

Refining Multilateral Nuclear Approaches

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Outline

Fuel Cycle Review

Conclusions

Energy Security and Nonproliferation

MNA Issues

Back-end

A Condensed Fuel Cycle

Front End

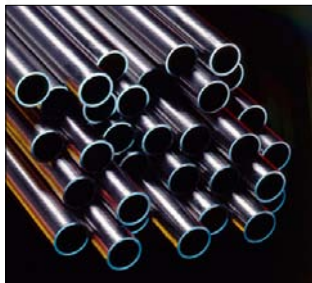
Reactor

Back End

Enrichment



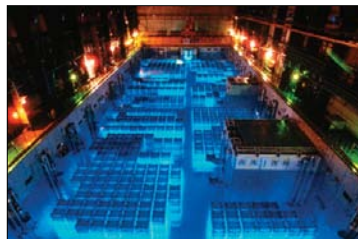
Fabrication



Reactor



Interim Storage



Reprocessing



Interim Storage



Geological Disposal



Evolving Conclusions

**MNAs Can Support
Energy Security and
Nonproliferation**



**Essential Issues
Remain Unexplored
and Unresolved**



**The Back-End Can
Most Fully Unlock
MNA Potential**

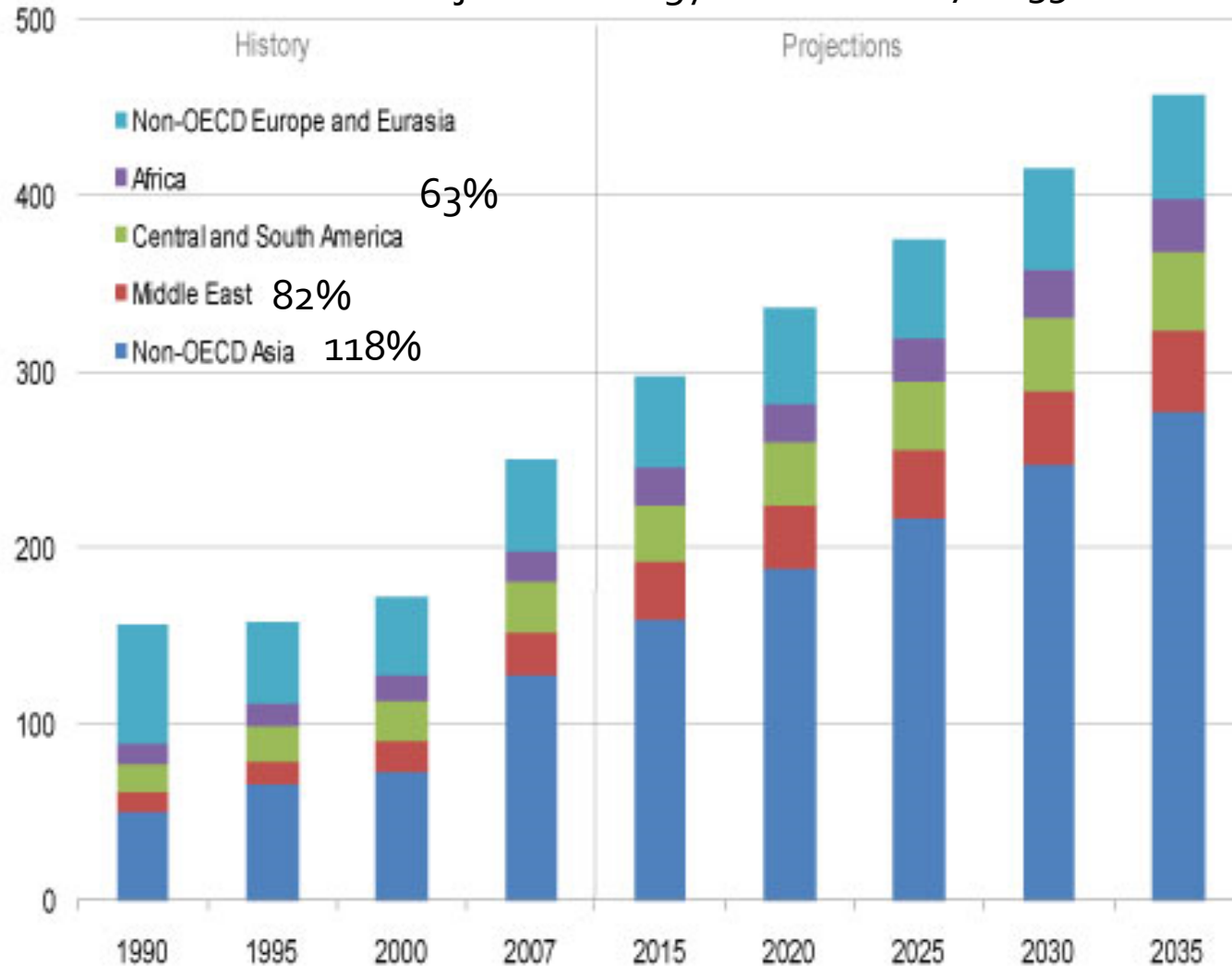


Nuclear Energy Growth and Energy Security

Figure 15. Marketed energy use in Non-OECD economies by region, 1990-2035

quadrillion Btu

Projected Energy Demand 2007-2035



Source: *International Energy Outlook 2010*. US Energy Information Administration

Unexplored and Unresolved MNA Issues

Political



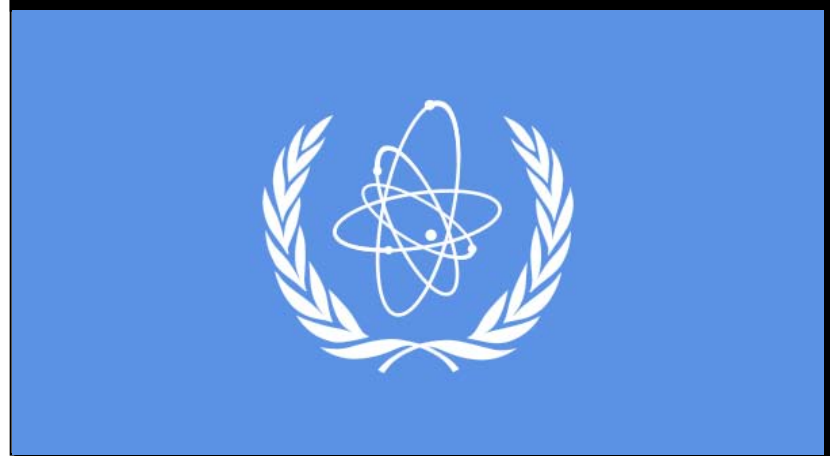
Technological



Legal



Mission/Feasibility



Including the Back End

A key consideration for states contemplating nuclear power

Solutions will require unprecedented collaboration

Will raise new and old issues

