



**IAEA**

*60 Years*

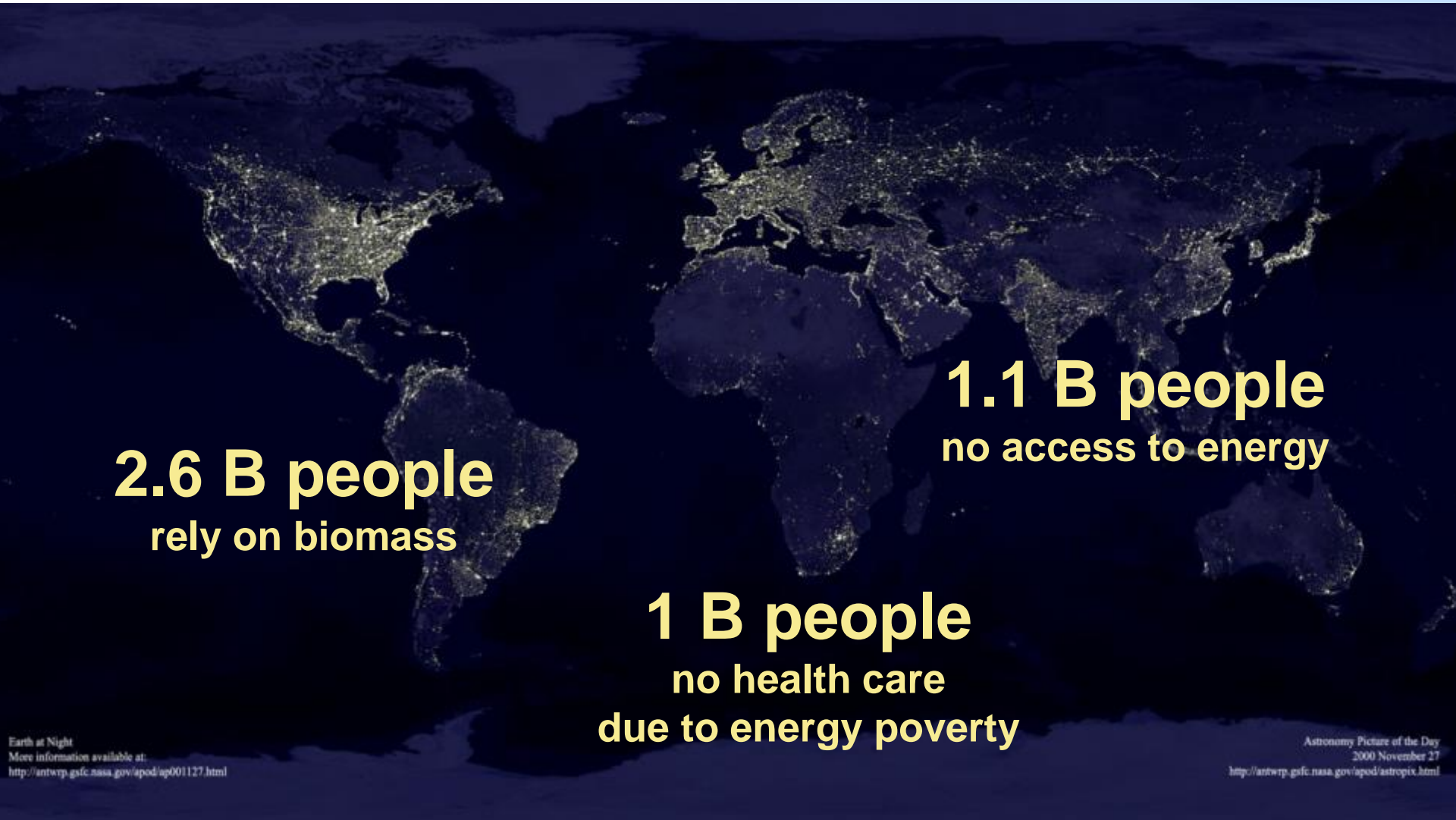
*Atoms for Peace and Development*

# **World nuclear energy perspectives**

**Mikhail Chudakov**  
**Deputy Director General**  
**Department of Nuclear Energy**  
**International Atomic Energy Agency**

**IFNEC Latin American Nuclear Energy Stakeholders Conference**  
**25 October 2016**

# Energy 2016



**2.6 B people**  
rely on biomass

**1.1 B people**  
no access to energy

**1 B people**  
no health care  
due to energy poverty

# IAEA & SDGs



# Energy challenge

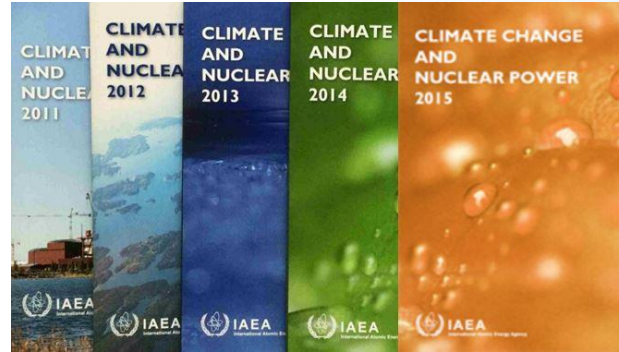


**Population**  
**Energy demand**  
**Energy security**

**Environment**  
**Climate change**



# Life cycle GHG emissions



# NP Reactors

(October 2016)

**450 in operation**



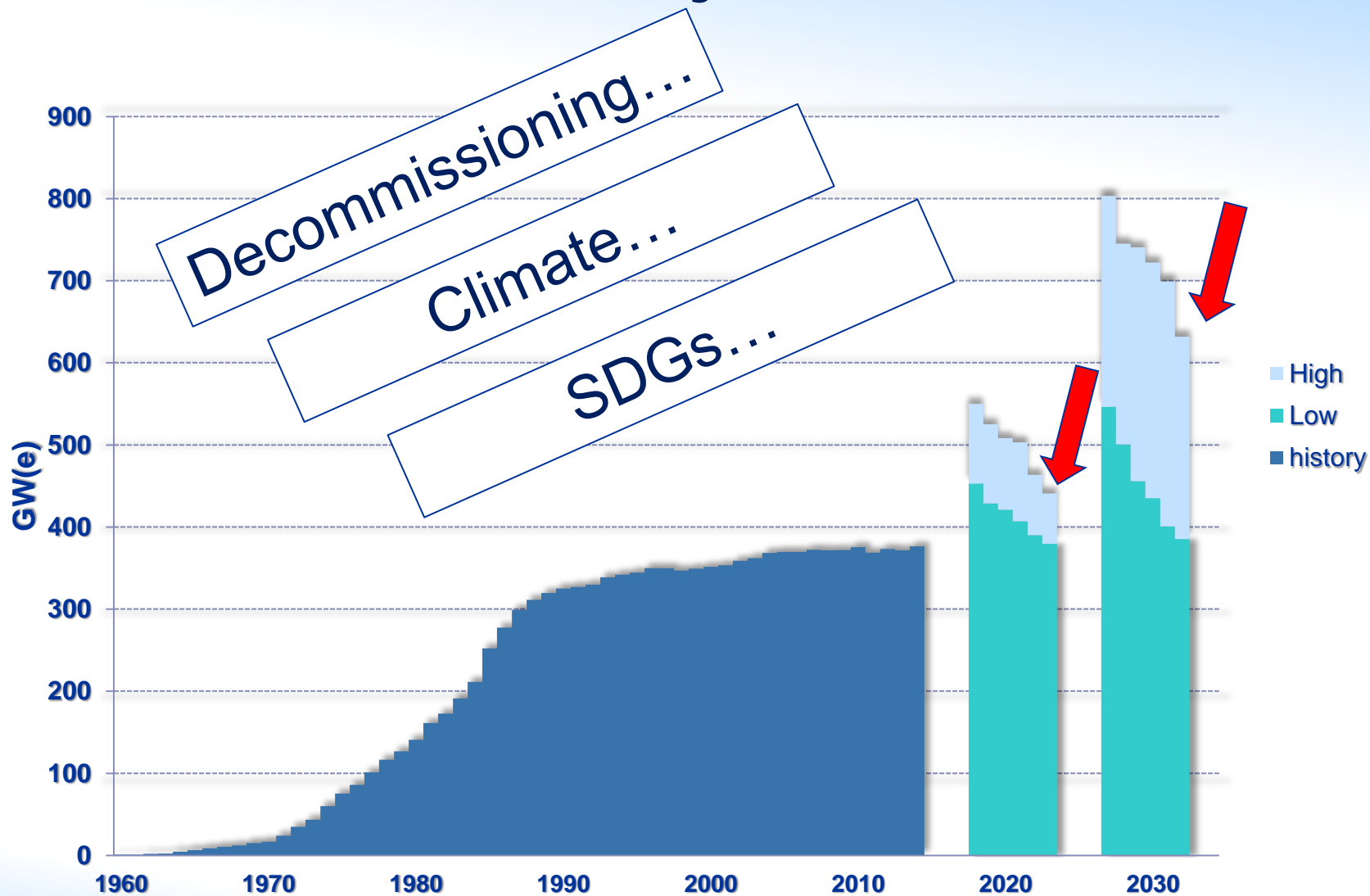
**392 GW(e) Capacity**



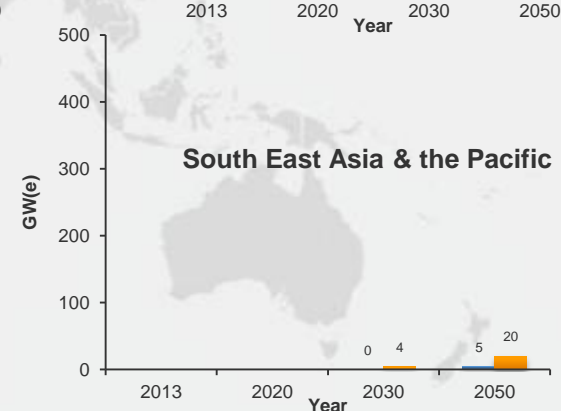
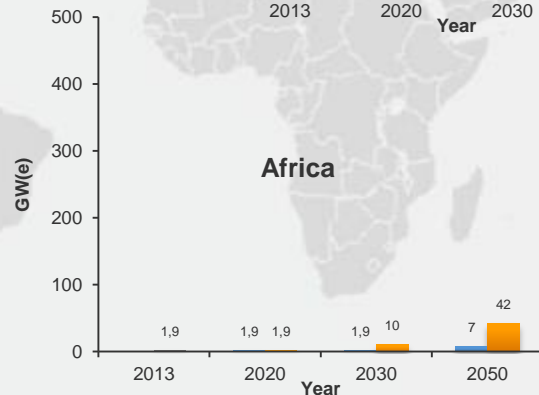
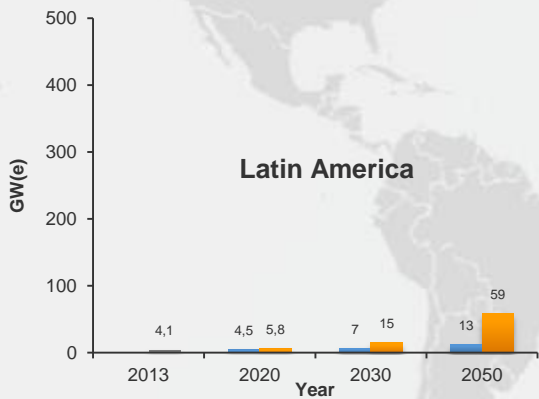
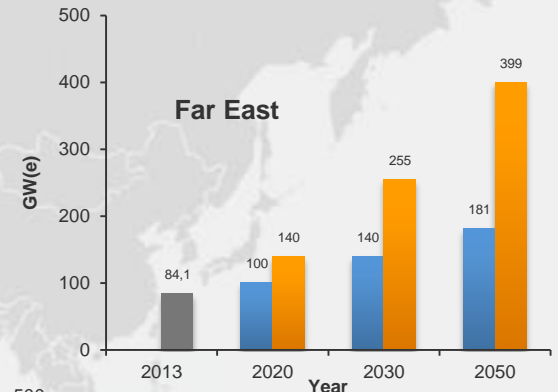
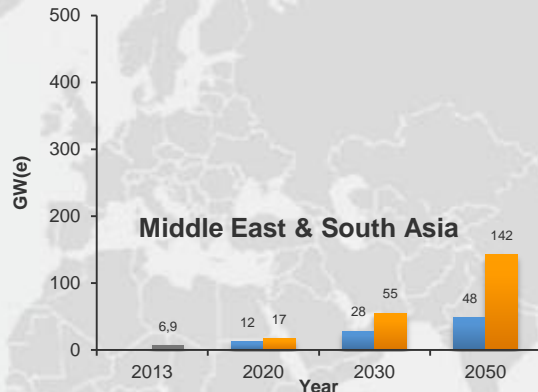
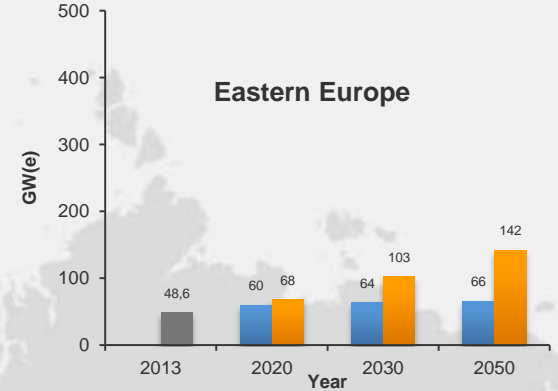
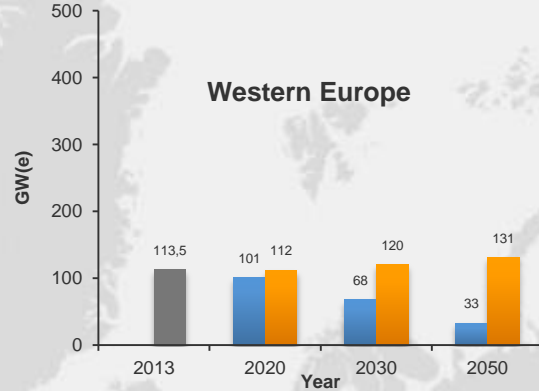
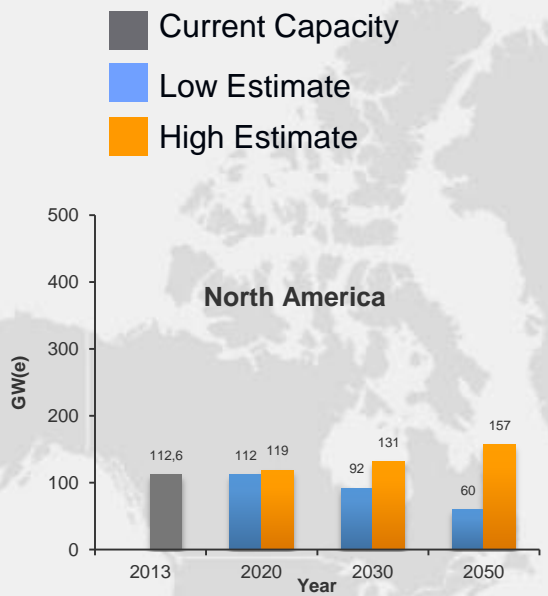
**60 under construction (2/3 in Asia)**



# 2030 Projections

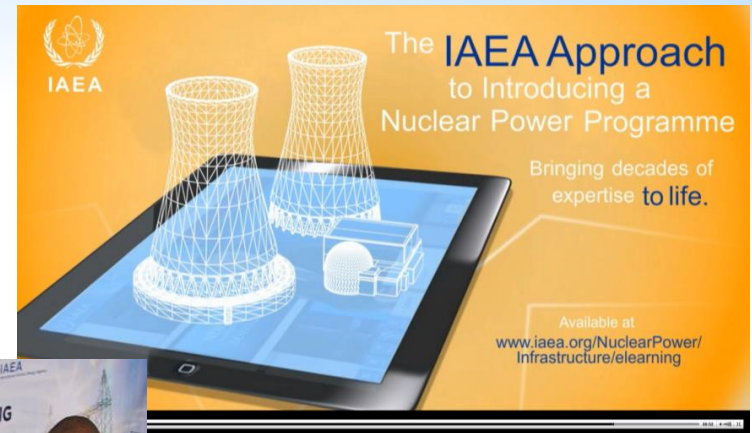


# NP Development in Different Regions





# IAEA Assistance to Newcomers

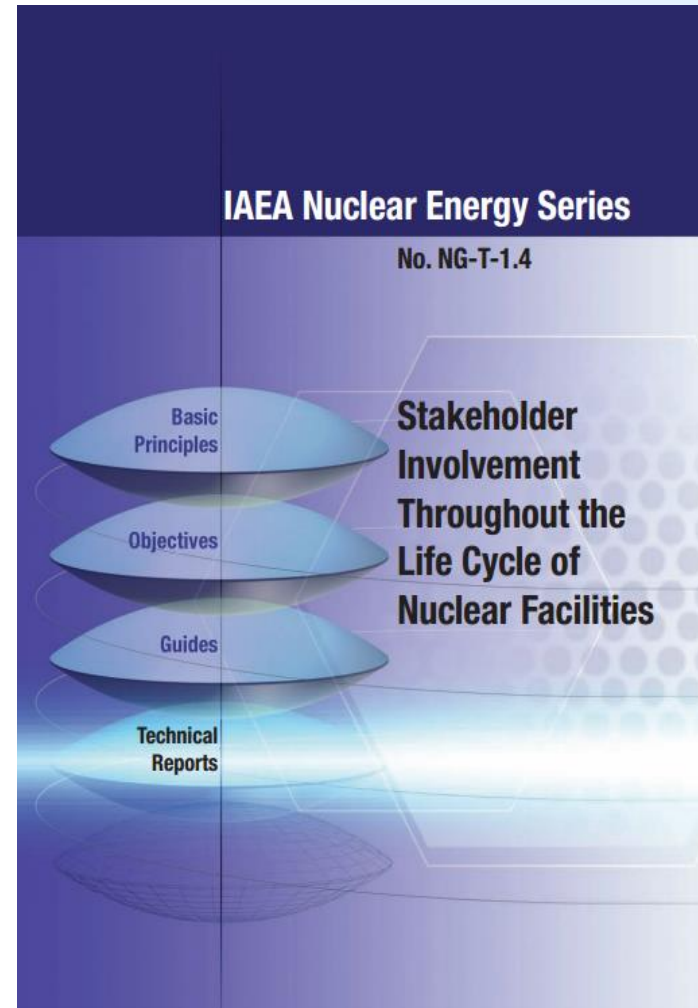
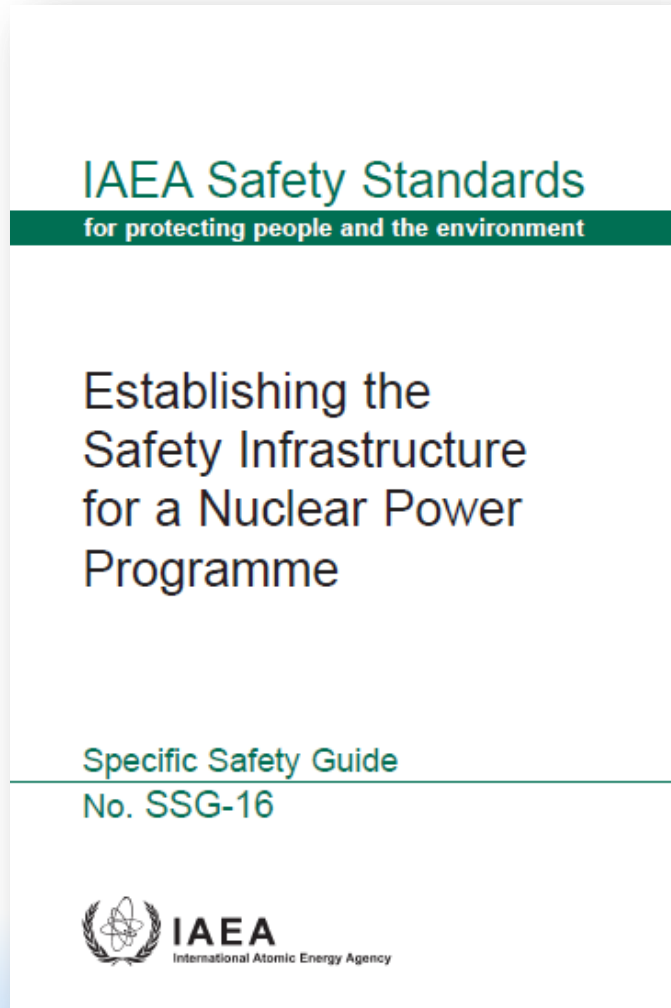


2015, Kenya



2016, Philippines

# Stakeholder Involvement

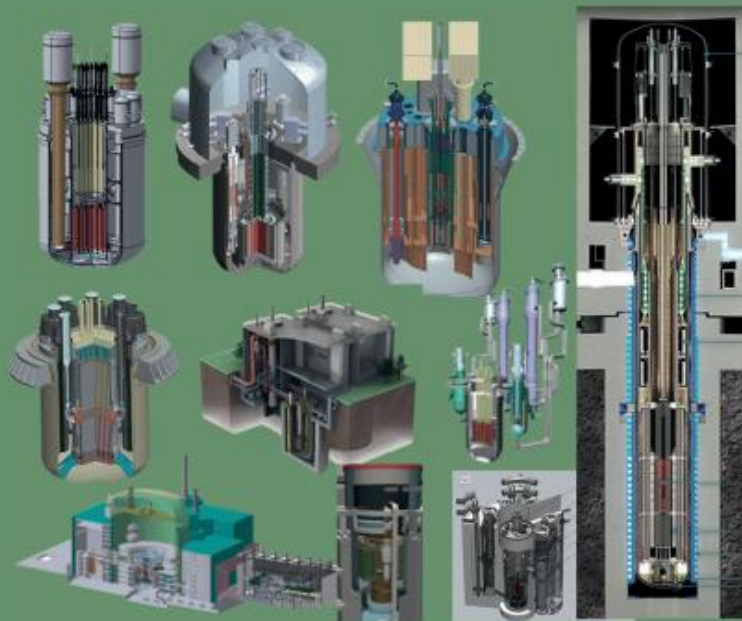


# Innovation & Technology Development

## STATUS OF INNOVATIVE FAST REACTOR DESIGNS AND CONCEPTS

A Supplement to the IAEA Advanced Reactors  
Information System (ARIS)

<http://aris.iaea.org>



## Advances in Small Modular Reactor Technology Developments

A Supplement to:  
IAEA Advanced Reactors Information System (ARIS)



# Capacity Building

## Argentinian Research Reactor to Serve as Hub for IAEA's Internet Reactor Laboratory Project in Latin America

By Lenka Kollar and Judy Vyshniauskas, IAEA Department of Nuclear Energy

OCT  
9  
2015



### Related Resources

- [Department of Nuclear Energy](#)
- [Nuclear Fuel Cycle & Waste Technology](#)
- [Research Reactors](#)

Pablo Cantero of the CNEA demonstrates to university professors how the Internet Reactor Laboratory project will work, Bariloche, 21 September 2015. (Photo: CNEA)

# Knowledge Management



## Nuclear Energy Management Schools

Oct 2016, Cape Town  
Sept 2016, St. Petersburg

## Networks



IAEA

60 Years

*Atoms for Peace and Development*

***...atoms for peace  
at your service...***

***Thank you!***



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[www.iaea.org/nuclearenergy](http://www.iaea.org/nuclearenergy)