

Closing statement and President's Report as provided, verbatim.

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Excellencies, ladies and gentlemen,

After five days of intensive discussion, we are approaching the end of the International Conference on Nuclear Knowledge Management and Human Resources Development. I would like to express my sincere gratitude to all speakers, panelists, and participants who have joined us, here in Vienna and virtually, for your valuable contributions to this conference organized by the IAEA.

Nuclear knowledge management and human resources development have proven to be significant levers and opportunities for enhancing the effectiveness and sustainability of the global nuclear sector, due to their dynamic nature and the current evolving global landscape.

Over the past week, our conversations have been structured around key themes: people, technology, alliances, and sustainability. This approach has allowed us to share our expertise from diverse perspectives, and think of innovation and growth through co-creation of collective knowledge.

By valuing diverse human viewpoints and leveraging cutting-edge technologies, such as AI, we can build strong collaborations, essential for a sustainable development and long-term success. The enthusiastic and active participation we have witnessed at this conference is a testament to this collaborative spirit.

At this point, let me remind you that we have had more than 760 participants from 108 Member States and 9 invited International Organizations in attendance this week. We received 262 paper submissions, with 190 presented orally and 72 as posters or e-posters.

This week has been bustling with activity—15 high-level plenaries and 24 parallel technical sessions were conducted, in addition to 8 side events featuring various topics organized by Member States, the nuclear industry, NGOs, and the IAEA Secretariat.

A great number of senior officials from IAEA Member States, nuclear industry leaders, international experts, and relevant stakeholders were in attendance. They delivered remarkable speeches, contributed to technical presentations, actively participated in discussions, and presented their scientific studies and research.

Thank you all for your dedication and collaboration in making this event a remarkable success.

Now, allow me to summarize the key findings from each day of our conference.

On **Day One**, Member States shared “Holistic Views on Nuclear Energy Policies and Their Impact on Nuclear Knowledge Management (NKM) and Human Resources Development (HRD); Global Challenges and National Alternatives.” We heard national statements from Argentina, China, Egypt, France, Ghana, Japan, Morocco, the Russian Federation, Hungary, Saudi Arabia, South Africa, the United Arab Emirates, and the United States of America. These statements underscored a shared commitment to support national capacity building to create a competent and capable workforce at both national and international levels. This joint effort, tailored to each nation's sovereign approach, highlights the uniqueness of the nuclear sector and the commitment to further developing human capital and nuclear knowledge worldwide.

It reaffirms the IAEA's role as the global center for cooperation in the nuclear field, promoting the safe, secure, and peaceful use of nuclear technology.

In our first plenary panel, we discussed strategies for retaining talented women in our nuclear organizations. The focus was on identifying opportunities and best practices to foster their career development. Emphasis was placed on the importance of supporting the development of leadership skills and involving men as allies to support women in the nuclear field.

On **Day Two**, we focused on people and our opportunities to develop, empower, and lead. Presentations in the plenary and parallel sessions covered various aspects of innovative training programs, national nuclear workforce development programs, and global competency models. We also discussed nuclear safety and security culture, knowledge transfer, and defining critical knowledge. Additionally, the nuclear knowledge management and human resource development (NKM-HRD) aspects of fusion organizations were addressed in a session and a side event hosted by EUROfusion. The day concluded with an exciting and inspiring discussion on nuclear leadership, followed by a bold side event on international mobility hosted by France.

On **Day Three**, we explored technology as a key lever for enabling innovations and knowledge. The sessions and discussions focused on technical areas such as artificial intelligence, digital platforms, and other innovative technologies supporting Nuclear Knowledge Management (NKM) and Human Resources Development (HRD). Artificial intelligence was recognized as a current disruptor in science and technology development, with direct implications for knowledge management and learning processes. We also covered issues related to establishing new NKM programs and lessons learned from existing ones. The day included a side event hosted by the NKM Section of the IAEA and an truly remarkable evening side event hosted by the Russian Federation.

On **Day Four**, we emphasized the power of alliances, aiming at engaging youth through global collaboration. The day began with keynote addresses on human resource strategies and attracting young people to the nuclear industry. Plenary sessions discussed the empowerment of the next generation and human-centric approaches in nuclear education. University education sessions explored various international nuclear engineering programs, while discussions on education networks and attracting young talent highlighted initiatives in competency building and talent acquisition. The afternoon featured sessions on communities of practice, outreach education programs, and a moderated panel discussion, concluding with a side event on enhancing nuclear competence through European collaboration hosted by ENEN.

Today, on **Day Five**, we looked towards the future, discussing how to build together resilience and progress for the sustainability of our human and knowledge ecosystems. The day commenced with keynotes addressing the challenges and strategies for human resource development in the nuclear sector, followed by a moderated panel on sustainable stakeholder engagement for capacity building development. Parallel technical sessions covered topics such as NKM and HRD for new nuclear builds, regulatory safety and security, and educational training. Afternoon sessions explored the role of NKM and HRD in healthcare, the development of small modular reactor (SMR) technologies, and modern tools in NKM. The day also included an IAEA side event and a technical tour of the Nuclear Security Training and Demonstration Center in Seibersdorf.

Ladies and gentlemen,

Let us reflect on the key takeaways from this conference and consider how we can implement them in the coming years. Leading, engaging, and developing human capital and nuclear knowledge will be the spearhead of our efforts moving forward.

As we strive to attract and retain top talent, the nuclear sector must position itself as an exciting and progressive scientific and industrial field. This involves effectively drawing in the brightest minds by showcasing our innovations and advancements.

Moreover, it is essential to acknowledge the values and motivations of young professionals today. Many are driven by a desire to contribute to long-term social and global goals such as sustainability and climate change mitigation. By emphasizing nuclear's contributions to these global objectives, we can attract young people who are passionate about making a positive impact on the world.

Nuclear must be seen as a modern, high-tech industry capable of utilising the latest technologies, such as AI, and captivating the labor market's attention, with a particular focus on youth. Building a culture that embraces diversity in terms of gender, age, and background will ensure equality and inclusion, enabling effective engagement of both national and international workforces.

Strengthening international cooperation and building strong partnerships among global organizations will facilitate the development and deployment of international workforces for international projects, reflecting the transnational nature of nuclear activities.

To remain competitive, the nuclear industry must proactively offer attractive student projects and open positions to students early in their education. Engaging students at this formative stage will help build a strong pipeline of future nuclear professionals.

In conclusion, by addressing these key areas, we can position the nuclear industry as a competitive and attractive career choice for young professionals. We must leverage our technological advancements, align with the values of the younger generation, engage students early, offer competitive compensation, and provide dynamic career opportunities. By doing so, we will secure the talent necessary to drive our industry forward and contribute to a sustainable future.

Ladies and gentlemen,

The past week has been intense and productive. Stakeholders from various sectors—government, industry, international organizations, non-governmental organizations, women's groups, and the young generation—came together to discuss the opportunities and challenges facing the nuclear sector. We proposed constructive solutions to further enhance the knowledge and capabilities of our global nuclear workforce. I would like to take this opportunity to express my heartfelt thanks to each and every one of you for your professional and insightful contributions, which have led to very fruitful outcomes for the conference.

I would also like to extend my gratitude to the Scientific Programme Committee for organizing the conference and evaluating and reviewing the scientific contributions. My thanks go to all chairs and co-chairs, moderators, and rapporteurs of plenary and parallel sessions for guiding and supporting the interactive presentations and discussions. Additionally, I appreciate everyone who contributed with papers, presentations, and posters.

Special thanks go to our scientific secretaries, Pedro Diéguez Porras and Alesia Iunikova, the Nuclear Knowledge Management Section team, as well as the IAEA colleagues from Conference Services, and all those in the Agency who have worked hard to make this conference a success.

Ladies and gentlemen, thank you all for your dedication and collaboration in making this event a remarkable joint achievement. Please also have a safe trip home.