

SCIENTIFIC AMERICAN

SPECIAL ISSUE

SEPTEMBER 2006
WWW.SCIAM.COM


\$4.99

How to Power the Economy and Still Fight Global Warming

Energy's Future Beyond Carbon

- ▶ **Cleaning up Coal**
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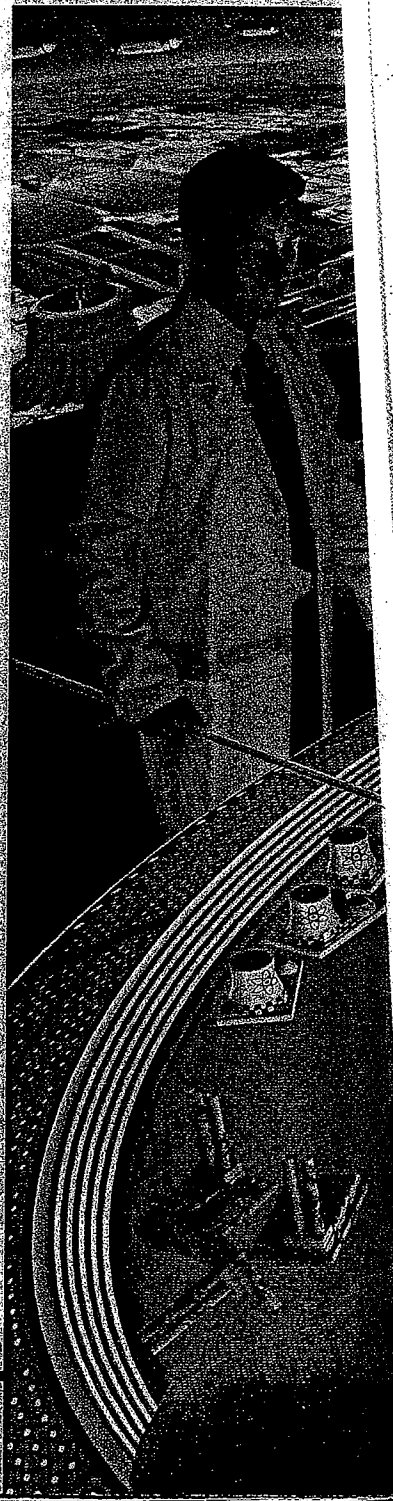
The Nuclear

A threefold expansion of nuclear power could contribute significantly to staving off climate change by avoiding one billion to two billion tons of carbon emissions annually
BY JOHN M. DEUTCH AND ERNEST J. MONIZ

Nuclear power supplies a sixth of the world's electricity. Along with hydropower (which supplies slightly more than a sixth), it is the major source of "carbon-free" energy today. The technology suffered growing pains, seared into the public's mind by the Chernobyl and Three Mile Island accidents, but plants have demonstrated remarkable reliability and efficiency recently. The world's ample supply of uranium could fuel a much larger fleet of reactors than exists today throughout their 40- to 50-year life span.

With growing worries about global warming and the associated likelihood that greenhouse gas emissions will be regulated in some fashion, it is not surprising that governments and power providers in the U.S. and elsewhere are increasingly considering building a substantial number of additional nuclear power plants. The fossil-fuel alternatives have their drawbacks. Natural gas is attractive in a carbon-constrained world because it has lower carbon

▶ Governments and utilities are considering a new wave of nuclear power plant construction to help meet rising electricity demand



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OVERVIEW

By John M. Deutch and Ernest J. Moniz

Option

