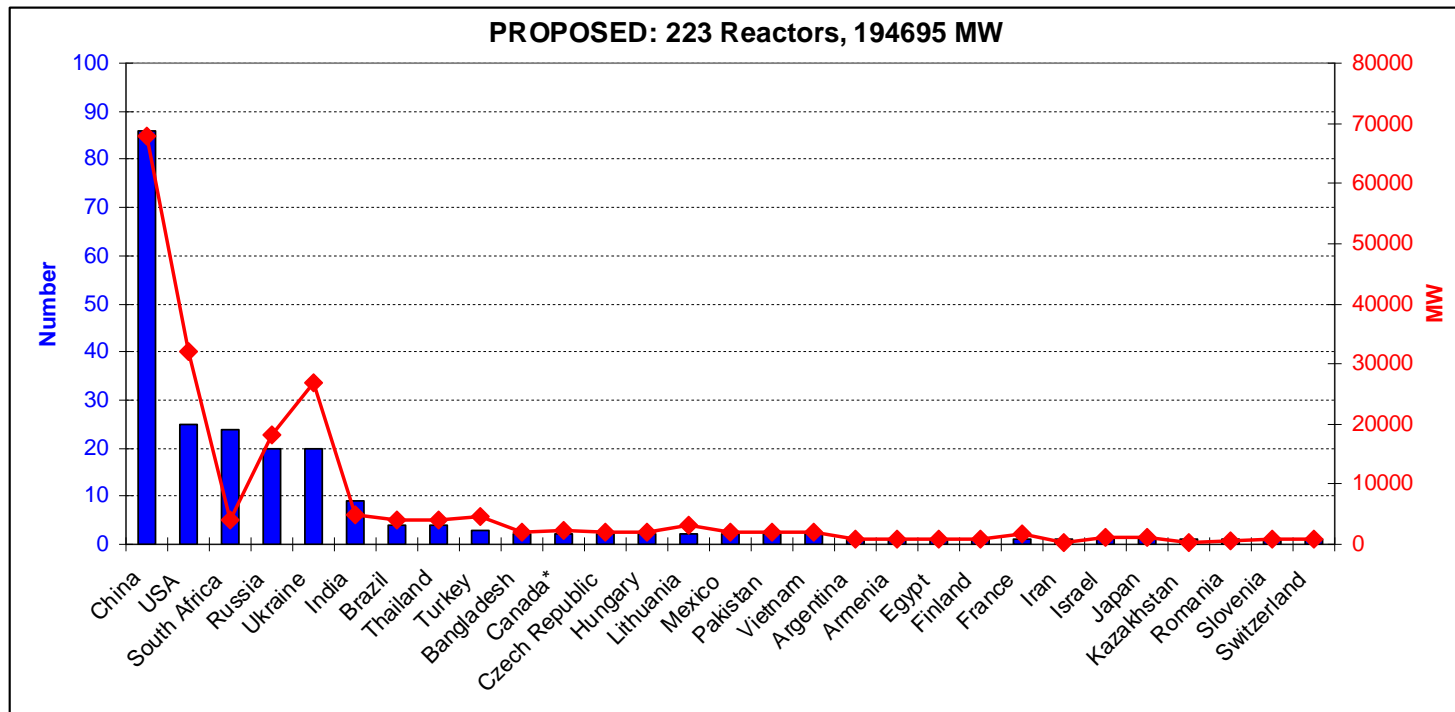
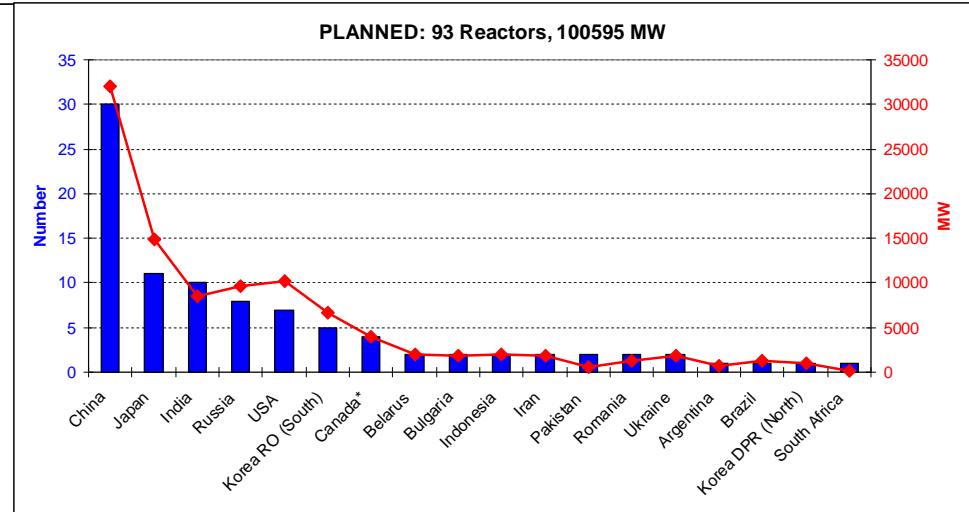
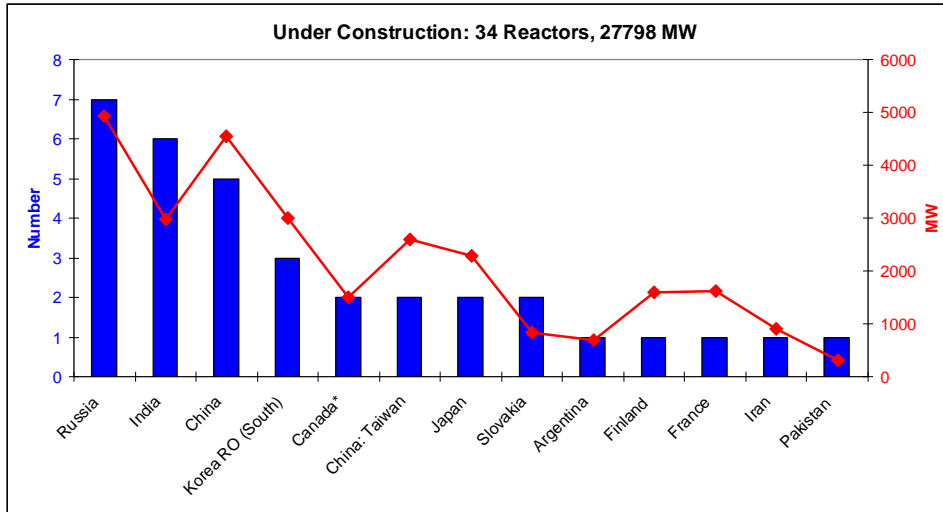




Future of Nuclear Power Plants (as of 31/12/2007)

Source: World Nuclear Association



Nuclear power plants under construction as of end-August 2008

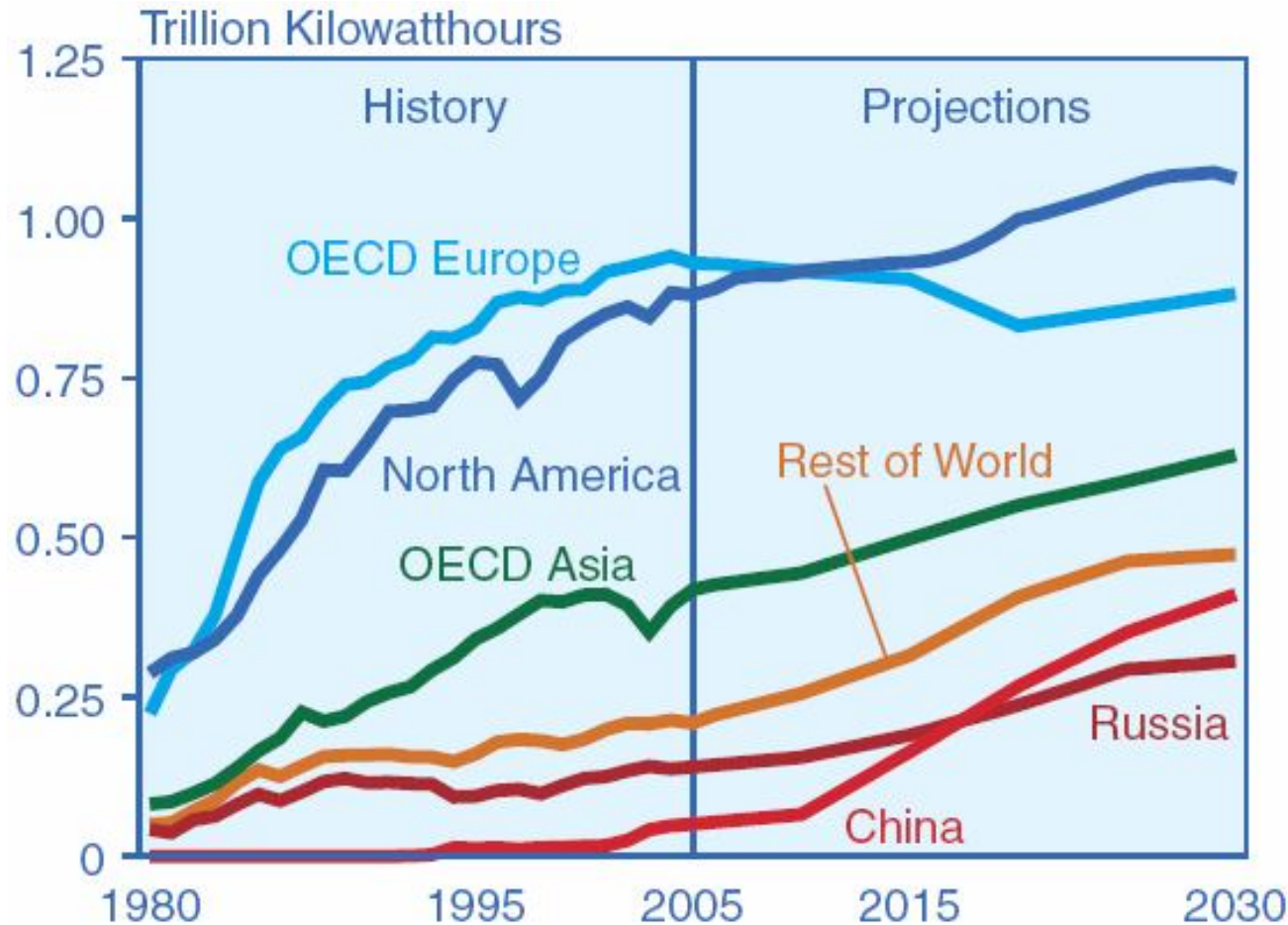
Country	Number of reactors	Capacity (MW)
Argentina	1	692
Bulgaria	2	1 906
China	6	5 220
Chinese Taipei	2	2 600
Finland	1	1 600
France	1	1 600
India	6	2 910
Iran	1	915
Japan	2	2 166
Korea	3	2 880
Pakistan	1	300
Russia	7	4 724
Ukraine	2	1 900
United States	1	1 165
Total	36	30 578

Note: Installed capacity is net (electricity only).

Source: IAEA PRIS Database (available at www.iaea.org)



World Net Electricity Generation from Nuclear Power 1980-2030



Spot price of uranium oxide

January 2001 → \$14.1/kg

March 2008 → \$163.1/kg

It seems unlikely that production costs will hamper the future supply of uranium.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **2030:** EIA, System for the Analysis of Global Energy Markets/Global Electricity Module (2008).



South Korea Nuclear Power Plants

Individual units at the plant site: Yonggwang			
Yonggwang 1	PWR	Korea	Operable
Yonggwang 2	PWR	Korea	Operable
Yonggwang 3	PWR	Korea	Operable
Yonggwang 4	PWR	Korea	Operable
Yonggwang 5	PWR	Korea	Under construction
Yonggwang 6	PWR	Korea	Under construction

Individual units at the plant site: Ulchin			
Ulchin 1	PWR	Korea	Operable
Ulchin 2	PWR	Korea	Operable
Ulchin 3	PWR	Korea	Operable
Ulchin 4	PWR	Korea	Under construction



Individual units at the plant site: Wolsong			
Wolsong 1	PHWR	Korea	Operable
Wolsong 2	PHWR	Korea	Operable
Wolsong 3	PHWR	Korea	Under construction
Wolsong 4	PHWR	Korea	Under construction

Individual units at the plant site: Kori			
Kori 1	PWR	Korea	Operable
Kori 2	PWR	Korea	Operable
Kori 3	PWR	Korea	Operable
Kori 4	PWR	Korea	Operable



Malaysia is ready to have a nuclear power plant to generate electricity by 2020.

Mohd Ruddin Ab Ghani, parliamentary secretary of the **Science, Technology and Innovation Ministry**.

Efforts to raise people's awareness about nuclear energy had started through works hops, seminars and conferences in the country.

He told reporters in Langkawi, a tourism island in northern Malaysia, when the International Conference on Protection from Radiation 2007 was opened there.

Mohd Ruddin stressed that electricity generation from nuclear energy was important as petroleum and coal reserves were being depleted.

Although the cost of building nuclear plants was high, the production cost would be cheaper, he added.

The 3 day conference was organized by the Malaysian Nuclear Agency, which reportedly has a research on nuclear reactor currently.

Çin bu konuda ne yapmış ?

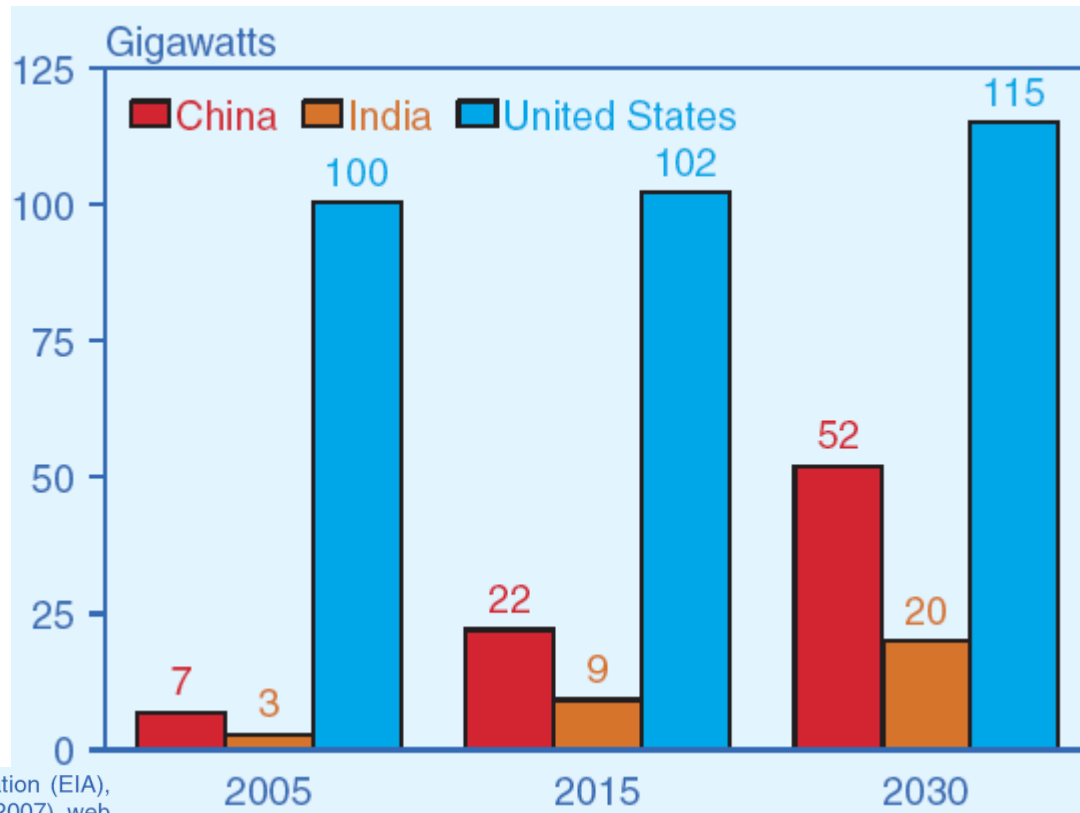
FRANSA ile ÇİN arasında 26 Kasım 2007 tarihinde yapılan 11.87 milyar US\$'lık nükleer anlaşma

1. Çin Fransadan **III.Nesil** 2 tane 1700MW nükleer santral alacak ve 2020'ye kadar planladığı 40.000MW'lık nükleer programını III.nesil nükleer santrallerle devam edecek,
2. Taraflar nükleer reaktörlerin geliştirilmesi ve mühendisliği ile ilgili bir ortak şirket kuracak ve III.Nesil Nükleer Santral **teknoloji transferi** ve paylaşımı yapacaklar, ve kurulacak bu şirket bu reaktörlerin Çin'de pazarlamasını da yapacak
3. Nükleer Santralı temin eden Fransız şirketinin işletmekte olduğu Afrikada'ki **uranyum madeninin** ömür boyu üretiminin %35'sini bu satış çerçevesinde Çin anlaşmayla kendisine bağlamıştır,
4. Fransız Elektrik Şirketi **EdF** bu iki ünitelik nükleer santralı kuracak üretim şirketine **%30 oranında ortak** olacak,
5. Nükleer Santralın imalatçı firması 2026 yılına kadar bu reaktörlere **yakıt teminini garanti** ederek yakıt sağlayacak,
6. Fransa tarafından kurulan mevcut Çin'deki Yakıt Montaj fabrikasına ilaveten ikinci bir **yakıt fabrikasının kurulmasına** Fransa katkıda bulunacak,
7. Nükleer santralın bazı önemli parçaları belli bir program çerçevesinde **ÇİN sanayi tarafından imal edilecek**. Fransa zaten Avrupa'da tesis etmekte olduğu 2 nükleer santralin buhar generatörü, yüksek basınçlı pompalar vs.gibi önemli parçalarını Çin'de imal ettirmektedir.

Nuclear in China

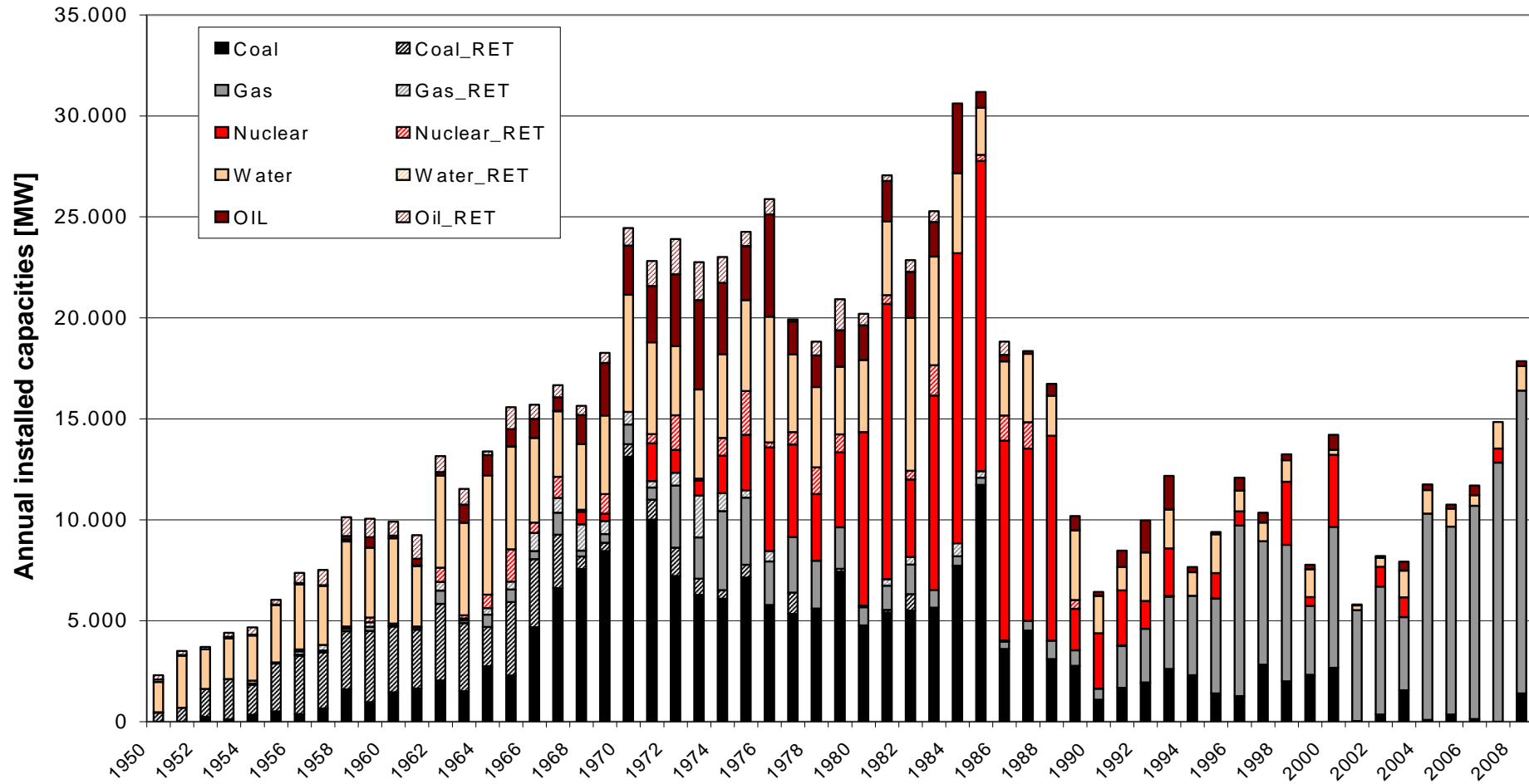
1. 11 commercial nuclear power reactors in operation, 6 of which have been brought on line since 2002.
2. Another 6 plants are currently under construction, and several more are in various stages of planning.
3. The Chinese government is also in the process of awarding billions of dollars in contracts to build additional nuclear plants.
 France's AREVA,
 Russia's AtomStroyExport,
 U.S.-based Westinghouse

In the world's largest nuclear power deal to date, China will pay \$11.9 billion to AREVA to build two nuclear reactors.



Sources: 2005: Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. 2015 and 2030: EIA, System for the Analysis of Global Energy Markets/Global Electricity Module (2008).

Avrupada Eklenen Yıllık Kapasite





ABD de Eklenen Yıllık Kapasite

