expansion of nuclear energy also raises **new security, safety, and environmental challenges**. The construction of additional nuclear reactors increases the volume of fissile material in circulation, amplifying

the risk of theft or diversion. Furthermore, **nuclear waste disposal**, **accident preparedness**, and **reactor decommissioning** remain long-term challenges that require international coordination.

The IAEA's role is therefore not limited to preventing proliferation; it also involves **helping countries build safe, sustainable nuclear infrastructure**, ensuring that technological progress does not compromise security.

e. The Current Debate

At the core of this agenda lies a fundamental question of **trust and balance**. States insist on their right to develop nuclear energy under the NPT, yet the same treaty obliges them to accept IAEA safeguards and uphold non-proliferation obligations. In practice, tensions arise between **national sovereignty** and **collective security**.

For instance, developing countries often argue that excessive export controls or political conditions imposed by nuclear supplier states restrict their access to technology. Meanwhile, nuclear-weapon states emphasize the importance of strict verification and transparency to prevent misuse.

This debate reflects a broader philosophical divide:

- Should nuclear technology be treated as a **universal right**, available to all under fair conditions?
- Or as a **controlled privilege**, restricted to nations that have proven their compliance and responsibility?

As the world transitions toward sustainable energy, finding equilibrium between these two positions remains one of the greatest diplomatic and ethical challenges of the 21st century.

3. International Frameworks and Conventions

The global nuclear order is built upon a web of **international treaties, conventions, and mechanisms** that regulate the use of nuclear technology. These frameworks establish the legal foundations for the **peaceful use of atomic energy**, the **prevention of nuclear weapons proliferation**, and the **promotion of nuclear safety and security**.

Together, they form what is often referred to as the **"international non-proliferation regime."** At its core stands the **IAEA**, acting as both the technical authority and the verifying body that ensures states comply with their obligations.

Below are the key instruments shaping this regime and their relevance to the current agenda item.

a. The Statute of the IAEA (1957)

The **Statute of the International Atomic Energy Agency**, adopted on **23 October 1956** and entering into force on **29 July 1957**, serves as the IAEA's constitutional document. It defines the Agency's objectives, organizational structure, and relationship with the United Nations.

According to **Article II**, the IAEA's objective is:

> "To accelerate and enlarge the contribution of atomic energy to peace, health, and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose."

This article captures the delicate duality of the IAEA's mandate — promoting development while preventing militarization. Under **Article III**, the Agency is authorized to establish safeguards to verify that nuclear materials and equipment are used exclusively for peaceful purposes.

The Statute also formalizes the IAEA's role as a **reporting body** to both the **United Nations General Assembly** and the **Security Council**, particularly in cases involving potential non-compliance or violations of safeguards. This integration ensures that the IAEA's technical authority operates within the broader political framework of the UN system. (Source: *Statute of the IAEA, iaea.org/statute.pdf*)

b. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT, 1968)

The **Treaty on the Non-Proliferation of Nuclear Weapons (NPT)**, which entered into force in **1970**, remains the **cornerstone of the global non-proliferation regime**. It is based on a delicate balance between three interrelated pillars:

1. **Non-proliferation** — preventing the spread of nuclear weapons;
2. **Disarmament** — committing to pursue negotiations toward the elimination of existing arsenals; and
3. **Peaceful use of nuclear energy** — ensuring access to nuclear technology for non-military purposes.

Under **Article I**, nuclear-weapon states (NWS) agree not to transfer nuclear weapons or related technology to non-nuclear-weapon states (NNWS). **Article II** obliges NNWS not to seek or acquire such weapons. **Article III** mandates NNWS to accept **IAEA safeguards** on all nuclear materials to verify compliance.

At the same time, **Article IV** guarantees the "inalienable right" of all parties to develop nuclear energy for peaceful purposes, emphasizing that this right must be exercised "in conformity with Articles I and II." This conditional right lies at the center of the current debate — balancing development and security.

The NPT enjoys near-universal membership, with 191 states parties. However, notable exceptions — **India, Pakistan, and Israel** — never joined the treaty and developed nuclear weapons outside its framework, while **North Korea**withdrew in 2003. These cases continue to challenge the universality and credibility of the regime.

(Source: *United Nations Office for Disarmament Affairs, NPT Overview, un.org/disarmament/wmd/nuclear/npt*)

c. The Comprehensive Nuclear-Test-Ban Treaty (CTBT, 1996)

The **Comprehensive Nuclear-Test-Ban Treaty (CTBT)** prohibits "any nuclear weapon test explosion or any other nuclear explosion" in all environments. Adopted by the **UN General Assembly** in **1996**, it aims to halt the qualitative development and modernization of nuclear weapons.

The **CTBTO Preparatory Commission**, based in Vienna, works closely with the IAEA and operates an extensive **International Monitoring System (IMS)** — a global network of seismic, hydroacoustic, infrasound, and radionuclide sensors designed to detect any nuclear explosion worldwide.

Although the treaty has been signed by 187 countries and ratified by 178, it has not yet entered into force because several key states — including **the United States, China, Egypt, Iran, Israel, and North Korea** — have not ratified it. Nonetheless, the **norm against nuclear testing** has become one of the strongest elements of the non-proliferation regime, reinforcing the global commitment to limit the spread and improvement of nuclear weapons.
(Source: *Comprehensive Nuclear-Test-Ban Treaty Organization, ctbt.org*)

d. The Treaty on the Prohibition of Nuclear Weapons (TPNW, 2017)

The **Treaty on the Prohibition of Nuclear Weapons (TPNW)**, also known as the **Ban Treaty**, represents the most recent and ambitious effort to achieve total nuclear disarmament. It was adopted in **2017** and entered into force in **2021**.

The TPNW prohibits its parties from developing, testing, producing, acquiring, possessing, or using nuclear weapons. It also bans assistance or encouragement of any such activities. In addition, the treaty calls for

the elimination of existing arsenals and provides mechanisms for environmental remediation and victim assistance.

However, none of the five recognized nuclear-weapon states under the NPT — **the United States, Russia, China, France, and the United Kingdom** — have joined the treaty, arguing that it does not adequately address current security realities. Nevertheless, the TPNW reflects a **growing humanitarian and ethical movement** to stigmatize nuclear weapons and promote disarmament as a moral imperative.
(Source: *United Nations Treaty Collection, TPNW, un.org/disarmament/wmd/nuclear/tpnw*)

e. The Nuclear Suppliers Group (NSG, 1975)

The **Nuclear Suppliers Group (NSG)** is a voluntary association of nuclear supplier countries that seek to prevent nuclear exports from contributing to weapons proliferation. It was formed in **1975**, largely in response to **India's 1974 nuclear test**, which demonstrated that civilian nuclear materials could be diverted for military use.

The NSG establishes **guidelines for nuclear exports**, requiring supplier states to ensure that transferred items are not misused and that recipient states are subject to IAEA safeguards. These guidelines cover both **nuclear materials** and **dual-use technologies** that could have military applications.

While not a treaty, the NSG has become an essential component of the global non-proliferation system by ensuring that nuclear commerce operates under strict control and transparency.
(Source: *Nuclear Suppliers Group Official Documents, nuclearsuppliersgroup.org*)

f. The Convention on Nuclear Safety (CNS, 1994)

The **Convention on Nuclear Safety (CNS)** was adopted in response to the **Chernobyl disaster** of 1986. It is the first legally binding international instrument to promote the safety of nuclear power plants.

Under the CNS, states commit to maintaining high standards of safety in the **design, construction, and operation** of nuclear facilities. They also agree to regular peer review meetings to evaluate national reports and share best practices.

The IAEA serves as the secretariat of the convention, ensuring transparency, accountability, and mutual learning among members. The CNS underscores that **nuclear safety is a collective responsibility** that transcends borders, as accidents in one country can have global consequences.
(Source: *Convention on Nuclear Safety, iaea.org*)

g. Regional and Complementary Agreements

Several regional initiatives complement the global frameworks by creating **nuclear-weapon-free zones (NWFZs)**. These include:

- The **Treaty of Tlatelolco (1967)** – Latin America and the Caribbean;
- The **Treaty of Rarotonga (1985)** – South Pacific;
- The **Treaty of Bangkok (1995)** – Southeast Asia;
- The **Treaty of Pelindaba (1996)** – Africa;
- The **Treaty of Semipalatinsk (2006)** – Central Asia.

These agreements prohibit the development, testing, or stationing of nuclear weapons within their respective regions, reinforcing the NPT's non-proliferation objectives while promoting regional peace and stability.

h. Collective Importance

Individually, each of these treaties addresses a specific dimension of nuclear governance — from non-proliferation and disarmament to safety and export control. Collectively, they form the **backbone of the**

international nuclear order, ensuring that the expansion of nuclear energy remains compatible with global peace and security.

The challenge, however, lies in their **uneven implementation** and the **political tensions** surrounding compliance, verification, and access to technology. For the IAEA, these frameworks provide both **authority and responsibility** — empowering it to act as the guardian of the atom in an increasingly complex world.

4. Case Studies

The global debate over nuclear energy and proliferation is not theoretical — it is shaped by the concrete experiences of individual states. Each nation's approach to nuclear policy reflects its **historical context, security environment, and energy needs**. The following case studies highlight how different countries have managed, or struggled to manage, the balance between the **right to peaceful nuclear energy** and the **obligation to prevent proliferation**.

a. The Islamic Republic of Iran

Iran's nuclear program is among the most controversial and heavily scrutinized in the world. Initiated in the **1950s under the U.S.-backed "Atoms for Peace" program**, it was originally designed for peaceful purposes, including medical research and power generation. After the **1979 Iranian Revolution**, international cooperation was suspended, and Iran began developing its nuclear capabilities independently, which raised suspicions about the possible military dimensions of its program.

The **International Atomic Energy Agency (IAEA)** became central to monitoring Iran's nuclear activities. Since the early 2000s, several IAEA reports identified **undeclared facilities and enrichment activities**, prompting concerns that Iran was violating its safeguards obligations under the **NPT**. This led to a prolonged standoff between Iran and the

international community, resulting in multiple **UN Security Council sanctions** between 2006 and 2010.

In 2015, after years of negotiations, Iran and the **P5+1 (China, France, Russia, the United Kingdom, the United States, and Germany)** reached the **Joint Comprehensive Plan of Action (JCPOA)**. The JCPOA imposed strict limits on Iran's enrichment capacity and stockpile of fissile material in exchange for the lifting of economic sanctions. The IAEA was tasked with continuous monitoring and verification.

However, following the **U.S. withdrawal from the JCPOA in 2018**, tensions reignited. Iran gradually reduced its compliance with the agreement, enriching uranium beyond permitted levels. The case of Iran demonstrates how **trust, transparency, and diplomacy** are essential for balancing sovereign energy rights with non-proliferation responsibilities. It also shows how **political instability and lack of mutual confidence** can erode even the most comprehensive verification frameworks.

b. The Democratic People's Republic of Korea (North Korea)

North Korea's nuclear program represents one of the greatest challenges to the global non-proliferation regime. Initially joining the **NPT in 1985**, North Korea agreed to accept IAEA safeguards but delayed full implementation. By the early 1990s, IAEA inspections revealed discrepancies in its declared nuclear material, suggesting covert weapons activities.

In 1994, the **Agreed Framework** between the United States and North Korea temporarily froze Pyongyang's plutonium production in exchange for economic aid and assistance in building light-water reactors. However, this agreement collapsed in 2002 after the United States accused North Korea of pursuing a secret uranium enrichment program.

In **2003**, North Korea officially **withdrew from the NPT**, expelling IAEA inspectors and resuming its weapons program. The country has since conducted multiple **nuclear tests (2006, 2009, 2013, 2016, 2017)** and developed missile systems capable of delivering nuclear warheads.

North Korea's case underscores the **limitations of the non-proliferation regime** when a state chooses to defy international norms. It raises questions about the **efficacy of verification mechanisms** and the ability of diplomatic frameworks — such as the Six-Party Talks — to ensure long-term compliance. For the IAEA, it highlights the challenge of balancing engagement with enforcement when faced with deliberate violations.

c. Japan

Japan's nuclear program stands as a model of peaceful and transparent nuclear development under strict international safeguards. As the **only nation to have suffered nuclear attacks**, Japan has a unique historical relationship with atomic energy, marked by a national commitment to non-proliferation and disarmament.

After World War II, Japan adopted a **pacifist constitution**, renouncing war and nuclear weapons. Nonetheless, driven by postwar energy needs and limited natural resources, it invested heavily in nuclear power beginning in the **1950s**, becoming one of the world's largest producers of civilian nuclear energy by the early 21st century.

Japan's nuclear activities operate under the **IAEA safeguards system** and a **bilateral agreement with the United States**that allows it to reprocess nuclear fuel under stringent conditions. Japan's advanced nuclear fuel cycle capabilities — including uranium enrichment and plutonium reprocessing — are carefully monitored to prevent proliferation risks.

The **Fukushima Daiichi accident in 2011**, however, transformed Japan's nuclear policy, leading to a temporary shutdown of all reactors and widespread public opposition to nuclear energy. In recent years, Japan has gradually restarted some reactors, emphasizing **safety, transparency, and carbon neutrality** as guiding principles.

Japan demonstrates that a technologically advanced state can maintain **nuclear capability without weaponization**, provided there is strong political will, institutional oversight, and international cooperation.

d. The French Republic

France is one of the **five recognized nuclear-weapon states** under the NPT but also one of the most successful examples of peaceful nuclear energy deployment. Nuclear power accounts for nearly **70% of France's electricity production**, making it a cornerstone of the country's **energy independence and low-carbon strategy**.

France's nuclear program began in the aftermath of World War II, driven by both strategic and economic motivations. The country developed nuclear weapons in the 1960s while simultaneously building a robust civilian energy sector. Unlike other nuclear-weapon states, France integrated both military and civilian nuclear industries under strong central control, ensuring clear institutional separation and oversight.

France's **Atomic Energy and Alternative Energies Commission (CEA)** and the **Electricité de France (EDF)** manage research, development, and operation of nuclear facilities. The **French Nuclear Safety Authority (ASN)** enforces rigorous safety standards, often cited as a model by other nations.

In international diplomacy, France advocates for **responsible nuclear energy expansion** and supports IAEA efforts to strengthen safeguards and transparency. Its experience highlights how **advanced infrastructure, transparency, and international engagement** can allow a nuclear-weapon state to lead in peaceful energy use while maintaining security commitments.

e. The Republic of Turkey

Turkey's nuclear ambitions are relatively recent but rapidly developing. For decades, Turkey relied heavily on imported fossil fuels, making energy diversification a strategic priority. In the early 2000s, Turkey initiated plans to introduce **civilian nuclear power** as part of its national energy policy.

The flagship project is the **Akkuyu Nuclear Power Plant**, built in cooperation with Russia's **Rosatom** under a "build-own-operate" model. The plant, once fully operational, is expected to meet around **10% of Turkey's electricity demand**and significantly reduce the country's carbon emissions.

Turkey is a **party to the NPT** and a member of the **IAEA**, maintaining a strong record of compliance. It has signed both **Comprehensive Safeguards Agreements** and an **Additional Protocol**, granting the IAEA broader inspection rights. This reflects Turkey's commitment to transparency and peaceful nuclear development.

However, Turkey's geographical proximity to unstable regions — including Iran and the Middle East — raises geopolitical concerns about **regional proliferation dynamics**. Additionally, reliance on foreign technology and expertise highlights the need for long-term capacity-building and independent regulation.

Turkey's case exemplifies the aspirations of **emerging nuclear states**: to achieve energy security and technological progress while adhering to international non-proliferation norms. It also showcases the IAEA's role in supporting safe nuclear newcomers through technical assistance and regulatory guidance.

f. Comparative Reflections

The experiences of Iran, North Korea, Japan, France, and Turkey reveal the diversity of nuclear trajectories across the world. They also demonstrate the **central role of the IAEA** as both an enabler and enforcer providing technical cooperation to peaceful users while verifying compliance and reporting violations.

Country	Status	Focus	Challenges
Iran	NPT Member	Civilian program under JCPOA	Political mistrust, sanctions

North Korea	Withdrawn from NPT	Military program	Isolation, non-compliance
Japan	NPT Member	Peaceful nuclear power	Safety concerns post-Fukushima
France	NPT Nuclear State	Civilian & military programs	Waste management, aging reactors
Turkey	NPT Member	Emerging civilian program	Dependence on foreign expertise

Each of these cases highlights a different dimension of the agenda:

- the **rights of states** to pursue peaceful nuclear energy,
- the **risks of diversion and proliferation**, and
- the **need for international trust and cooperation**.

Ultimately, these examples demonstrate that **the future of nuclear governance depends not only on treaties and safeguards but also on political will, mutual confidence, and global solidarity.**

Would you like me to continue with the **"Role of the IAEA"** section next?
That one will explain *exactly* how the Agency enforces safeguards, assists member states, and mediates in conflicts making it perfect for your delegates to understand what they can (and cannot) propose in resolutions.

5. Current Global Developments

a. The Russia–Ukraine Conflict and Nuclear Security

The ongoing war in Ukraine has raised serious concerns about **the security of nuclear facilities in conflict zones**. The **Zaporizhzhia Nuclear Power Plant**, Europe's largest, has been occupied by Russian forces since 2022.
Frequent shelling around the site has led to repeated **IAEA missions**

and **emergency inspections**, highlighting the unprecedented risks of military action near nuclear reactors.
Director General **Rafael Grossi** has repeatedly urged both sides to establish a **"nuclear safety and security protection zone"** around the facility. This conflict underscores the IAEA's dual role as both a technical body and a mediator in crisis situations.

b. The Israel–Palestine Tensions and Regional Non-Proliferation

The renewed violence in the Middle East has reignited debate over the **absence of a regional nuclear-weapon-free zone**.
While Israel maintains its policy of nuclear ambiguity, neighboring states have called for **universal adherence to the NPT** and **IAEA safeguards**.
The crisis demonstrates the deep connection between **regional instability and nuclear security**, as mistrust discourages disarmament efforts.
Delegates should consider whether renewed diplomatic initiatives — possibly under IAEA auspices — could revive the long-stalled **MENWFZ negotiations**.

c. The Global Shift Toward Nuclear Energy

Amid growing concerns over **climate change and energy shortages**, many nations are revisiting nuclear power as a sustainable alternative.
Countries like **France, South Korea, and the UAE** are expanding nuclear capacity, while **Germany and Japan** are reconsidering previous phase-out policies.
The IAEA reports a surge of interest from **over 30 newcomer countries**, signaling a potential **"nuclear renaissance."**
This shift emphasizes the need for updated **global safety standards, technology-sharing frameworks, and waste management systems**, making this agenda more relevant than ever for EKMUN'25 delegates.

6. The Role of the IAEA

The **International Atomic Energy Agency (IAEA)** serves as the world's principal institution for promoting the peaceful use of nuclear technology and preventing its misuse. Its role lies at the intersection of **science, international law, and diplomacy**, allowing it to combine technical verification with political negotiation.

As both a **scientific authority** and a **guardian of international security**, the IAEA operates through three interconnected functions: **verification**, **assistance**, and **norm-building**. Together, these pillars enable the Agency to fulfill its mission under the motto *"Atoms for Peace and Development."*

a. Safeguards and Verification

The **safeguards system** is the cornerstone of the IAEA's mandate. It ensures that states' nuclear materials and activities are not diverted from peaceful purposes to military use. Safeguards are implemented through **inspections, monitoring, and evaluation**, forming the technical backbone of the global non-proliferation regime.

Under **Article III of the NPT**, non-nuclear-weapon states (NNWS) are required to conclude **Comprehensive Safeguards Agreements (CSAs)** with the IAEA. These agreements allow inspectors to verify that all declared nuclear material remains in peaceful use.

In addition, many countries have signed the **Additional Protocol (AP)**, which provides the IAEA with expanded access to information, sites, and facilities — allowing it to detect undeclared nuclear activities. As of 2025, over **140 states** have Additional Protocols in force.

IAEA inspectors conduct **hundreds of on-site visits** each year, using technologies such as **environmental sampling, satellite imagery, surveillance cameras, and seals** to monitor compliance. The results are compiled into **Safeguards Implementation Reports (SIRs)**, which are presented annually to the **Board of Governors**.

If evidence of non-compliance is found, the Agency can report the case to the **UN Security Council**, as it did with **Iran (2006)** and **North Korea (1993, 2003)**. These mechanisms ensure that the IAEA not only monitors but also enforces adherence to international norms.

> “Safeguards are not instruments of trust — they are instruments that make trust possible.”
> — *Rafael Mariano Grossi, IAEA Director General (2021)*

b. Technical Cooperation and Capacity-Building

Beyond verification, the IAEA plays a vital developmental role by helping countries use nuclear science for **health, energy, food, and environmental management**. Through its **Technical Cooperation Programme (TCP)**, the Agency provides financial and expert assistance to member states — particularly developing nations — so they can harness nuclear technology safely and effectively.

The TCP operates under three main goals:

1. **Promote sustainable development** through nuclear applications;
2. **Build national capacities** in safety, regulation, and human resources;
3. **Facilitate technology transfer** under strict non-proliferation conditions.

Examples of IAEA-supported initiatives include:

- **Nuclear Medicine and Radiotherapy:** Providing cancer diagnosis and treatment technologies in low-income countries through the *Rays of Hope* initiative.
- **Isotope Hydrology:** Helping states manage scarce water resources by tracing groundwater and pollution patterns.
- **Agricultural Innovation:** Using radiation-induced mutation breeding to develop drought-resistant crops and improve food security.
- **Energy Planning:** Advising governments on sustainable nuclear energy strategies, including feasibility studies for first-time nuclear programs (as in Turkey and Egypt).

Through these programs, the IAEA acts as a **bridge between science and development**, ensuring that access to nuclear technology remains a **right shared by all nations**, not just those with advanced infrastructure.

c. Nuclear Safety and Security

Another critical pillar of the IAEA's mandate is ensuring that nuclear technologies are used safely and securely. The Agency develops international **Safety Standards** and **Security Guidelines**, which serve as global benchmarks for the operation of nuclear facilities.

These standards cover a wide range of issues, including:

- The **design and construction** of nuclear reactors,
- **Waste management** and disposal,
- **Radiation protection** for workers and the public,
- **Emergency preparedness** and accident response, and
- **Physical protection** of nuclear materials and facilities against theft or sabotage.

Following the **Chernobyl (1986)** and **Fukushima (2011)** disasters, the IAEA strengthened its regulatory frameworks through instruments such as the **Convention on Nuclear Safety (CNS)** and the **Joint Convention on the Safety of Spent Fuel Management (1997)**.

In recent years, **nuclear security** — preventing the theft, smuggling, or misuse of nuclear materials — has become a major focus. The IAEA provides training, conducts **Integrated Nuclear Security Support Plans (INSSPs)**, and facilitates international cooperation to prevent nuclear terrorism.

> The Agency's safety and security work underscores the principle that **nuclear energy can only serve humanity if it never harms humanity**.

d. Research, Innovation, and Data Sharing

The IAEA also functions as a global hub for **scientific research and knowledge exchange**. It operates or supports numerous research facilities, including the **IAEA Laboratories in Seibersdorf (Austria)**, **Monaco**, and **Vienna**, where scientists collaborate on topics ranging from radiation medicine to nuclear agriculture.

Through programs like the **Coordinated Research Activities (CRA)** and the **International Centre for Theoretical Physics (ICTP)**

partnership, the IAEA encourages innovation and international scientific collaboration. These platforms enable developing countries to access the latest technologies and data, helping them close the knowledge gap in nuclear science.

The Agency's databases — such as the **Power Reactor Information System (PRIS)** and the **Nuclear Data Services (NDS)** — provide transparent, reliable information about global nuclear operations. This transparency fosters **trust and accountability** in international cooperation.

e. Mediation and Crisis Management

The IAEA's role extends beyond technical oversight; it often acts as a **neutral mediator in international disputes**. Because it combines scientific expertise with political legitimacy, the Agency has frequently been called upon to de-escalate crises involving nuclear programs.

- In **Iran**, the IAEA facilitated verification and dialogue leading to the **JCPOA (2015)**.
- In **Iraq**, following the Gulf War, the IAEA's inspections helped dismantle the country's clandestine weapons program.
- In **Ukraine (2022–present)**, the IAEA has deployed teams to protect nuclear facilities such as **Zaporizhzhia**, emphasizing its humanitarian mission to prevent accidents during armed conflict.

Such interventions demonstrate that the IAEA functions as a **diplomatic actor**, not merely a technical body. Its credibility rests on impartiality, professionalism, and the global consensus that it acts "in the service of peace."

f. Cooperation with the United Nations and Other Organizations

The IAEA is formally linked to the **United Nations** through a special relationship agreement concluded in 1957. The Agency reports annually to the **UN General Assembly** and refers cases of non-compliance to the **UN Security Council**when necessary.

It also works in close partnership with other UN agencies, including:

- The **World Health Organization (WHO)** — on radiological medicine and public health;
- The **Food and Agriculture Organization (FAO)** — on nuclear agriculture and food preservation;
- The **World Meteorological Organization (WMO)** — on environmental monitoring and climate studies;
- The **Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)** — on monitoring nuclear explosions.

These partnerships allow the IAEA to integrate nuclear science into global initiatives such as the **Sustainable Development Goals (SDGs)** and **climate change mitigation strategies**.

g. The IAEA as a Balancing Institution

Ultimately, the IAEA stands at the crossroads of **sovereign rights and global responsibilities**. It guarantees states their legitimate right to nuclear energy under **Article IV of the NPT**, but only within the framework of **transparency, verification, and international law**.

Its dual role — as **promoter** of peaceful use and **guardian** against proliferation — requires constant balance, diplomacy, and trust. As technological advances such as **small modular reactors (SMRs)** and **nuclear fusion** emerge, the IAEA's relevance continues to expand.

In a rapidly changing world, the Agency remains guided by the same fundamental vision expressed at its founding:

> "Atoms for peace not for war."

7. Country Stances

The following section provides an overview of the **official positions** and **policy priorities** of selected IAEA member states regarding nuclear energy and non-proliferation.
These summaries are based on publicly available statements, UN votes, and national policy documents, helping delegates represent their assigned countries accurately during debate.

United States of America (USA)

The U.S. supports the IAEA as a central pillar of the non-proliferation regime. It prioritizes **transparency, safeguards, and strict export controls** while promoting peaceful nuclear cooperation with allies. The U.S. government continues to invest in **advanced reactor technologies**, including **small modular reactors (SMRs)**, and supports nuclear energy as a clean solution to climate change. Washington opposes the nuclear programs of states like **Iran** and **North Korea**, while maintaining strategic cooperation with **India** through the 2008 civil nuclear agreement.

Russian Federation

Russia views nuclear cooperation as a diplomatic and economic tool. Through **Rosatom**, it builds reactors abroad (e.g., in Turkey, Egypt, and India) and advocates for **non-discriminatory access** to nuclear technology. Moscow criticizes unilateral sanctions outside the IAEA framework. However, the **war in Ukraine** has challenged its credibility, especially following the militarization concerns surrounding the **Zaporizhzhia Nuclear Power Plant**, which remains under IAEA monitoring.

People’s Republic of China

China promotes the right of all countries to peaceful nuclear development under IAEA supervision. It has become one of the leading exporters of **reactor technology** and integrates nuclear energy into its **carbon neutrality goals (2060)**. China supports cooperation with

developing countries and often aligns with the **Non-Aligned Movement** on the issue of equitable access to technology.

European Union (EU)

The EU is committed to **non-proliferation, nuclear safety, and sustainable energy**. Through **Euratom** and the **INSC**, it funds safety programs and IAEA missions. The EU also played a leading diplomatic role in the **Iran nuclear deal (JCPOA)**. Internally, its members are divided: **France** relies heavily on nuclear energy, while **Germany** has phased it out after Fukushima. Despite these differences, the EU consistently supports IAEA authority and multilateral verification.

Iran (Islamic Republic of Iran)

Iran insists that its nuclear program is **entirely peaceful**, citing its right under **Article IV of the NPT**. However, IAEA inspectors and Western states have raised concerns about undeclared enrichment activities. The **JCPOA (2015)**temporarily limited Iran's nuclear work in exchange for sanctions relief, but its partial collapse in 2018 led to renewed tensions. Iran now seeks IAEA mediation to restore mutual confidence.

Democratic People's Republic of Korea (North Korea)

North Korea withdrew from the NPT in 2003 and expelled IAEA inspectors. Since then, it has conducted several **nuclear tests**, directly violating UN Security Council resolutions. Pyongyang justifies its nuclear weapons as a deterrent against U.S. "hostility." The IAEA continues to call for unconditional access to North Korean facilities, but diplomatic engagement remains frozen.

Turkey (Republic of Turkey)

Turkey supports **universal non-proliferation** and **peaceful nuclear energy development**. The **Akkuyu Nuclear Power Plant**, built in partnership with Russia, marks the country's entry into civilian nuclear power. Ankara also advocates for a **Middle East Nuclear-Weapon-Free Zone** and actively participates in IAEA technical cooperation programs, promoting safety and transparency.

Israel and the Middle East

Israel is not a signatory to the NPT and maintains a policy of **nuclear ambiguity**, neither confirming nor denying possession of nuclear weapons. This creates tension within the region, particularly with Iran and Arab League states, who argue that the absence of universal safeguards undermines regional trust. The IAEA continues to call for dialogue toward establishing a **Middle East Nuclear-Weapon-Free Zone (MENWFZ)**, though political conditions remain complex.

2. Key Questions per Agenda Topic

Bu bölümü "**5. Introduction to Agenda Item**" bölümünün **sonuna ekle**. Yani delegeler her alt konuyu (right to nuclear energy / global energy crisis) okuduktan sonra tartışacakları soruları görsün.

Key Questions – Subtopic 1: The Right of States to Nuclear Energy vs. the Risks of Proliferation

1. How can the IAEA ensure equal access to nuclear energy without compromising global security?
2. Should states that violate safeguards temporarily lose their right to nuclear cooperation?
3. How can technology transfers be regulated to prevent weaponization?
4. Are the current safeguard mechanisms (e.g., the Additional Protocol) sufficient?
5. How should the international community address cases like Iran or North Korea?

Key Questions – Subtopic 2: The Role of Nuclear Energy in Addressing the Global Energy Crisis

1. Can nuclear energy be considered a sustainable solution to the global energy crisis?
2. How can the IAEA assist developing nations in adopting nuclear energy safely?
3. Should nuclear energy be prioritized over renewables in climate strategies?

4. What role do innovations such as SMRs and fusion play in the future of energy?
5. How can international cooperation reduce the cost and risk of nuclear projects?

8. The Role of Key Actors

Nuclear policy does not exist in a vacuum. The IAEA's mission to balance the peaceful use of nuclear energy and prevent proliferation depends heavily on the political will, technological capabilities, and diplomatic stances of its **member states**.
The following section outlines the positions and influence of major global actors and regional blocs within the IAEA framework.

a. The United States of America (USA)

The **United States** has historically been one of the strongest supporters and shapers of the IAEA. President **Dwight D. Eisenhower's "Atoms for Peace" speech (1953)** was the conceptual origin of the Agency itself. Since then, the U.S. has viewed nuclear non-proliferation as a **core national security priority** while also promoting the **responsible expansion of peaceful nuclear technology**.

The U.S. contributes the **largest share of the IAEA's regular budget** (approximately 25%) and provides extensive **voluntary contributions** for technical cooperation, nuclear security, and emergency response. Through initiatives like the **Global Initiative to Combat Nuclear Terrorism (GICNT)** and the **Nuclear Security Summits (2010–2016)**, the United States has sought to strengthen global nuclear security frameworks.

At the same time, U.S. foreign policy emphasizes **strict export controls** through mechanisms such as the **Nuclear Suppliers Group (NSG)** and the **123 Agreements**, which regulate U.S. nuclear cooperation with other states. Washington's position tends to favor **rigorous safeguards** and **transparency requirements** before granting access to sensitive nuclear technologies.

However, critics often argue that U.S. policies can be **selective**, providing nuclear cooperation to allies (e.g., India) while opposing similar programs in other states (e.g., Iran). Nevertheless, the United States remains a cornerstone of the global non-proliferation architecture and a key player in shaping the IAEA's strategic direction.

b. The Russian Federation

The **Russian Federation**, as the legal successor to the Soviet Union, is both a **nuclear-weapon state** under the NPT and one of the world's leading suppliers of nuclear technology. Russia's approach emphasizes the **sovereign right of states** to pursue nuclear energy, provided that they comply with IAEA safeguards.

Through its state corporation **Rosatom**, Russia exports nuclear reactors and fuel to numerous countries, including **Turkey (Akkuyu)**, **Egypt (El Dabaa)**, and **India (Kudankulam)**. These partnerships demonstrate Moscow's strategy of using nuclear cooperation as a tool of **diplomacy and economic influence**.

In the IAEA, Russia consistently advocates for **non-discriminatory access** to nuclear technology and often critiques Western attempts to politicize safeguards. It supports multilateral frameworks under IAEA supervision rather than unilateral sanctions or interventions.

However, Russia's actions in **Ukraine**, particularly regarding the **Zaporizhzhia Nuclear Power Plant**, have sparked major international concern. The IAEA has deployed teams on-site to prevent accidents, highlighting both the Agency's neutrality and the complex geopolitical environment in which Russia operates.

c. The People's Republic of China

China's nuclear policy is grounded in its doctrine of **"peaceful development"** and **strategic restraint**. As a recognized nuclear-weapon state under the NPT, China emphasizes the principle of **equality among all nations** in accessing nuclear energy. It supports the

right of developing countries to build nuclear power infrastructure under proper safeguards.

China is rapidly becoming one of the world's top nuclear exporters, offering reactor technology such as the **Hualong One**design to countries in **Pakistan, Argentina, and the Middle East**. At the same time, China has increased its investment in **nuclear fusion research** and **small modular reactors (SMRs)** as part of its broader **carbon neutrality by 2060**agenda.

Beijing often aligns itself with the **Non-Aligned Movement (NAM)** and developing states on the issue of **technology transfer**, while maintaining strong participation in global non-proliferation efforts. China advocates for a balanced IAEA approach that safeguards peaceful use without restricting economic development.

d. The European Union (EU)

The **European Union** plays a collective and influential role in IAEA decision-making through coordination among its 27 Member States, several of which — including **France, Germany, and Sweden** — are major contributors to the Agency's work.

The EU supports the IAEA financially and politically through its **Instrument for Nuclear Safety Cooperation (INSC)**and partnerships under **Euratom**, the **European Atomic Energy Community**. Euratom was established in 1957 alongside the IAEA itself, with the goal of developing a common nuclear market and ensuring safety standards across Europe.

The EU strongly advocates for **nuclear non-proliferation and disarmament**, while also promoting **climate-friendly nuclear energy** as part of its **Green Deal** strategy. The EU played a key diplomatic role in negotiating the **JCPOA (Iran nuclear deal)** and continues to mediate between the United States and Iran on its implementation.

While some EU countries (e.g., France) rely heavily on nuclear power, others (e.g., Germany) have phased it out entirely — reflecting the diversity of views within the Union. Nonetheless, the EU remains one of

the IAEA's most consistent and coordinated supporters of **multilateral verification and nuclear safety**.

e. The Non-Aligned Movement (NAM)

The **Non-Aligned Movement**, representing over **120 developing countries**, is one of the most influential blocs within the IAEA General Conference. NAM members emphasize the **inalienable right to peaceful nuclear energy**, as guaranteed under **Article IV of the NPT**.

Many NAM states argue that the non-proliferation regime has become **imbalanced**, with nuclear-weapon states failing to fulfill their **disarmament obligations** under Article VI while imposing stringent restrictions on developing countries. The group therefore calls for greater **technology sharing, equitable access**, and **capacity-building support** from advanced nuclear nations.

NAM's influence is significant in shaping resolutions related to technical cooperation and safeguards. Its collective stance often acts as a counterweight to the policies of Western countries, reminding the IAEA that **non-proliferation and peaceful use must advance together**.

f. The Republic of Turkey

Turkey represents the perspective of **emerging nuclear energy states** that are transitioning toward peaceful nuclear development. As a long-standing member of the IAEA and party to the NPT, Turkey consistently supports the **universal application of safeguards** and **non-discriminatory access** to nuclear technology.

Turkey's active role within the **Non-Aligned Movement** and its cooperation with **both Western and Eastern partners**give it a unique diplomatic position. Through the construction of the **Akkuyu Nuclear Power Plant** with Russia, and its involvement in **IAEA technical cooperation projects**, Turkey seeks to demonstrate that **newcomer states can develop nuclear power responsibly** under international oversight.

Ankara also advocates for **regional stability** and supports the creation of a **Middle East Nuclear-Weapon-Free Zone (MENWFZ)** — a

long-standing yet unrealized goal of international diplomacy. By promoting transparency, education, and international cooperation, Turkey aims to position itself as a model for safe and peaceful nuclear advancement in the developing world.

g. Collective Dynamics within the IAEA

Within the IAEA's policymaking bodies — the **Board of Governors** and the **General Conference** — these actors frequently align in **thematic blocs** rather than rigid alliances:

Bloc / Group	Representative States	Core Interests
Western Group	USA, EU, Japan, Canada, Australia	Non-proliferation, export controls, safety, and transparency
Eastern Group	Russia, China, Belarus	Technology sovereignty, peaceful development, non-politicization
Non-Aligned Movement (NAM)	India, Egypt, South Africa, Turkey, Indonesia	Right to peaceful use, technology transfer, equitable access

Latin American & African States	Brazil, Argentina, Nigeria, Kenya	Technical cooperation, development aid, regional safety frameworks

These dynamics influence the drafting and adoption of IAEA resolutions. Delegates must understand that achieving consensus often requires **balancing divergent priorities** — reconciling security concerns with development needs.

h. Conclusion

The IAEA's effectiveness depends on the cooperation of its member states, particularly those with nuclear expertise and political influence. Whether through **technology sharing**, **diplomatic engagement**, or **financial support**, these actors collectively determine the success of the Agency's mission.

In the context of this agenda, their challenge is shared:
to ensure that nuclear energy remains a **tool for peace, sustainability, and progress**, rather than a source of mistrust or division.

9. Ethical and Environmental Dimensions

The development and use of nuclear technology are not only matters of policy and science — they are also **profound ethical and environmental questions**. The dual-use nature of nuclear energy forces humanity to constantly balance **technological progress** with **moral responsibility** and **environmental sustainability**.

The ethical debate surrounding nuclear energy centers on one essential question:

Can a technology with the power to destroy humanity also serve as a foundation for its progress?

a. The Ethics of Peaceful Use

The principle of **"Atoms for Peace"**, introduced by U.S. President Eisenhower in 1953, was based on the belief that nuclear technology could be transformed from a weapon of war into an instrument of peace. This idea remains at the moral heart of the IAEA's mission.

However, the ethical challenge lies in ensuring that **the pursuit of development does not justify risk**. Every nation has a legitimate right to access nuclear technology under **Article IV of the NPT**, but this right carries with it a **collective responsibility** — to prevent misuse, ensure safety, and protect future generations from harm.

Philosophically, this raises a conflict between two moral imperatives:

1. The **utilitarian** argument — that nuclear energy's benefits (clean power, medical use, agricultural progress) justify its existence; and
2. The **deontological** argument — that certain risks, such as radiation exposure or weaponization, can never be morally acceptable, regardless of utility.

Thus, the peaceful use of nuclear energy must always be guided by **transparency, accountability, and consent** — principles that define ethical governance in international relations.

b. Intergenerational Responsibility

Nuclear energy raises unique questions about **justice across generations**. Unlike most forms of energy, nuclear waste remains hazardous for thousands of years, far beyond the lifespan of its creators. This introduces the ethical concept of **intergenerational responsibility** — the duty to protect future generations from the consequences of today's decisions.

Disposal of radioactive waste poses both **technical** and **moral** challenges. Long-term storage solutions, such as **deep geological repositories** (e.g., Finland's Onkalo facility), require immense foresight

and trust. Once buried, the waste must remain isolated for millennia — an unprecedented ethical commitment.

The IAEA's **Joint Convention on the Safety of Spent Fuel Management (1997)** promotes international cooperation on waste management, but the moral question persists:

> *Do we have the right to produce energy that future generations will have to guard forever?*

Delegates should reflect on this when debating nuclear expansion — recognizing that sustainability is not only about meeting today's needs but also about not compromising tomorrow's safety.

c. Environmental Impact and Climate Ethics

From an environmental perspective, nuclear energy presents a paradox. On one hand, it produces **very low greenhouse gas emissions**, making it a valuable tool in combating **climate change**. On the other hand, it carries significant **ecological risks** — including radiation contamination, nuclear waste, and the potential for catastrophic accidents.

Chernobyl (1986) and **Fukushima (2011)** remain powerful reminders of what can happen when safety systems fail. Both disasters displaced entire communities, contaminated ecosystems, and created long-lasting zones of exclusion. They also demonstrated that the environmental consequences of nuclear accidents transcend national borders.

Advocates of nuclear power argue that, compared to fossil fuels, it is **safer and cleaner overall**, as modern reactor designs drastically reduce risks. Moreover, as the global demand for low-carbon energy grows, many experts view nuclear power as **essential for achieving the Paris Agreement goals**.

Opponents, however, emphasize that the **ethical cost of potential accidents** and **radioactive waste** outweighs its climate benefits. They argue that true sustainability must prioritize safety, renewable alternatives, and community consent.

Thus, the ethical question is not simply “Is nuclear energy safe?” but “Is it right?” — and under what conditions can it be pursued responsibly?

d. Humanitarian Consequences of Nuclear Weapons

Even though the IAEA’s mandate focuses on peaceful uses, it cannot ignore the moral consequences of nuclear weapons. The **bombings of Hiroshima and Nagasaki (1945)** killed over 200,000 civilians and left generations suffering from radiation-related illnesses.

This legacy shapes global consciousness about nuclear power. The **Treaty on the Prohibition of Nuclear Weapons (TPNW)**, adopted in 2017, was inspired largely by the humanitarian movement, emphasizing that any use of nuclear weapons is fundamentally incompatible with human dignity and international humanitarian law.

The continued existence of **over 12,000 nuclear warheads** worldwide raises deep ethical questions about deterrence, fear, and justice. The IAEA’s work, while technical, serves an inherently moral purpose: preventing humanity from ever repeating the destruction of 1945.

> “The ultimate goal of the IAEA’s mission is not merely safety or compliance — it is the preservation of life itself.”
> *— Mohamed ElBaradei, Former IAEA Director General and Nobel Laureate, 2005*

e. Energy Equity and Global Justice

Another ethical dimension lies in **energy inequality**. Many developing nations still lack access to reliable electricity, limiting their social and economic growth. For them, nuclear energy represents hope — a path to modernization and self-sufficiency.

Yet, international export controls, restrictive financing, and political barriers often make it difficult for poorer nations to access nuclear technology. This imbalance creates an ethical dilemma:

> Should advanced countries, which already benefited from decades of nuclear development, restrict others from following the same path?

The **Non-Aligned Movement (NAM)** argues that all nations have the **equal right to peaceful nuclear energy**, while ensuring compliance through IAEA safeguards. The moral challenge for the international community is to balance **equity with security** — ensuring that safety concerns do not become a pretext for technological discrimination.

f. The Role of Public Perception and Social Responsibility

Public acceptance plays a crucial role in shaping national nuclear policies. Fear of radiation, lack of transparency, and distrust in government institutions often lead to public resistance — as seen in the widespread protests following Fukushima.

The IAEA encourages governments to engage in **open communication** with citizens and civil society organizations. Transparency builds trust, and trust ensures that nuclear policies reflect the will and welfare of the people.

Ethically, the public must be not only protected but **informed and included** in decision-making processes. Without social legitimacy, even the safest nuclear program risks failure.

g. Conclusion: Ethics as the Core of Nuclear Governance

Ultimately, the governance of nuclear energy cannot be measured solely in megawatts or treaties. It must be judged by its **moral integrity** — whether it serves humanity without endangering it.

The IAEA's mandate embodies this balance: advancing science and development while preventing destruction. As technology evolves, so too must our ethical frameworks.

Delegates at EKMUN'25 must therefore remember that their resolutions are not just political proposals — they are statements about **what kind of world we wish to create**:
a world where the atom remains a servant of peace, not a master of fear.

10. Questions to be Addressed

To ensure a structured and productive debate, delegates should focus on the following key issues. Each question reflects one dimension of the central theme **balancing the peaceful use of nuclear energy and the prevention of nuclear weapons proliferation**.

1. **How can the international community ensure that access to peaceful nuclear energy remains a universal right without increasing the risks of proliferation?**
   → What mechanisms or safeguards can guarantee this balance?
2. **Should restrictions on nuclear technology exports be tightened or relaxed?**
   → Are current frameworks such as the Nuclear Suppliers Group (NSG) fair and inclusive to developing states?
3. **How can the IAEA strengthen its verification system to detect undeclared nuclear activities?**
   → Should the Additional Protocol become a universal legal requirement?
4. **What measures can be taken to rebuild international trust in the IAEA's neutrality and credibility?**
   → How can political polarization in the Board of Governors be reduced?
5. **In what ways can nuclear energy contribute to solving the global energy and climate crises?**
   → What role should the IAEA play in promoting low-carbon nuclear technologies for sustainable development?
6. **How can states manage nuclear waste and decommission reactors responsibly?**
   → What international cooperation mechanisms can help ensure long-term environmental safety?
7. **What are the ethical limits of using nuclear technology in medicine, agriculture, and industry?**
   → Should there be a universal code of ethics for nuclear research and innovation?
8. **What steps can be taken to establish nuclear-weapon-free zones in regions with high political tension, such as the Middle East?**
   → What precedent can be drawn from existing treaties like Tlatelolco and Pelindaba?

9. **How can the IAEA enhance cooperation with non-member or non-NPT states (such as India, Israel, and North Korea)?**
   → Should engagement or containment be the guiding approach?
10. **How can developing nations ensure energy equity and sovereignty while complying with international non-proliferation norms?**
    → How can the Technical Cooperation Programme be expanded to support this goal?
11. **What role should private industry and innovation play in future nuclear governance?**
    → How can the IAEA regulate emerging technologies such as small modular reactors (SMRs) and nuclear fusion?
12. **Should the IAEA's mandate evolve to include new global challenges, such as climate change and artificial intelligence in nuclear systems?**
    → How might these future developments redefine the balance between peace, security, and progress?

These questions aim to help delegates **develop well-structured arguments**, **propose practical resolutions**, and **address both scientific and moral dimensions** of the topic.
A strong delegate should link every argument back to the IAEA's founding vision — *Atoms for Peace and Development.*

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