

ENVIRONMENTAL DEFENSE FUND

Foreclosing the Future: Coal, Climate and Public International Finance




ENVIRONMENTAL DEFENSE FUND
finding the ways that work

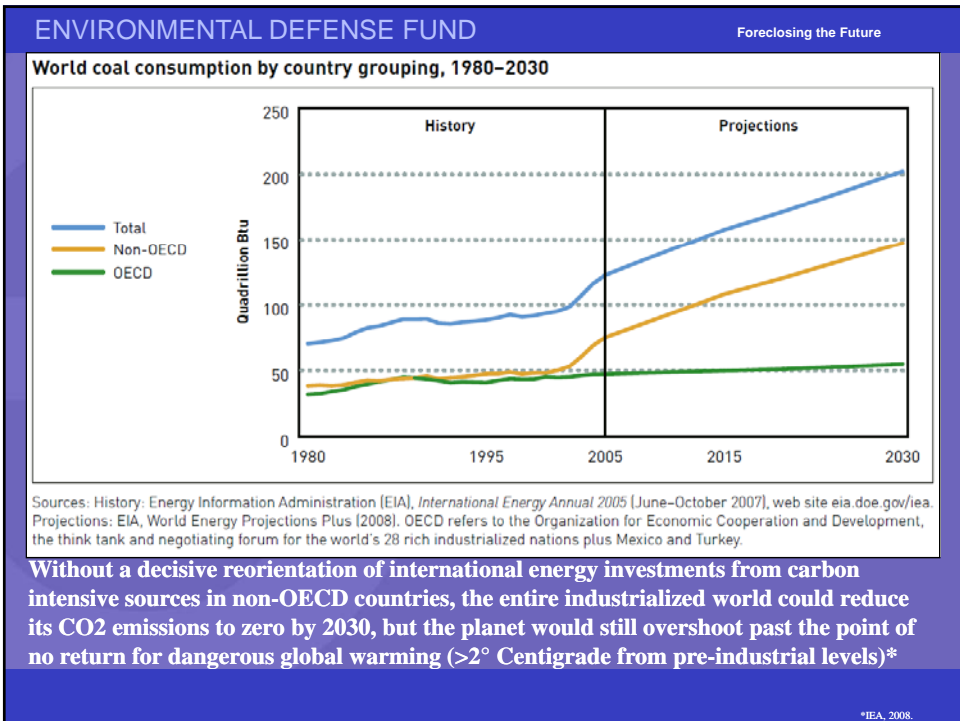
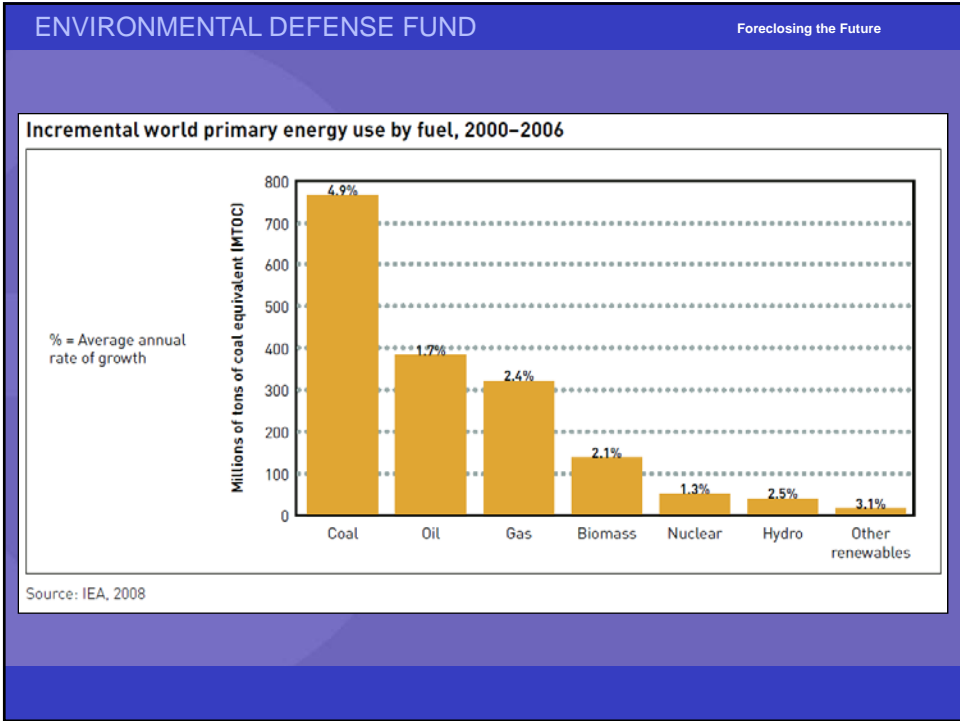
Bruce Rich

ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

WHY COAL?

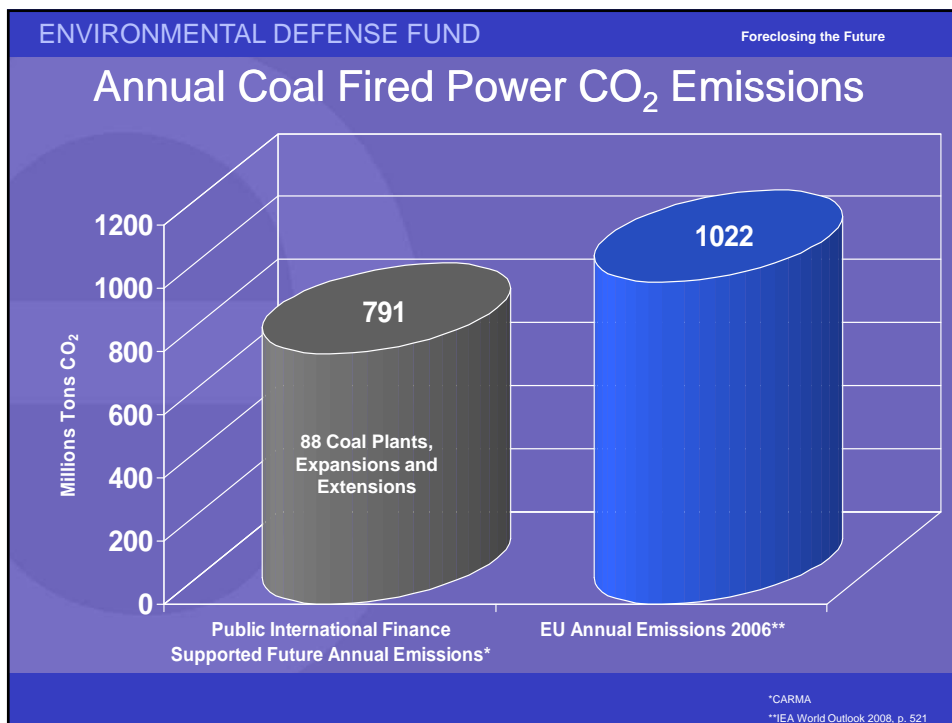


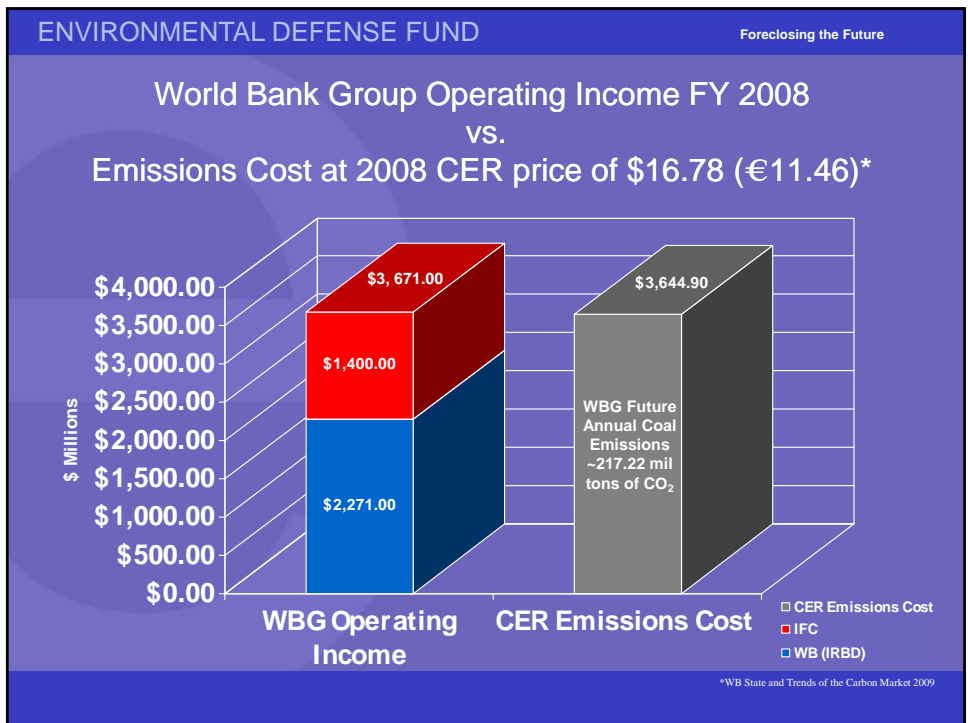
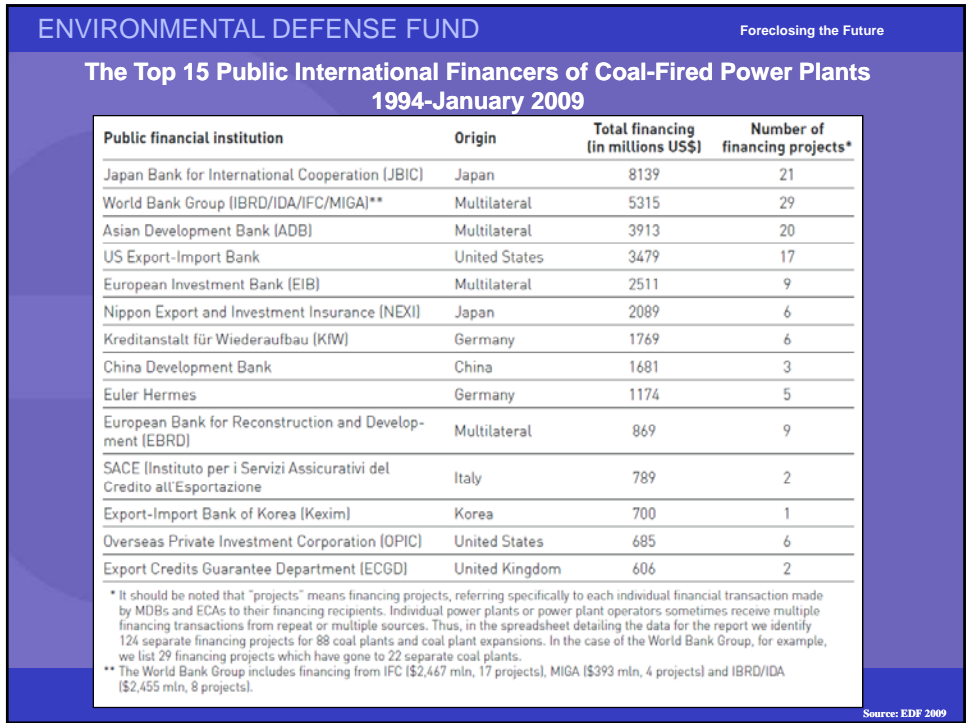
- Coal the most carbon intensive of all fuels: double the amount of C02 for same energy production than natural gas, 40% more than oil
- Coal plants, after hydroelectric facilities, have the longest generating life of all energy sources, 40-50 years, locking in C02 emissions for up to half a century

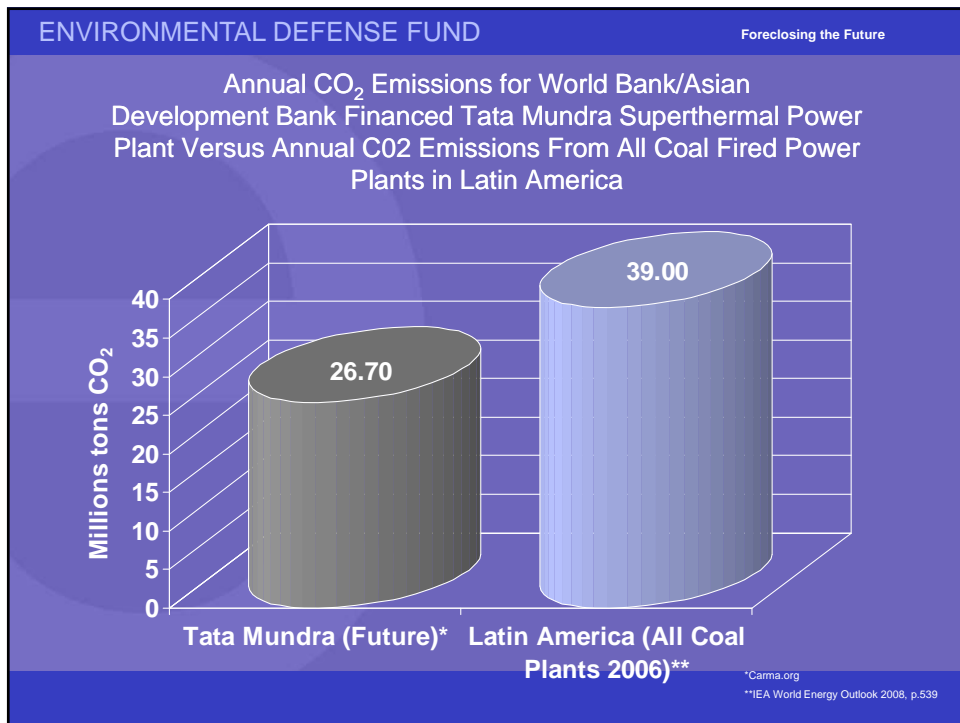
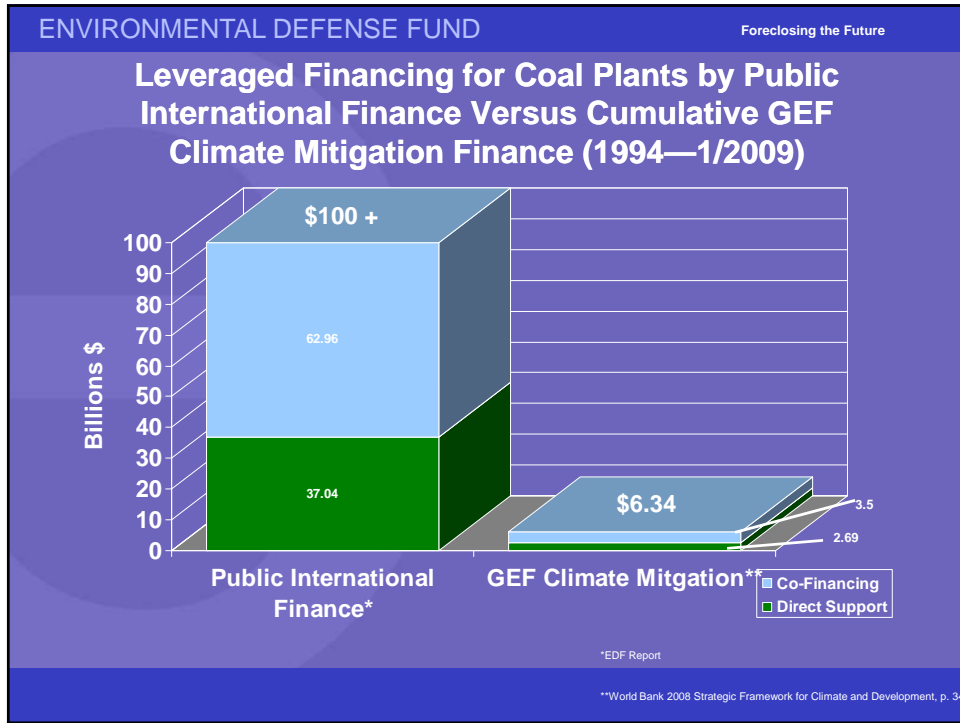


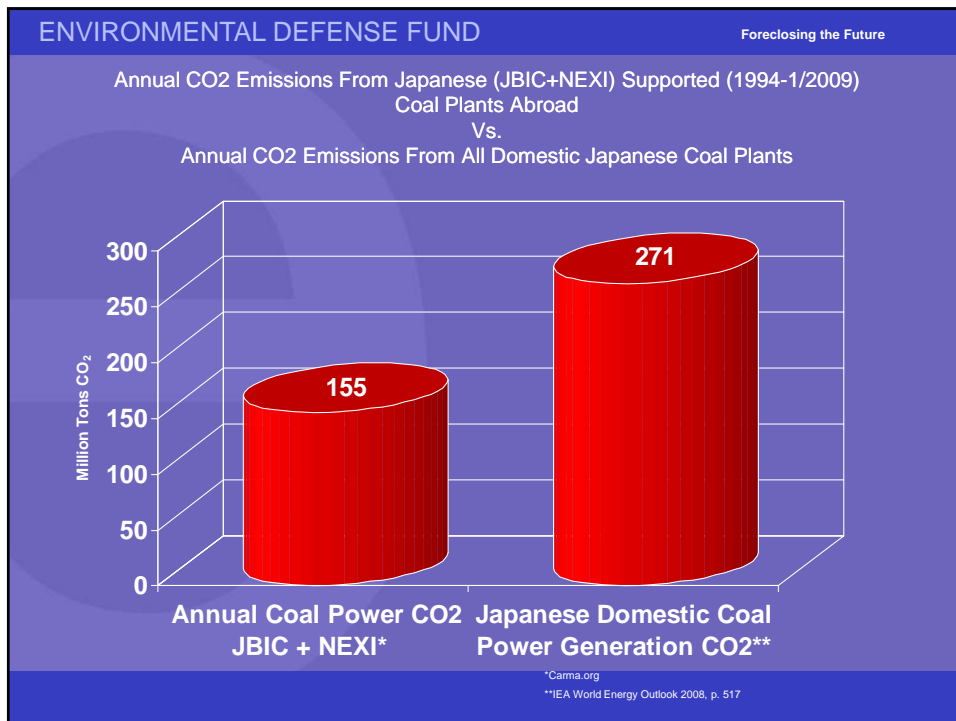
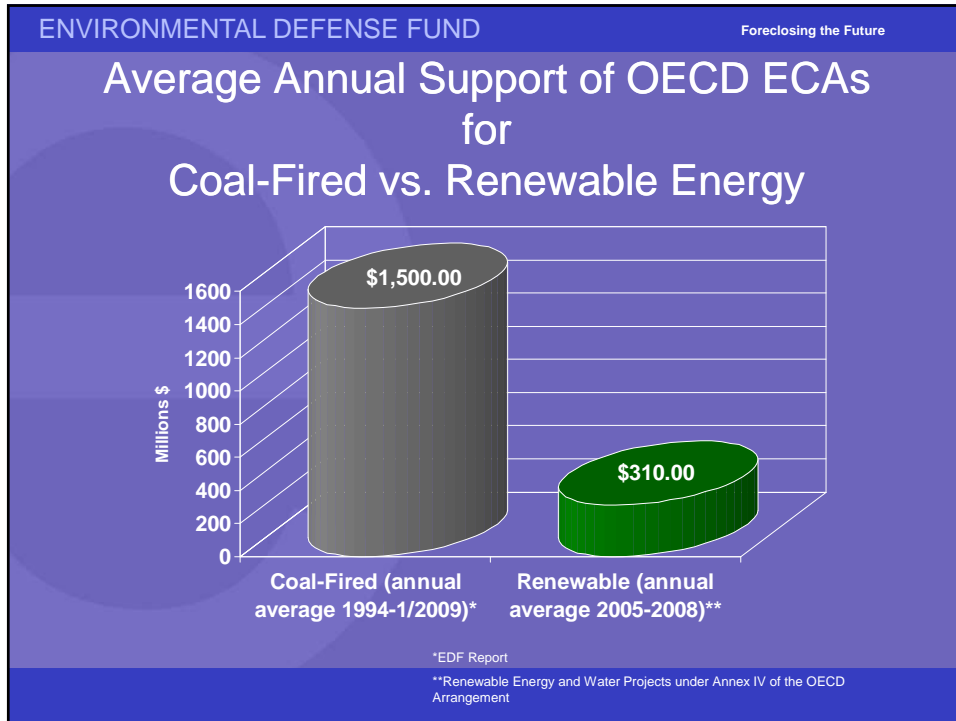
ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

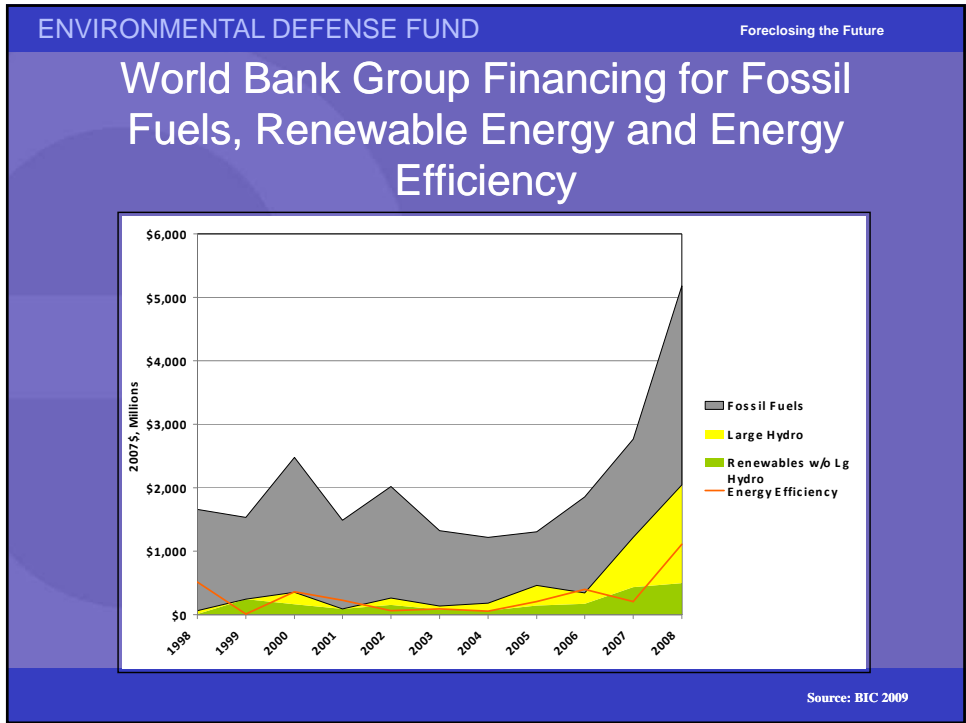
- Public international financing--OECD country-supported Multilateral Development Banks (MDBs) and Export Credit Agencies (ECAs)--of new coal power since 1994.
- \$37 billion in direct public international financing (with co-financing over \$100 billion) for 88 new coal plants, expansions and operating life extensions of existing plants
- 1994: Entry into force of United Nations Framework Convention on Climate Change (UNFCCC). Article 4: industrialized countries committed to “promote, facilitate, and finance the transfer of, or access to, environmentally sound technologies” in developing countries to address climate change.
- Sovereign right of all nations to choose their energy investments. But public international finance supported largely by richer OECD nations should support the necessary transition from coal power in the developing world and economies in transition.











ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

World Bank Group Financing for Fossil Fuels (million \$)

	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008
World Bank	577	618	599	592	544	255	291	313	758	575	199
IFC	521	229	935	373	794	488	499	409	590	824	2,988
Sub-total	1,098	847	1,534	965	1,338	743	790	722	1,348	1,399	3,187
MIGA (guarantees)	185	205	239	230	193	312	155	75	118	152	0
Total	1,283	1,052	1,773	1,195	1,530	1,055	945	797	1,465	1,551	3,187
Total Adjusted for Inflation (2007\$)	1,593	1,288	2,125	1,398	1,760	1,188	1,035	845	1,505	1,551	3,137

Source: BIC 2009

ENVIRONMENTAL DEFENSE FUND		Foreclosing the Future							
World Bank Group Financing Three-Year Average (2007\$)									
	FY2006		FY2007		FY2008		Three-year Average		
	million \$	percent change	million \$	percent change	million \$	percent change	million \$	percent change	
Fossil Fuels	1,505	78%	1,551	3%	3,137	102%	2,064	61%	
Coal	119	1283%	140	18%	1,041	642%	433	648%	
Large Hydro Power	180	-46%	777	333%	1,529	97%	829	128%	
Energy Efficiency	399	91%	206	-48%	1,108	438%	571	160%	
New Renewable Energy	176	15%	435	147%	485	11%	366	58%	
New RE & EE	576	59%	641	11%	1,593	148%	937	73%	

Source: BIC 2009

ENVIRONMENTAL DEFENSE FUND		Foreclosing the Future	
Breakdown of IFC Energy Sector			
IFC Current Energy Sector Generation Commitments			
	million \$	% share	
Coal	1,173	29%	
Oil	427	11%	
Gas	879	22%	
Hydro	738	19%	
Wind	58	1%	
Geothermal	65	2%	
Other renewable	45	1%	

Source: Concentrating Solar Power (CSP) Financing and the Clean Presentation by Dana R. Younger, World Bank Infrastructure Department Climate Investment Funds CTF Trust Fund Committee

Source: BIC 2009

ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

PENDING COAL PLANT INVESTMENTS

Japan Bank for International Cooperation (JBIC)

--Four new coal plants in Vietnam, India and Indonesia later in 2009 with installed capacity of 3,690 MW, estimated future C02 emissions 31.84 million tons annually

World Bank Group

--December, 2008: IFC and South African power utility ESKOM announce preliminary engagement of WBG to lend up to \$5 billion for power expansion plan of ESKOM (Source: Reuters, 4 Dec. 2008)

--ESKOM expansion plan calls for increasing coal generation by 12, 316 MW 2009-2016; plus around 4000 MW for hydro, and 100 MW for a wind farm. (Source: ESKOM 2008 Annual Report)

--Botswana Mmamabula coal mining and power development: proposed coal mining and coal power generation investments involving construction of as many as 3 new coal plants totaling 4800MW.

--IBRD preparing \$650 million loan to add 600 MW to the existing Morupule coal fired power plant (Source: World Bank Monthly Operations Summary, June 15, 2009)

ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

The Environmental Defense Fund urges the US and other OECD countries to direct their representatives to the MDBs and to the United Nations, and their bilateral ECAs, to hasten the necessary shift from coal to renewable energy by promoting the following recommendations:

ENVIRONMENTAL DEFENSE FUND Foreclosing the Future



Source: BrightSource Energy


- **DEPLOY** scarce public international finance in support of scaling up renewable energy, energy efficiency and other alternatives to coal.

ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

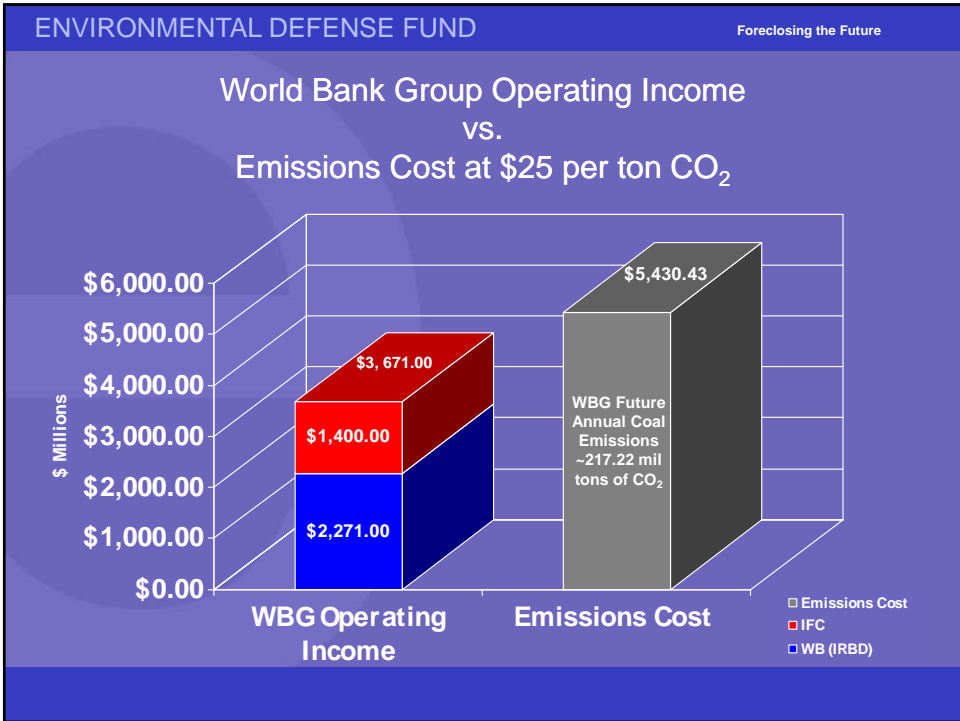
- **AGREE** on greatly increased support for climate mitigation funding by rich industrialized nations to help cover the short-term costs of the urgently needed energy transition in poorer nations.



ENVIRONMENTAL DEFENSE FUND Foreclosing the Future




- CALCULATE coal's true cost; MDBs and ECAs should institute comprehensive Greenhouse Gas Screenings and Accounting and Shadow Carbon Pricing for all projects that emit greenhouse gases. (Shadow Carbon Pricing includes the social and economic cost of carbon emissions)



ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

- **CREATE** under the auspices of the United Nations Framework Convention on Climate Change the first international database of GHG-intensive investments (including coal plants) and their emissions by public finance institutions. No such database currently exists.




ENVIRONMENTAL DEFENSE FUND Foreclosing the Future

- **NEGOTIATE**, as soon as possible, an international agreement among OECD member nations on a common climate/GHG policy for their ECAs.



ENVIRONMENTAL DEFENSE FUND Foreclosing the Future



**FORECLOSING THE FUTURE:
COAL, CLIMATE AND PUBLIC
INTERNATIONAL FINANCE**

For the Full Report, Health Impact Analysis,
and In-Depth Data on the 88 plants visit:

edf.org/coalfinance