

2016 IAEA Scientific Forum

# Nuclear Technology for the Sustainable Development Goals

28–29 September 2016

IAEA Headquarters, Vienna, Austria



## Programme

Opening: Mr Yukiya Amano, Director General, IAEA

Moderator: Ms Melinda Crane, Chief Political Correspondent, Deutsche Welle-TV

Conference Secretary: Mr Serge Gas, Director, Office of Public Information and Communication, IAEA



IAEA

60 Years

*Atoms for Peace and Development*



# Wednesday, 28 September 2016

## 9:30–10:30 Opening

- Opening statement by Mr Yukiya Amano, Director General, IAEA
- His Serene Highness Prince Albert II of Monaco
- Mr Andrew Wheatley, Minister of Science, Energy and Technology, Jamaica
- Mr Abdeladim Lhafi, High Commissioner for Water and Forests and the Fight against Desertification and Commissioner General of COP 22, Morocco
- Mr Yiren Wang, Vice Chairman, China Atomic Energy Authority (CAEA), China
- Mr Alan Finkel, Chief Scientist, Australia

## 10:30–12:30 Session 1

### Health and Well-being: Global Access to Radiation Medicine

From prevention to palliation, radiation medicine plays an essential role in the diagnosis and management of a wide range of diseases. However, access to radiation medicine with adequate quality assurance is limited in many countries. The session will look at what is needed to help achieve the SDG 3 target of reducing deaths from non-communicable diseases by one third by 2030.

Ms Mary Gospodarowicz, Professor, Radiation Oncology, University of Toronto;  
Medical Director, Princess Margaret Cancer Centre, Canada

#### **“Global Access to Radiation Medicine: Key Findings of the Lancet Commission Report”**

Mr Kenji Shibuya, Professor and Chair, Department of Global Health Policy,  
Graduate School of Medicine, University of Tokyo, Japan

#### **“Universal Health Coverage: Opportunities and Challenges in the Era of SDGs”**

Ms Ntoko Ndlovu, Radiation Oncologist, College of Health Sciences, University of Zimbabwe, Zimbabwe

#### **“Challenges with Implementation of Radiotherapy Services: The Case of Zimbabwe”**

Ms Jamila Al-Suwaidi, Consultant Medical Physicist, Dubai Health Authority (DHA), United Arab Emirates

#### **“International Cooperation for Health Care: The Example of Radiation Medicine in the UAE”**

Mr Carlos Alberto Buchpiguel, Professor, Department of Radiology and Oncology,  
São Paulo University School of Medicine, Brazil

#### **“Combatting Cardiovascular Diseases: The Unexploited Potential of Nuclear Medicine”**

Mr Alistair McGuire, Professor, LSE Health and Social Care, Department of Social Policy,  
London School of Economics and Political Science (LSE), United Kingdom

#### **“Financing Medical Infrastructure, R&D and Health Care: Models That Work”**

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**12:30–14:00 Lunch Break**

**14:00–16:00 Session 2**

**Zero Hunger: Atoms for Food, Agriculture and Nutrition**

The second session will showcase how nuclear technology is successfully deployed to boost food security and tackle agricultural challenges. From efficiently fighting pests and diseases to improving crop varieties and nutrition and ensuring food safety, nuclear techniques are used to guarantee sufficient food all year round. This session will discuss how nuclear technology can contribute to the SDG 2 target of ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture around the world.

Mr Kostas Stamoulis, Assistant Director General, Economic and Social Development Department, Food and Agriculture Organization of the United Nations (FAO)

**“Achieving Zero Hunger by 2030: What Is Needed?”**

Mr Mohammad Shamsheer Ali, Director General, Bangladesh Institute of Nuclear Agriculture (BINA), Bangladesh

**“Nuclear and Plant Breeding Techniques for Crop Improvement in Addressing Present and Future Agriculture Challenges”**

Ms Chandapiwa Marobela-Raborokgwe, Deputy Director, Botswana National Veterinary Laboratory, Botswana

**“Animal Health and Nuclear Techniques: Lessons Learnt from Botswana’s Experience in Fighting Diseases to Boost Food Security”**

Mr Daniel Wunderlin, Director, Institute for Food Science and Technology of Córdoba (ICYTAC), Argentina

**“Making Food Safer with Nuclear Technology”**

Ms Emorn Udomkesmalee, Associate Professor, Institute of Nutrition, Mahidol University, Thailand

**“Atoms for Nutrition: Enhancing Diet Quality with Nuclear Technology”**

**16:30 Reception**



# Thursday, 29 September 2016

## 09:00–10:30 Session 3

### Energy for the Future: The Role of Nuclear Power

Nuclear power is one of the lowest-carbon technologies available to generate electricity and can play a significant role in mitigating climate change. Several countries are taking concrete steps to introduce nuclear power, but its share in the world's energy mix is decreasing and its competitiveness is being challenged. This session will discuss how innovation, technological advances and new economic models can help increase nuclear power's contribution to the areas covered by SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure), and SDG 13 (climate action).

Ms Agneta Rising, Director General, World Nuclear Association (WNA), Sweden

**"The Future of Nuclear Power and its Role in Mitigating Climate Change"**

Ms Fiona Reilly, Executive Partner, Atlantic Superconnection Corporation, United Kingdom

**"Financing Nuclear: A Competitive Solution"**

Mr Leonid Bolshov, Director, Nuclear Safety Institute (IBRAE RAN), Russian Federation

**"Nuclear Safety: Lessons from the Past, Innovation for the Future"**

Ms Leslie Dewan, CEO, Transatomic Power, United States

**"Innovation in Nuclear Power: A Brighter Future?"**

## 10:30–11:00 Coffee Break

## 11:00–12:30 Session 4

### Isotopes for the Environment: Managing Our Natural Resources

This session will showcase examples of how nuclear and isotopic techniques can help manage our planet's natural resources and address SDG 6 (clean water and sanitation), SDG 14 (life below water), and SDG 15 (life on land). The session will also look at how data collected using such techniques can play an essential role in establishing adequate environmental policies at national and international levels.

Mr Osea Naiqamu, Minister for Fisheries and Forests, Fiji

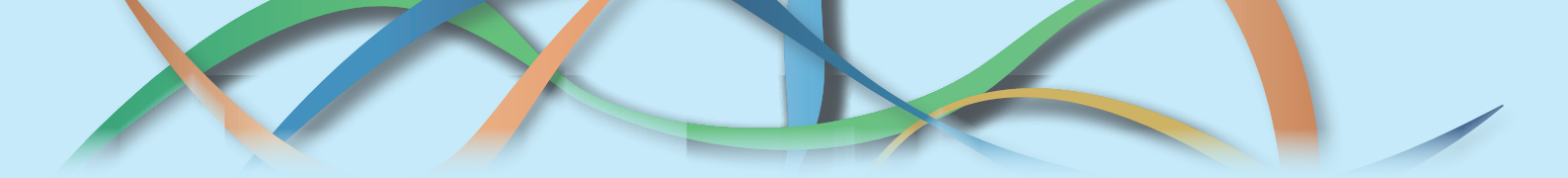
**"Environment Challenges in Small Island States: The Case of Fiji"**

Ms Simone Richter, Group Executive, Nuclear Science and Technology and Landmark Infrastructure, Australian Nuclear Science and Technology Organisation (ANSTO), Australia

**"How Can Nuclear Technology Help Protect the Environment?"**

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Mr Lalit Varshney, Head, Radiation Technology Development Division, Bhabha Atomic Research Centre, India

**“From Waste to Fertilizer: How Can Radiation Technology Be Environmentally Friendly and Help Industry and Farming?”**

Mr Imad-eldin Ahmed Ali Babiker, Associate Professor, Agricultural Research Corporation (ARC), Sudan

**“When Water Runs Low and Soil Goes Dry: How Can Nuclear Technology Help Preserve Land?”**

## 12:30–13:30 Lunch Break

## 13:30–15:00 Session 5

### Partnerships for Progress: Transferring Nuclear Science and Technology

Focusing on SDG 17 — forming partnerships for achieving all the SDGs — the last session will examine nuclear technology transfer and sustainability issues related to human resources and financing.

Mr Djarot Sulistio Wisnubroto, Chairman, National Nuclear Energy Agency of Indonesia (BATAN), Indonesia

**“How Can Nuclear Science and Technology Cooperation Have a Lasting Impact on Industries, Economies and Societies?”**

Mr Joanes Atela, Senior Research Fellow, Climate Resilient Economies, African Centre for Technology Studies (ACTS), Kenya

**“Sustainable Science and Technology Transfer: What Are the Conditions for Success?”**

Mr Marco Ripani, Senior Staff Scientist, Istituto Nazionale di Fisica Nucleare (INFN), Italy

**“From Nuclear Science to Industry: Effective Strategies and Initiatives”**

Mr Kenneth L. Peddicord, Director, Nuclear Power Institute (NPI), United States

**“Transferring Skills in Nuclear Power: The Human Factor”**

## 15:00–15:20

### Wrap-up by the IAEA Director General (or his representative)