

## THE FUTURE OF NUCLEAR POWER

### 4 Nuclear Power: An Evolving Scenario



*Mohamed ElBaradei* discusses the state of nuclear power and the changes on the horizon.

### 9 Power for People

About one in four people still have no electricity. How much will it cost to bring the needed power to more people? *Fatih Birol* looks at the bottom line.

### 13 Double or Quits:

The Global Future of Civil Nuclear Energy  
Nuclear power has advantages and drawbacks. *Peter Beck & Malcolm Grimston* argue that the only rational approach is to keep the options open.

### 15 ANENT Passing the Torch



Attracting and educating the next generation of nuclear professionals has become a global challenge. *Fatimah Mohd Amin* outlines one expanding initiative that hopes to keep pace with Asia's nuclear scene.

## NUCLEAR'S GLOBAL REACH

### 18 China's Challenging Fast Track

Far more energy will have to be produced — and conserved — to power China's expanding economy and protect the environment. *Wei Zhihong* examines China's choices.

### 22 Energising Africa

For Africa to be competitive, the poor need access to energy. *Ogunlade Davidson* highlights what could be done.

### 24 View from Japan: Building for the Future



Bridging the transition to a safe and secure energy future will require innovative nuclear systems. *Shunsuke Kondo*, Chairman of Japan's Atomic Energy Commission, sees a way forward.

### 27 Nuclear Snapshots

Perceptions of energy needs drive public opinion on the USA's nuclear future. *Ann Stouffer Bisconti* reports on where the US public stands.

### 29 Staff Report: Nuclear's New Accent

Europe's eastward expansion may be a boost to the nuclear power industry.

### 31 In Black & White



South Korean journalist and poet, *Choi Yearn-hong* examines media's role in shaping the public's opinion on nuclear power and other issues.

## THE POWER OF POSSIBILITIES

### 33 A Continuing Quest



Managing nuclear waste goes far beyond the science. Canada's *Elizabeth Dowdeswell* outlines her country's approach to long-term management of nuclear waste.

### 36 Down to Earth...and Below

*Claes Thegerström* maps Sweden's progress to locate a final resting place for high-level waste.

### 39 Nuclear's Second Wind

*Evgeny Adamov* explores how nuclear energy may gain its "second wind."

**Sidebar:** Fast Reactors

### 44 Fuelling Innovation

*Judith Perera* looks at several multinational initiatives for developing advanced and "innovative" nuclear energy systems.

### 48 South Africa's Nuclear Model



A small and innovative reactor is seen as the model for South Africa's new electricity plants.

*Tom Ferreira* takes an inside look at the promising future of Pebble Bed Modular Reactors.

## TWIN CHALLENGES: SAFETY & SECURITY

### 51 Safety for All : The New INSAG

*Richard Meserve & Kenneth Brockman* unveil the new International Nuclear Safety Group.

### 53 Illicit Trafficking & the New Agenda

The proliferation of WMD has spawned a variety of initiatives to control the trafficking of illicit nuclear materials. *Vladimir Orlov* reviews the landscape.

**Sidebar:** IAEA Database Tracks Nuclear and Radioactive Material

### 57 Hot Spots, Weak Links



What is the IAEA doing to help curb nuclear trafficking and possible terrorist threats?

IAEA's *Anita Nilsson & Tomihiro Taniguchi* outline a course of action.

### 62 Staff Report: Return to Sender

Upgrading the Safety & Security of Research Reactors

**Box:** Research Reactors Code of Conduct

### 64 Timeline Iraq

Challenges & Lessons Learned

*Jacques Baute*, Head of IAEA's Iraq Team, draws lessons from his team's experiences in Iraq and reflects on the inspection process.

### 69 Viewpoint: Seeking Truth

*Bonnie Azab Powell* reports Hans Blix's conversation with CNN's Christiane Amanpour on inspections in Iraq.

### 72 IAEA Books & Meetings

**Sidebar:**

Nuclear Gets "Funky": Areva's new campaign