



**IAEA International Ministerial Conference
Nuclear Power in the 21st Century**

Jordan Statement

**H.E. Dr. Khaled Toukan,
Chairman
Jordan Atomic Energy Commission**

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**Mr. President,
Your Excellences,
Honored and Distinguished Guests,
Ladies and Gentlemen,**

I am honored to be with you today in this important event addressing such a distinguished gathering of ministers and key officials in the nuclear energy sector. We meet here to discuss the sustainable role of nuclear power in meeting the growing global energy demand. I would like to seize this opportunity to thank the International Atomic Energy Agency (**IAEA**) and the Organization for Economic Co-operation and Development (**OECD**) for organizing this important Conference and would like to extend my appreciation to the host of this gathering, the Government of the United Arab Emirates for the excellent organization of this Conference and the impressive tour of the Barakah Nuclear Power Plant.

Ladies and Gentlemen,

Jordan realizes the importance of nuclear energy and its applications in promoting economic and social growth while protecting the environment. Significant progress has been achieved from the use of nuclear technologies in health and agriculture.

Jordan took several important steps along a transparent roadmap that sought to implement the national strategy for energy, which was developed in 2007 following in-depth studies to formulate a reliable, secure, economic, and sustainable energy mix for Jordan, where nuclear energy is one of its main constituents. The Jordan Atomic Energy Commission (**JAEC**) has pursued the promotion of nuclear energy in Jordan, with strict adherence to nuclear safety and security while selecting advanced and safe nuclear reactors. The use of nuclear energy is one of the key alternatives to transition from total dependence on fossil fuels to low-carbon energy sources in line with modern developments in the energy industry.

Furthermore, nuclear energy has been demonstrated to be an effective option for sustainable electric power generation and water desalination, offsetting the lack of natural resources and the dependence on imported fossil fuels that has been the traditional source for energy production.

Jordan has been seriously exploring nuclear energy as a strategic alternative for its future energy needs and industrial development that provides a reliable, secure, economic, and sustainable energy solution for the medium and long terms. Jordan places great importance in developing secure

alternatives for its energy supplies and has placed this as one of its top national priorities.

Jordan has accomplished several milestones in its path to develop its national nuclear energy program. The commissioning of the Jordan Research and Training Reactor (**JRTR**) in December 2016, was marked as a flagship achievement, representing our current vision of a Center of Excellence for Nuclear Science & Technology - established to serve the Hashemite Kingdom of Jordan and the Middle East region as a whole. Ever since its commissioning, the JRTR has been undergoing initial operation testing with best international safety and security practices.

The official inauguration of the Synchrotron-light for Experimental Science and Applications in the Middle East (**SESAME**) last May, represents yet another scientific achievement. SESAME will provide the region with a world-class, state-of-the-art facility for advanced research in disciplines ranging from physics to biological and medical sciences, as well as archaeology. Hence SESAME and the JRTR represent a major opportunity to boost scientific research and technological advancement in the Middle East, covering both neutron and gamma applications, helping to promote economic growth and transform the region into a beacon of innovation.

Jordan has proven resources of uranium deemed of strategic importance for the country contributing to the security of its future nuclear fuel supplies. Exploration and exploitation works are underway to determine the feasibility of these surficial resources. Uranium exploration and extraction process development for the Central Jordan Area has been ongoing since 2008, with the aim to complete a Bankable Feasibility Study by 2020.

We have been progressing steadily in the development of our first nuclear power plant project. Jordan has completed pre-investment phase activities that include cooling water system optimization, grid impact, electric market studies, and detailed site characterization; and is conducting environmental impact and financeability assessments.

In parallel to the large reactor project, JAEC is conducting a feasibility study for the construction of two Small Modular Reactors (**SMRs**) in Jordan for the production of electricity and water desalination in partnership with KACARE and KAERI, based on the SMART design.

Although nuclear safety is a national responsibility, it has trans-boundary implications and hence international cooperation and coordination are crucial. We strongly believe

that nuclear safety should be subjected to international harmonization of standards and best practices and all member states should be encouraged to join the Convention on Nuclear Safety (CNS). Jordan took several important steps in the development of its nuclear power program and related infrastructure in adherence to IAEA guidelines and international best practices. These steps included enacting of new legislations related to nuclear safety and the establishment of a nuclear regulator.

Ladies and Gentlemen:

We in Jordan believe that strengthening global partnerships plays a pivotal role in the development of the nuclear infrastructure needed to successfully implement national nuclear energy programs, particularly with regard to the development of the legal and regulatory framework for all nuclear activities, including the export of nuclear material, equipment, and systems that are consistent with international standards. As we seek to reach this goal, and in an effort to support all activities that aim at preventing the proliferation of nuclear weapons within the framework of the NPT, the GoJ has formally applied for participation in the Nuclear Suppliers Group (NSG).

We believe that partaking in the NSG will be highly conducive to establishing such a system and will serve to further strengthen Jordan's position as an advocate to non-proliferation and a future active participating government exporting uranium and nuclear technology.

Ladies and Gentlemen,

We look forward to achieving substantial outcome from this Conference. We cannot continue on business as usual scenarios under the increasing competition from cheap natural gas and renewables and rising anti-nuclear sentiments. The world cannot continue ignoring the role of nuclear energy in the Millennium Development Goals (MDGs) and combatting Green House Gas Emissions (GHGs). We need to expand considerably the contribution of nuclear energy in the global energy mix (along with green energy). With your active participation, this Ministerial Conference will achieve success.