

The Institute for Security Studies (ISS)

The Future of Nuclear Energy Post-Fukushima

Speaker: Mr Yukiya Amano

Director General of the International Atomic Energy Agency (IAEA)

Friday 8th February 2013 17:30 – 18.30

Opening Remarks: Jakkie Cilliers, Executive Director, ISS

Good afternoon. It is indeed a pleasure to welcome you all to this Lecture and Q&A session with Mr Yukiya Amano, the Director General of the International Atomic Energy Agency (IAEA). Mr Amano heads up the IAEA, which is an inter-governmental organisation based in Vienna, with a complement of over 2000 staff all working to ensure the safe, secure and peaceful use of nuclear technologies and to prevent the proliferation of nuclear weapons.

Mr Amano, it is not only a pleasure to have you with us but it will indeed be an honour and privilege to listen to your talk especially given that Fukushima had a global impact in terms of both the humanitarian consequences of the earthquake and tsunami but also in undermining the confidence in nuclear energy as a safe and secure power source. As I am sure you will indicate, the incident resulted in several countries re-examining their nuclear programmes with some deciding to phase out nuclear power completely. Others, like South Africa, have decided to continue with their plans to explore their nuclear infrastructure.

South Africa is the 27th largest economy in the world but the 12th largest carbon dioxide emitter – largely because our energy intensive economy is largely dependent upon carbon-based fuels.

One of the ‘enabling milestones’ in the National Planning Commission is that the country needs to produce sufficient energy to support industry at competitive prices, ensuring access for poor households, while reduction carbon emissions per unit of power by about a third.

Amongst a list of eight the NPC prioritizes the procuring at least 20 000 MW of renewable electricity by 2030, importing electricity from the region, decommissioning 11 000MW of

ageing coal-fired power stations and stepping up investments in energy-efficiency. Currently only about 1% of electricity is generated from renewable sources.

According to the Integrated Resource Plan, more nuclear energy plants will need to be commissioned from 2023/4. According to the NPC nuclear power does provide a low-carbon base-load alternative and it recommends a thorough investigation on the implications of nuclear energy. But it notes that a potential nuclear fleet will involve a level of investment unprecedented in South Africa. It concludes by calling for a 'plan B' should nuclear energy prove too expensive, sufficient financing be unavailable or timelines be too tight.

Let me say a few words about ISS and why we are hosting you at this important event and on your first trip to South Africa - which, by the way comes, a week after heated debate in South Africa around our Electricity Supply Commission's (Eskom) application for electricity tariff increases. The National Energy Regulator of South African has been holding public hearings on this issue on why these increases are needed not only to ensure the security of current supply but also to embark on an expanded nuclear build. We know also that an IAEA delegation has been in the country for the last two weeks undertaking an extensive review of South Africa's Integrated Nuclear Infrastructure (INIR).

The Institute for Security of Studies (ISS) is a pan-African organisation with offices in Pretoria, Nairobi, Addis Ababa and Dakar. We work for the advancement of sustainable human security in Africa through policy research, teaching/training and capacity building. We thus work on issues affecting state governance, citizen safety and security and, of course, the impact of transnational and global threats to our socio-economic development – including the impact of climate change; the arms trade and armed violence as well as corruption, and the lack of human rights, to name a few.

Our work in the nuclear area should be seen in this context. While we do not take a position on nuclear energy as such we do understand the need for sustainable and more efficient and renewable energy sources. We would also then be concerned about nuclear security – and in this context I mean the security of supply of both electricity and therefore of nuclear fuel); safety of workers in these facilities, the safety of communities living in their vicinity and of course the dangers they present for proliferation.

The use, or threat of use, of nuclear weapons by States remains a major challenge to international security. Today, the potential of nuclear terrorism is also uppermost in our minds as we grapple to advance a policy of disarmament and non-proliferation of weapons of mass destruction with the goal of promoting international peace and security without preventing the use of advanced technologies for peaceful purposes.

For this reason, in 2007, we embarked on a project to move forward the entry-into-force of the African Nuclear Weapon Free Zone Treaty, generally known as the Treaty of Pelindaba, after the treaty, in some senses had been forgotten since its signature by all African States in 1996. Mr Amano, we know that you hold the Treaty of Pelindaba in high esteem given that it was is a Treaty developed through an indigenous process – led by Africans for Africans – evidenced by your attendance at the Second Conference of States Parties in November last year and that the IAEA has been actively supporting African Union members in applying nuclear techniques in, for example, Tsetse eradication, water management and agriculture and, of course, cancer control.

As you can see your presence here has generated great interest. The audience includes members of the nuclear industry – both from the private and public sectors - academics and students of nuclear physics and international relations, non-governmental and community based organisations, media representatives, international organisations, members of the diplomatic community – including ISS’ donors (Norway and the British High Commission, who we are grateful to for supporting this event), and of course our own Permanent Representative to the IAEA, His Excellency, Mr Xolisa Mabhongo.

With these words, I now call on Mr Amano to deliver his lecture. Thereafter Anton du Plessis, will introduce Noel Stott from ISS who will briefly respond and then we will have the question and answer session.