

CONTENTS

PERSPECTIVES ON ATOMS FOR PEACE

“The gravity of the time is such that every new avenue of peace, no matter how dimly discernible, should be explored.”

—President Eisenhower, Atoms for Peace

5 Atoms for Peace Plus Fifty



Susan Eisenhower examines her grandfather’s most significant—and still debated—political legacy.

7 Shadow & Substance:

Securing the Future of Atoms for Peace

Lawrence Scheinman explores the relationship of Atoms for Peace and proliferation, and the need for reinforcing the world’s regime to reduce potential risks.

10 The Changing Landscape

Views from IAEA Member States on peaceful nuclear applications, and the IAEA’s evolving role, from their statements at the 2003 IAEA General Conference.

Staff Report:

Bust of Eisenhower Presented to the IAEA

PERSPECTIVES ON THE IAEA

“The more important responsibility of this atomic energy agency would be to devise methods whereby this fissionable material would be allocated to serve the peaceful pursuits of mankind...Thus, the contributing Powers would be dedicating some of their strength to serve the needs rather than the fears of mankind.”

—President Eisenhower, Atoms for Peace

12 IAEA Vision & Reality

How far has the IAEA been able to realize the vision that inspired its creation in 1957?

David Fischer maps the Agency’s road through changing times.

17 Atoms for Peace:

A Vision for the Future

Where is the IAEA headed, and how well can it meet the big issues driving its 21st century agenda? Director General **Mohamed ElBaradei** outlines his views and course of action.

21 View from the Boardroom:

The year that was!

Insights from **Nabeela Al-Mulla**, who shares the triumphs and tribulations of her year as Chairwoman of the IAEA Board of Governors.

PERSPECTIVES ON CONTROLLING NUCLEAR WEAPONS

“Even a vast superiority in numbers of weapons, and a consequent capability of devastating retaliation, is no preventive, of itself, against the fearful material damage and toll of human lives that would be inflicted by surprise aggression.”

—President Eisenhower, Atoms for Peace

24 The Increasing Risk of Nuclear Proliferation: Lessons Learned

The IAEA’s **Pierre Goldschmidt** draws lessons from recent history for efforts to strengthen safeguards on nuclear material and activities.

28 Verification Ghosts



Kaleb Redden focuses on challenges and changes affecting the IAEA.

31 Under Fire

Is the global Nuclear Non-Proliferation Treaty strong enough to keep the lid on nuclear weapons?

Piet de Klerk looks at the state of the Treaty’s health.

36 View from India

M.R. Srinivasan offers his views on bottling the nuclear genie.

- 38 **City Mayors on the March**
Hiroshima's Mayor **Tadatoshi Akiba** leads a citizen campaign to ban nuclear weapons.

- 40 **The Dawning of the Nuclear Age**



Photo essay of images painting the early nuclear scene.

PERSPECTIVES ON PEACEFUL NUCLEAR DEVELOPMENT

"It is not enough to take this weapon out of the hands of the soldiers. It must be put into the hands of those who will know how to strip its military casing and adapt it to the arts of peace."

—President Eisenhower, Atoms for Peace

- 42 **Pillars of Peace:**
The Evolution of
Nuclear Technical Cooperation



As development budgets shrink, the IAEA's **Ana Maria Cetto** details plans to build upon the base for technical cooperation in nuclear fields.

- 46 **Closing the Divide**
South Africa's **Waldo Stumpf** outlines the keys to more effective IAEA technical cooperation.
Staff Report: Malaysia's Marketplace

- 48 **Seeing the Impact: The socio-economic benefits of peaceful nuclear technologies**
Dollars and cents tell only part of the economic story for nuclear technologies over the past half century. **Werner Burkart** and **Michael Rosenthal** tell the rest, and suggest what can be learned from it.

- 54 **Making Nuclear Power Sustainable**



Bertrand Barré sees answers to the world's growing energy needs but no magic bullet.

Staff Report:
World Nuclear University Kicks Off

- 57 **Setting the Standard**
The UK's **Laurence Williams** outlines steps to reinforce the global application of IAEA standards for nuclear and radiation safety.

- 59 **The Promise of Innovation**
Nuclear Energy Horizons



Getting to the next generation of nuclear electricity plants will take more than technological innovation. **Victor Mourogov** reviews the picture.

Staff Report: Hydrogen Fuel—On the Energy Rich Road to "Hydricity"

- 62 **Atoms for Peace**



Text of the Address by **Mr. Dwight D. Eisenhower**, President of the United States, to the 470th Plenary Meeting of the United Nations General Assembly, 8 December 1953.

- 68 **IAEA Books & Meetings**