NRC INTERNATIONAL ACTIVITIES

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OVERVIEW

- **Five major international program areas:**
  - **Conventions and Treaties**
  - **Export and Import Licensing**
  - **Bilateral Arrangements**
  - **Multilateral Work**
  - **Cooperative Research**

CONVENTIONS & TREATIES

- **April 2008: Review Meeting of the Convention on Nuclear Safety**
- **October 2008: Joint Convention Organizational Meeting**
- **U.S. Ratification of the Convention on Supplementary Compensation for Nuclear Damage**

CHALLENGES

- **Additional Protocol For IAEA Safeguards in the U.S.**
- **Amendments to the Convention on the Physical Protection of Nuclear Material**
- **2010 Nuclear Non-Proliferation Treaty Review Conference**

EXPORT/IMPORT LICENSING

- Implementing the Energy Policy Act and the Code of Conduct
- Part 810 and Subsequent Arrangement Reviews
- Import of Radioactive Waste
- Part 110 Rulemaking

CHALLENGES

- **Completion of Part 110 Rulemaking**
- **Section 123 Agreements**

BILATERAL COOPERATION

- 42 Bilateral Arrangements with 38 Countries and Taiwan
- Outreach: Middle East, Turkey, Vietnam, Thailand, and Indonesia
- Active Cooperation with Finland, France, Canada, India, China, Iraq
- Pilot Assistance Projects

CHALLENGES

- **Regulatory Infrastructure for Countries Considering Nuclear Power Programs**
- **Establishing Cooperation**
- **Maintaining Safe Operation of Existing Nuclear Facilities**
- **Exchange Security Information**

CHALLENGES, CONT.

- **Expand Regulatory Infrastructure Assistance to Commonwealth of Independent States and African Countries**
- **Coordinate Assistance with Other Providers**
- **Foreign Assignees**

NRC'S International Interactions

- Enhanced Coordination and Cooperation among OIP and the OEDO
- International Activities are Becoming Integral to NRC's Domestic Safety Mission
- Benefits from NRC's International Interactions

Cooperative Research Activities

- 70+ Bilateral or Multilateral Agreements with 25 countries plus OECD
- Active Participation in OECD/NEA and NEA Programs
- Provide Intellectual Capital, Expert Analysis, and Experience
- Leverage Research Activities to Capitalize on Foreign Expertise and Research Programs

Operating Experience Activities

- NRC Engaged in International OpE Processes and Analysis
- NRC Engaged in International OpE International Outreach of Fuel Cycle OpE
- Use of Domestic and International OpE in New Reactor Licensing and Construction
- Reflection of OpE into Standards Development

Multilateral Cooperation

- Participation in Nuclear Energy Agency Safety Programs
- Participation in IAEA Safety, Security, and Safeguards Programs
- Basic Safety Standards

2010 IRRS Mission Preparations

- Performed Self-Assessment in 2006-07
- NRC staff Participation in IRRS Missions to Other Countries
- Preparation Meeting with IAEA and Mission Leaders One Year Before Mission

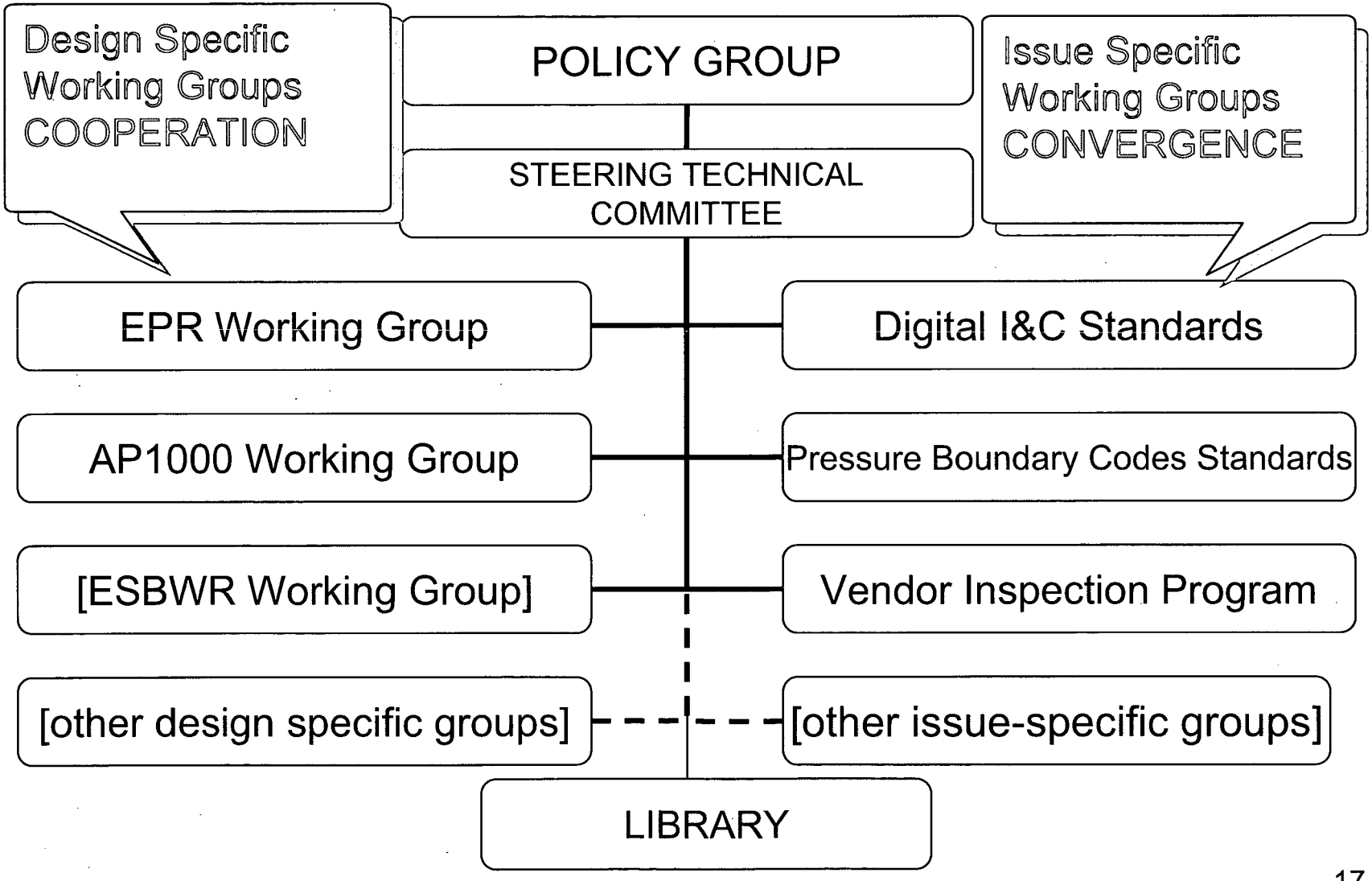
CHALLENGES

- **Emerging Nuclear Programs**
- **Integration and Balance of Safety and Security**
- **Prioritizing Increasing Demands**

Multinational Design Evaluation Program (MDEP)

- Multinational initiative to enhance cooperation and further convergence of regulatory practices among ten regulatory authorities currently evaluating new reactor designs.
- Pilot Project completed- 10 recommendations approved
- 3 stages merged

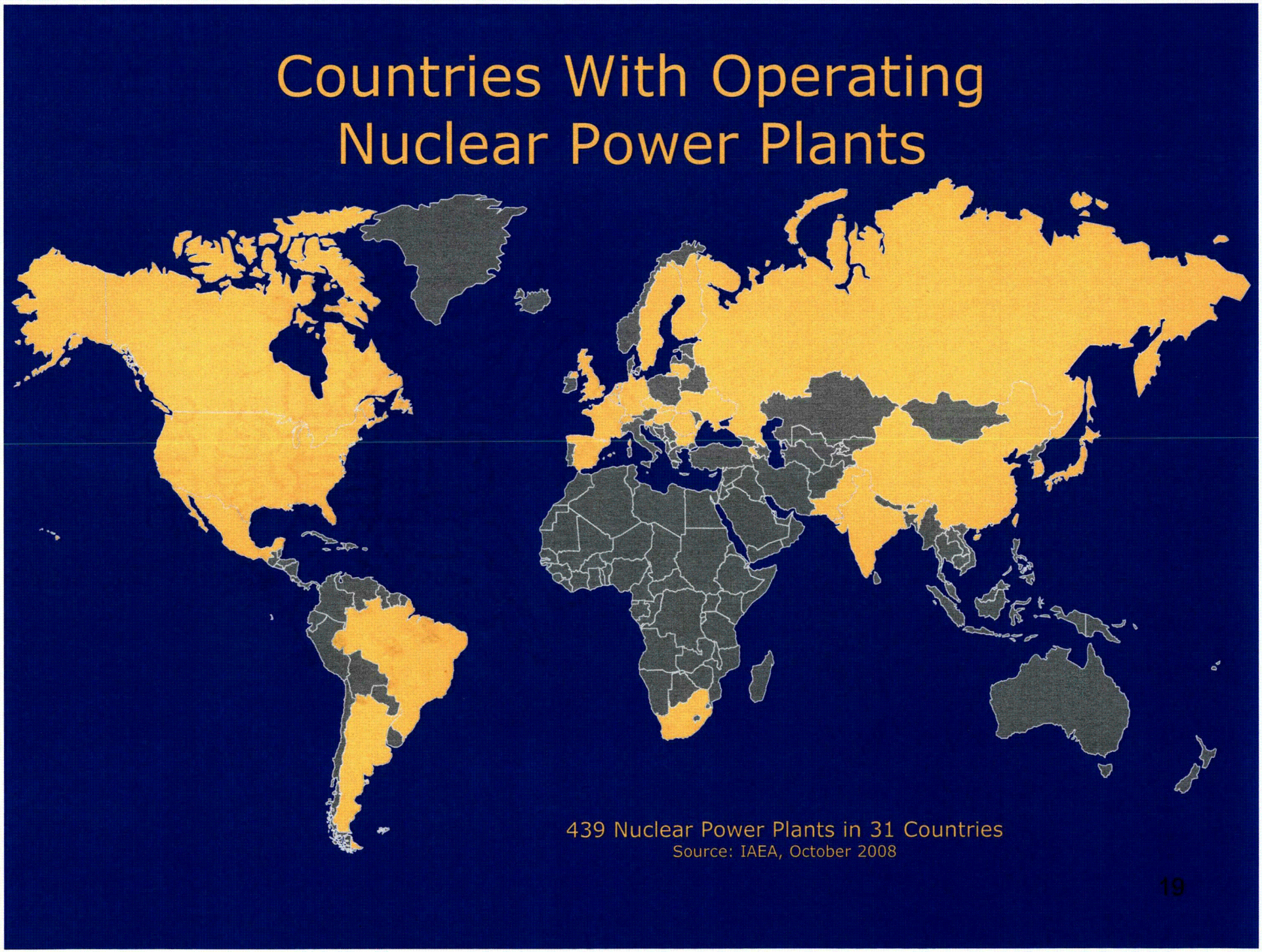
MDEP Structure



CONCLUSION

- **Global Industry Requires Global Approaches**
- **Leveraging Resources Through Bilateral and Multilateral Engagement**
- **Intensified Interactions With Program Offices**
- **Human Resources & Knowledge Management**

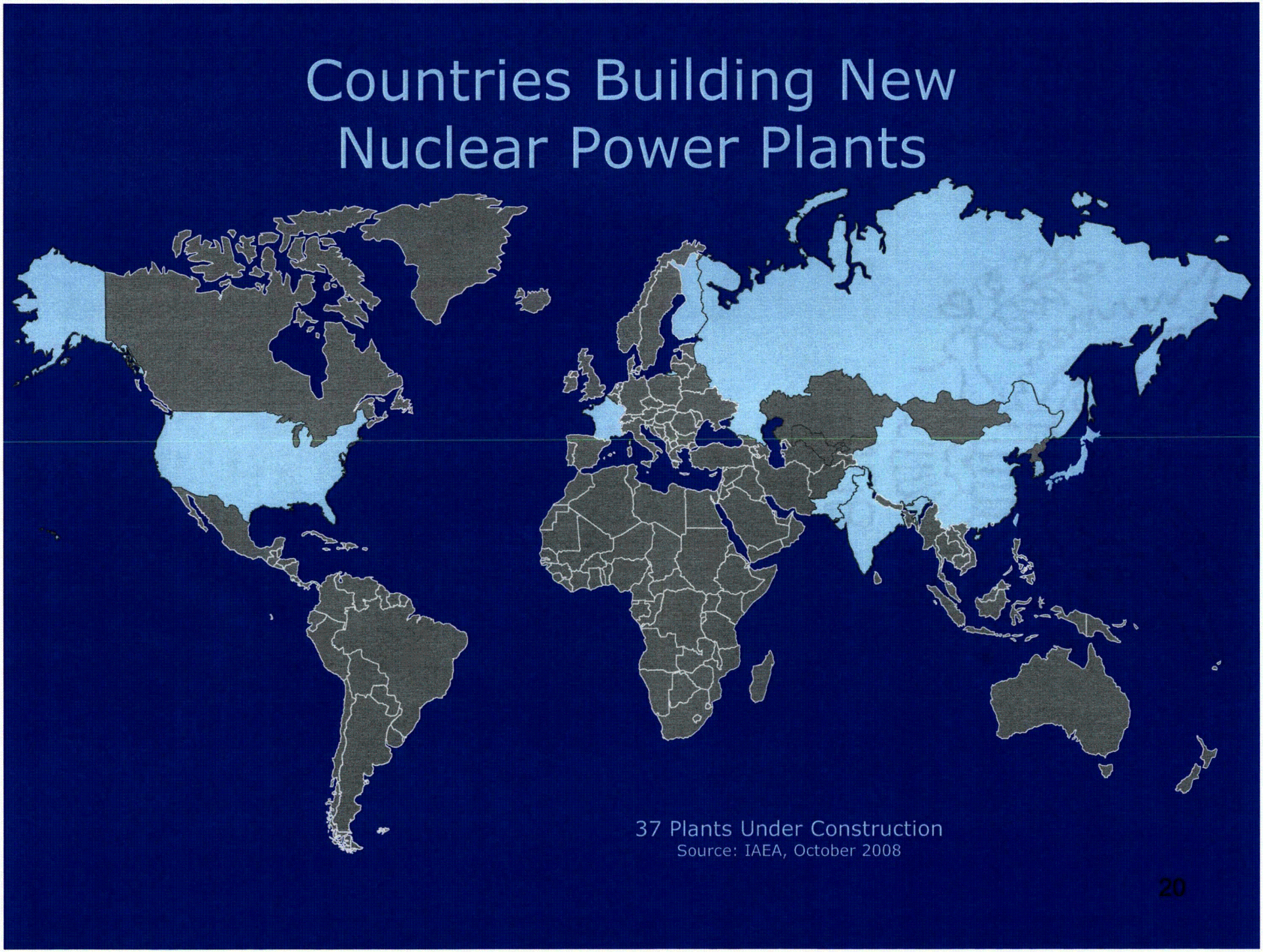
Countries With Operating Nuclear Power Plants



439 Nuclear Power Plants in 31 Countries

Source: IAEA, October 2008

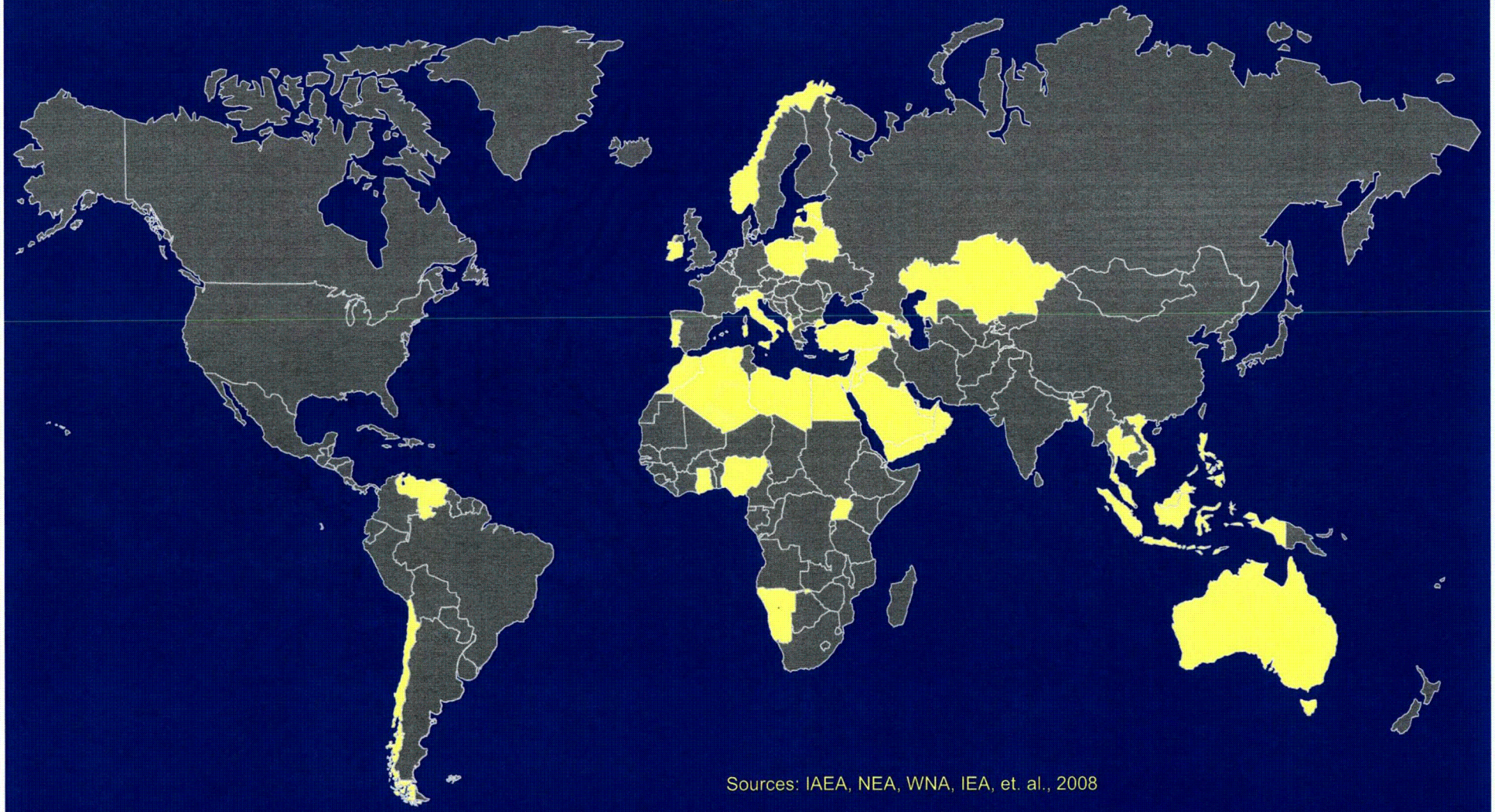
Countries Building New Nuclear Power Plants



37 Plants Under Construction

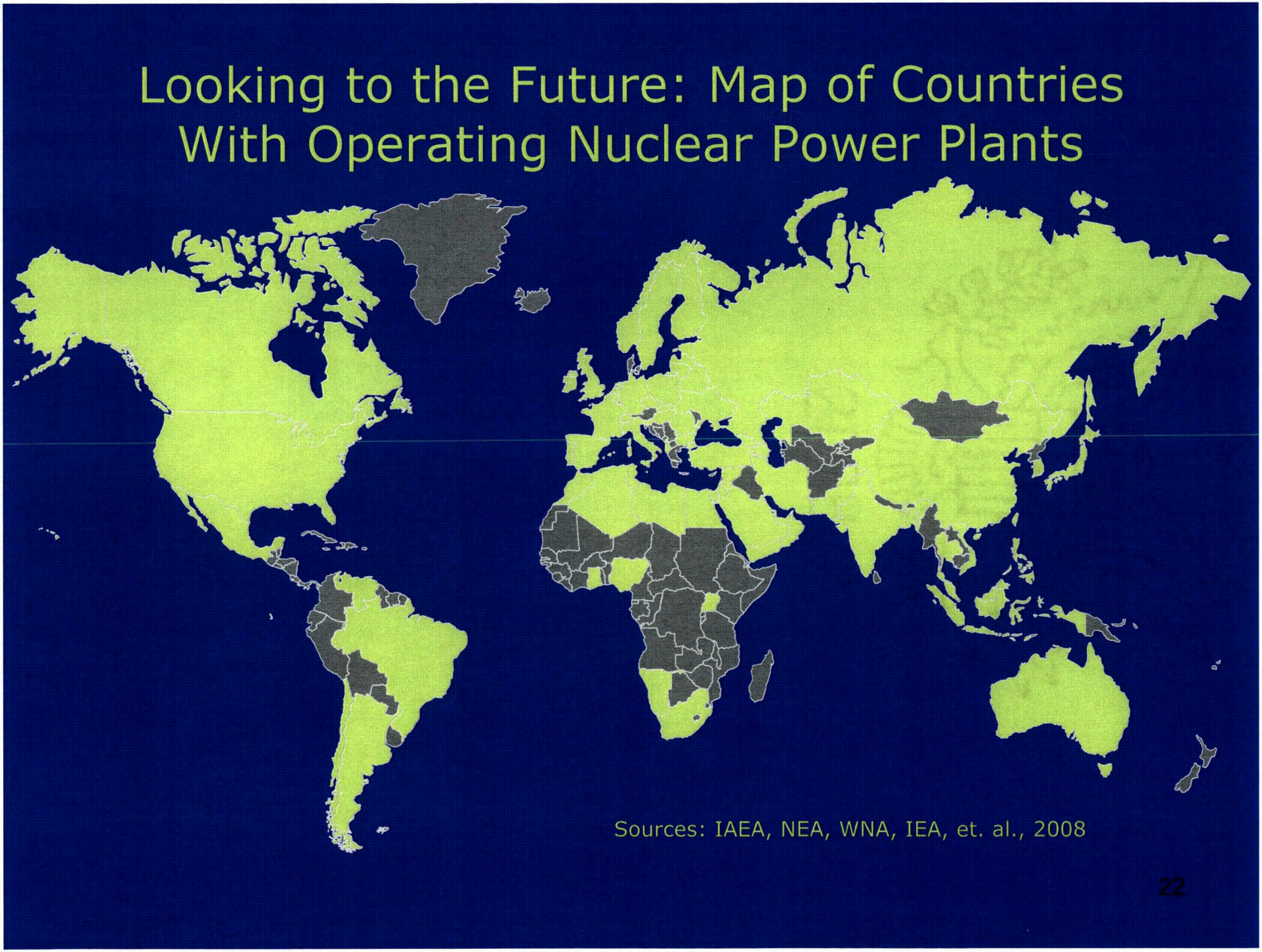
Source: IAEA, October 2008

Approximately 40 – 50 Non-Nuclear-Power Countries Considering Nuclear Power Plants



Sources: IAEA, NEA, WNA, IEA, et. al., 2008

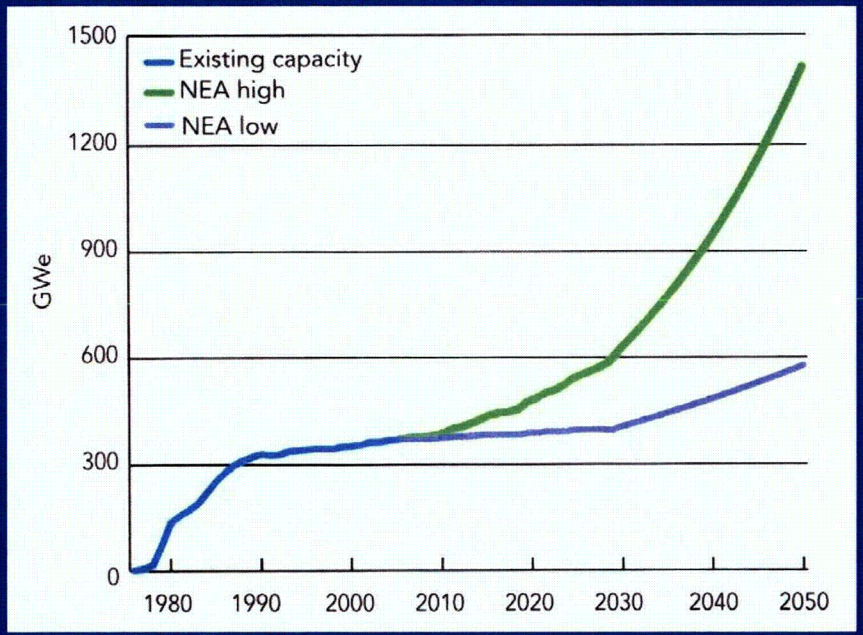
Looking to the Future: Map of Countries With Operating Nuclear Power Plants



Sources: IAEA, NEA, WNA, IEA, et. al., 2008

NEA Projections to 2050

Low Scenario: Up to 2030 new nuclear power plants are built only to replace those that are being retired. Between 2030 and 2050, about 23 reactors are built each year, on average, to replace retired plants.



Source: NEA Nuclear Energy Outlook - 2008

High Scenario: An average of 12 new reactors are built per year between 2007 and 2030. The build rate accelerates between 2030 and 2050, starting modestly but reaching an average of 54 reactors per year over the period.