



Fifty Years of Atoms for Peace

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Summary: The nuclear community around the world will be marking the 50th anniversary of President Eisenhower's Atoms for Peace Speech on 8 December 2003. The Lawrence Livermore National Laboratory is organising a series of seminars in the US, Japan and France which will culminate in consensus statement *Atoms for Peace after 50 Years; New Challenges and Opportunities*. A separate initiative has seen the foundation of the *World Nuclear University* with the mission to strengthen international institutions to guide the ongoing development of the peaceful nuclear technology. The challenge for the nuclear community over the next 50 years is to redefine and recommit to the old vision in a new world challenged by new dimensions in national security, by environmental degradation and by the impacts of population pressures coupled with predicted climate change.

Introduction

In his historic address to the United Nations of 8 December 1953¹, President Eisenhower sought to "hasten the day when the fear of the atom will begin to disappear from the minds of people and governments" and expressed confidence that the "greatest of destructive forces can be developed into a great boon, for the development of all mankind". He proposed an agency under the aegis of the United Nations undertaking a number of rolls associated with the control, administration and safeguarding of fissionable material.

Eisenhower's vision for the civilian applications of nuclear technology over the past 50 years has been realised to a greater extent than could be realistically predicted at the time. Ignoring any multiplier effect, peaceful applications accounted for 2.3 per cent and 1.9 per cent respectively of the Japanese and US GDP in 1995. In this year in the US, the economic impact of radioisotope applications exceeded that of nuclear power by a factor of 3.6 (Walter 2003)

The International Atomic Energy Agency (IAEA) was established in 1957 and now has 134 Member States supporting a major program of nuclear technical cooperation. The IAEA is presently cooperating as a Partner in Development with 111 developing countries in the application of nuclear techniques to major sustainable development priorities.² This is a practical realisation of Eisenhower's vision that the industrialised countries will dedicate "some of their strength to serve the needs rather than the fears of mankind." In recent

¹ www.iaea.or.at/worldatom/About/atoms.html

² www-tc.iaea.org/tcweb/tcprogramme/recipients/default.asp

years a number of developing countries have contributed as donors to the regional programs in Asia and the Pacific.

The nuclear community world wide is marking this anniversary in a number of ways.

Atoms for Peace after 50 years: New Challenges and Opportunities

The Center for Global Security Research of the US Lawrence Livermore National Laboratory (CGSR), is embarked on a project that aims to understand the forces, changes, and choices that will shape the next 50 years³. The Project has been implemented through a series of Workshops in the US, Japan and France. The frames of reference for the project were defined by revisiting Eisenhower's vision and seeking added insights into the past 50 years of nuclear technology.

The Workshops identified a number of fundamental forces which will underpin the development of nuclear technology over the next 50 years:

1. the policies of various countries and sub-national groups towards acquiring nuclear weapons capabilities; the extent of the availability of nuclear material and of the skills and knowledge that can be used to manufacture weapons;
2. the recognition that fossil fuels will remain a dominant source of greenhouse gas, whereas nuclear power produces almost no greenhouse gases; and
3. the widespread and growing medical, agricultural, and industrial uses of nuclear technology.

³ <https://cgsr.llnl.gov/>

A major outcome of the project will be the publication of a consensus document: *Atoms for Peace after 50 Years; New Challenges and Opportunities* in November in time for the commemoration of the 8 December 2003 anniversary.

World Nuclear University

The foundation of World Nuclear University (WNU) by the IAEA, the Nuclear Energy Agency, the World Association of Nuclear Operators (WANO) and the World Nuclear Association (WNA) also reflects the lasting inspiration of the 'Atoms for Peace' initiative.⁴

The mission of the WNU is to "strengthen the international community of people and institutions so as to guide and further develop:

- The safe and increasing use of nuclear power as the one proven technology able to produce clean energy on a large global scale; and
- The many valuable applications of nuclear science and technology that contribute to sustainable agriculture, medicine, nutrition, industrial development, management of fresh water resources and environmental protection."

⁴[www.world-nuclear-university.org /index.htm](http://www.world-nuclear-university.org/index.htm)

At the inaugural ceremony of 4 September 2003, Dr John Rich, Director General WNA, predicted that this "new institution will speak powerfully - and in many languages - that nuclear technology has a large, promising future as an essential tool of sustainable development for all humankind." He went on to say that our "aim today is wholly congruent with the vision offered by President Eisenhower 50 years ago."

ANSTO is one of the 26 WNU member institutions.

Concluding comment

The challenge for the nuclear community over the next 50 years is to redefine and recommit to the old vision in a new world challenged by new dimensions in national security, by environmental degradation and by the impacts of population pressures coupled with predicted climate change.

Reference

Walter, Alan (2003) Private communication; From information presented in CGSR Seminar *Atoms for Peace after 50 years* Workshop II: Civilian Applications May 26-29, 2003 Gotenba, Shizuoka-ken, Japan