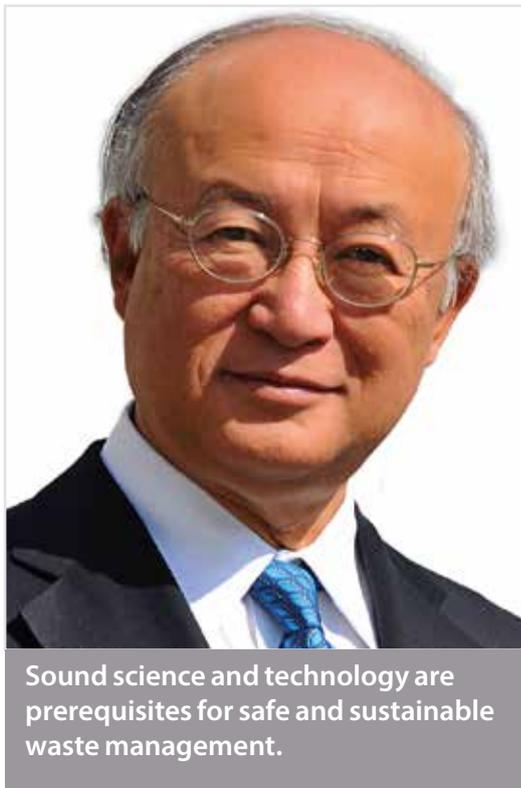


# THE SCIENCE AND TECHNOLOGY BEHIND SAFE AND SUSTAINABLE RADIOACTIVE WASTE MANAGEMENT

Nuclear technology provides enormous benefits in many areas, including human health, agriculture and electricity generation. Management of the radioactive waste generated from activities in these and other areas is often seen as a problem. In fact, storage technologies have a long and successful performance record and disposal technologies are also available.



Sound science and technology are prerequisites for safe and sustainable waste management. The technology continues to develop, including in areas such as the geological disposal of high level waste and spent nuclear fuel.

Appropriate legal, governmental and regulatory frameworks need to be in place.

But it is also essential that the public are kept fully informed. It is no coincidence that the countries with the lowest levels of public anxiety about the safety of nuclear technology are those which demonstrate the highest degree of openness and transparency.

I decided to devote the 2014 IAEA Scientific Forum to technologies for the management of radioactive waste because I wanted to provide a platform for experts from all over the world to consider the challenges and solutions and to explain the technology to a wider public audience.

It is up to each country using nuclear technology to ensure the safe management and disposal of waste. But countries can benefit greatly from each other's experiences. Providing a forum for exchanges of experience and best practice is one of the key roles of the IAEA.

The IAEA has, from the beginning, been actively involved in helping Member States to safely manage radioactive waste with a view to protecting people and the environment from the harmful effects of ionizing radiation. We develop safety standards and guidance. We publish technical reports. And we organize training courses, workshops and technical meetings to assist with safe and sustainable implementation of national radioactive waste management programmes.

The Scientific Forum, entitled *Radioactive Waste: Meeting the Challenge*, will take stock of technological developments related to the management of all types of radioactive waste. Existing solutions and emerging technologies will be considered. Renowned experts and organizations in waste management will share their expertise.

This edition of the IAEA Bulletin is intended to give readers a clear understanding of the different types of radioactive waste and the measures needed to ensure its safe management and disposal, as well as the role of the IAEA in supporting Member States.

I hope you will find it helpful and informative.

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Yukiya Amano, IAEA Director General