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Financing Sustainable Energy

World Bank and IFC efforts

Antonie de Wilde

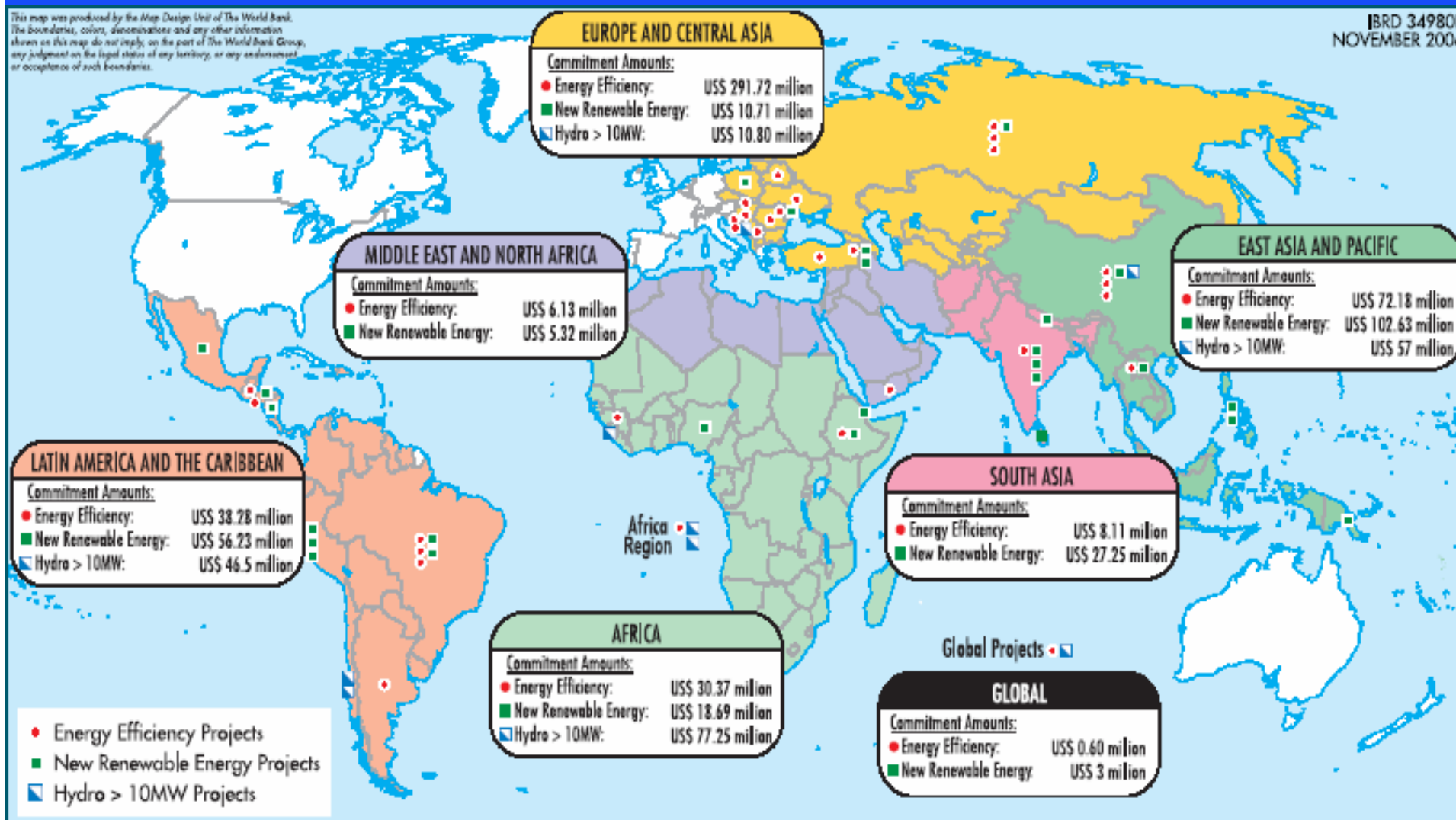
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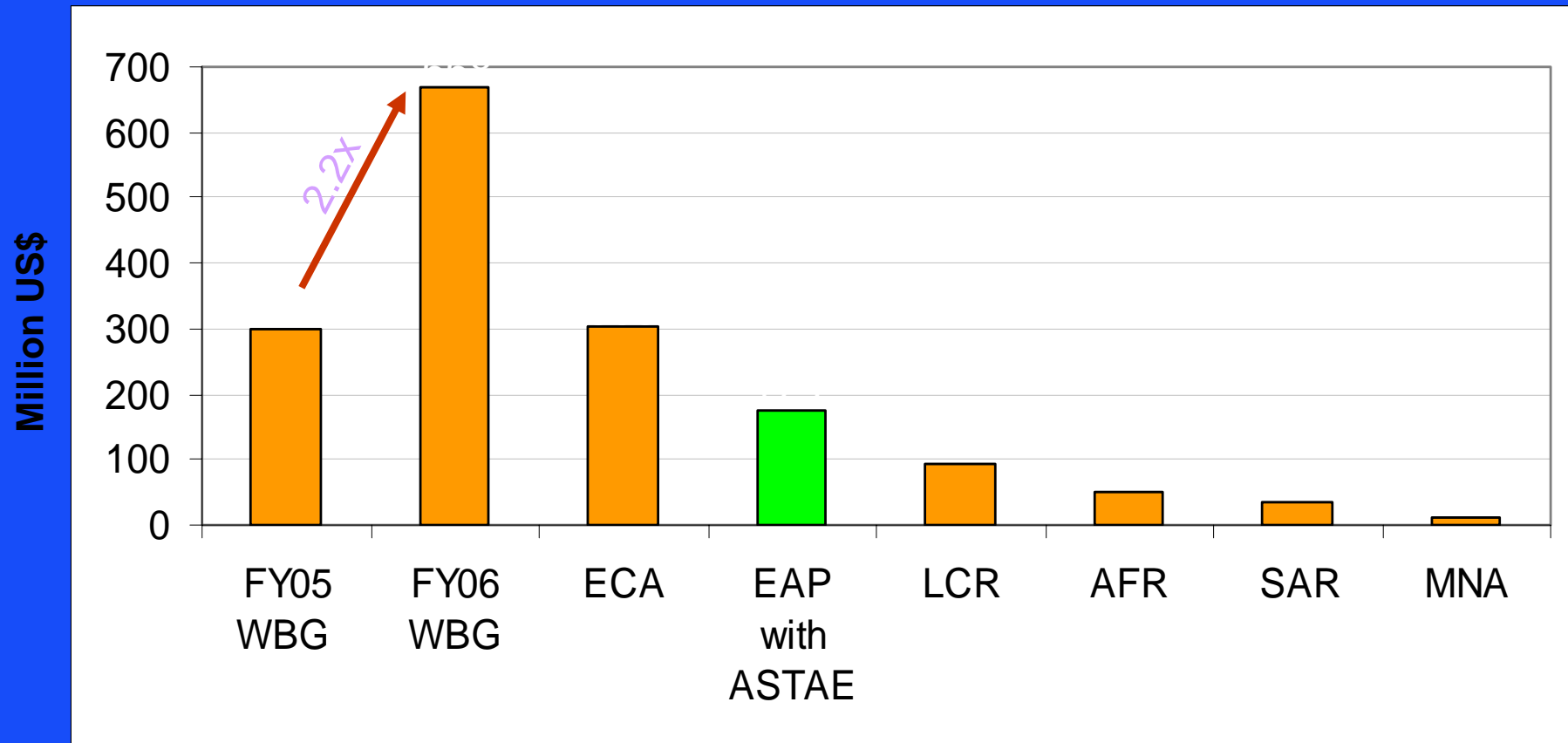




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EAP Contribution to Bonn Commitment

WBG New Renewables and Energy Efficiency Investments in FY2006





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- Energy commitments over FY06-FY08 to exceed \$10 billion, up by 40% as compared to previous three year period.
- FY06 lending for renewable and energy efficiency: \$668 million; more than double the Bonn target (increase 20% per year) and should continue to increase.
- Carbon finance: In collaboration with public and private sector participants, WBG played a critical role in creating the carbon market, With \$2 billion of carbon funds under its management
- **Action Plan aims to:**
 - Transition to a low carbon economy: energy efficiency, renewable energy, district heating, biofuels, gas flaring reductions, rehabilitation of coal plants etc
 - Decrease market risks (development of post 2012 carbon continuity fund, Methodology for Green Investment Schemes, IFC Carbon Delivery Guarantee, etc)
 - Fostering new technologies: WBG lighting Africa initiative with the private sector, fuel cells and solar thermal power plant etc
 - Additional Focus on transportation
 - Adaptation to climate variability and change: screening tools, case studies to look into water - agriculture – adaptation nexus



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Leveraging Private Investment

- Economic Analysis: Are renewables and Energy efficiency investments part of the least cost energy supply
- Focusing on Risk Mitigation
 - Country-side risk mitigation (
 - Credit Risks
 - Political risks
 - Concessional funding for low carbon tech
 - Risk mitigation and financing for pre-commercial tech
 - Securing risks to make them manageable
 - Predictability post 2012 for at least 8 years



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Bank Projects under Implementation with ASTAE Support –progress status

	Project	WBG/GEF Funding	Progress Status
1	Cambodia Rural Electrification and Transmission Project	\$21.8m	▪ Significant progress in transmission; distribution losses reduced by 22%; and 88 licenses issued to IPPs and Rural Electricity Enterprises
2	China Heat Reform and Building Energy Efficiency	\$18m	▪ 1 city has implemented 2 million m ² consumption-based billing pilot. 2 demonstration subprojects under implementation. TA supporting central government heating supply reform efforts (pricing, metering, billing).
3	China Renewable Energy Scale-up Program I (CRESP)	\$127.2m	▪ 100MW (260 GWh/year) wind farm in Fujian, 24MW (162 GWh/year) biomass plant in Jiangsu, and TA under implementation
4	China Follow-up Project to CRESP Phase I	\$87m	▪ 100 MW (270GWh/year) wind farm in Inner Mongolia and 27MW (56 GWh/year incremental) small hydro under implementation
5	China Renewable Energy Development Project	\$40m	▪ 320,000 PV systems with total capacity of 7.31MW sold in western provinces, 21 MW wind capacity installed/ operating in Shanghai.
6	Laos PDR Rural Electrification Phase I	\$13.7m	▪ Project implementation started in June 2006. Target: 52,000 households to receive access; System loss reduction from 22% to 17%.
7	Papua New Guinea Teachers Solar Lighting	\$1m	▪ Target of 3,000 households over period of 5 year exceeded in first three months of field work with 7,000 applications already received.
8	Philippines Rural Power	\$19m	▪ 10,000 new customers in rural areas will be provided with mini-grid electrical connection or individual RET services by project end
9	Philippines Electric Cooperative System Loss Reduction	\$12m	▪ At least 80GWh of annually energy savings and 40,000 tons of annual carbon emissions to be avoided by the end of the project
10	Vietnam Rural Energy II	\$225.3m	▪ Under implementation to improve electricity access to 2 million people in 1,200 rural communities through major upgrades and expansion



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Bank Projects under Preparation with ASTAE Support

	Project	Board Approval	WBG/GE F/PCF \$	Project Development Objective
1	China Energy Efficiency Financing Project	FY08	\$213.5m	▪ Promotion sustainable energy efficiency financing for large and medium-sized industries
2	China Inner Mongolia Biomass	FY08	\$50m	▪ Replace small-fired and heavily polluting power plants, and sell cleaner electricity to the grid
3	Fiji Renewable Energy Power	FY07	\$34m	▪ Meet power demand with reliable, least-cost renewable power supply
4	Greater Mekong Sub-region (GMS) Power Trade Phase I	FY07	\$33m	▪ Strengthen power trade between the GMS countries of Cambodia, Lao PDR and Vietnam
5	Indonesia Rural Electrification	FY09	\$100m	▪ Scale-up access to modern energy services to un-served communities, esp. in rural areas
6	Mongolia Infrastructure Services Delivery	FY08	\$16.7m	▪ Improve quality and cost effectiveness of urban delivery services
7	Mongolia Renewable Energy and Rural Electricity Access	FY07	\$7m	▪ Increase the access to and the reliability of electricity in rural Mongolia
8	Pacific Islands Regional Sustainable Energy Finance	FY07	\$10m	▪ Provide cheaper, increased electricity access to households and SMEs by mobilizing bank credit
9	Philippines Burgos Wind Power	FY07	TBD	▪ Create and trade GHG credits under CDM
10	Timor Leste Energy Services Delivery	FY07	\$2.5m	▪ Improve energy efficiency and reliability of energy services



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Sri Lanka

World Bank 2 projects

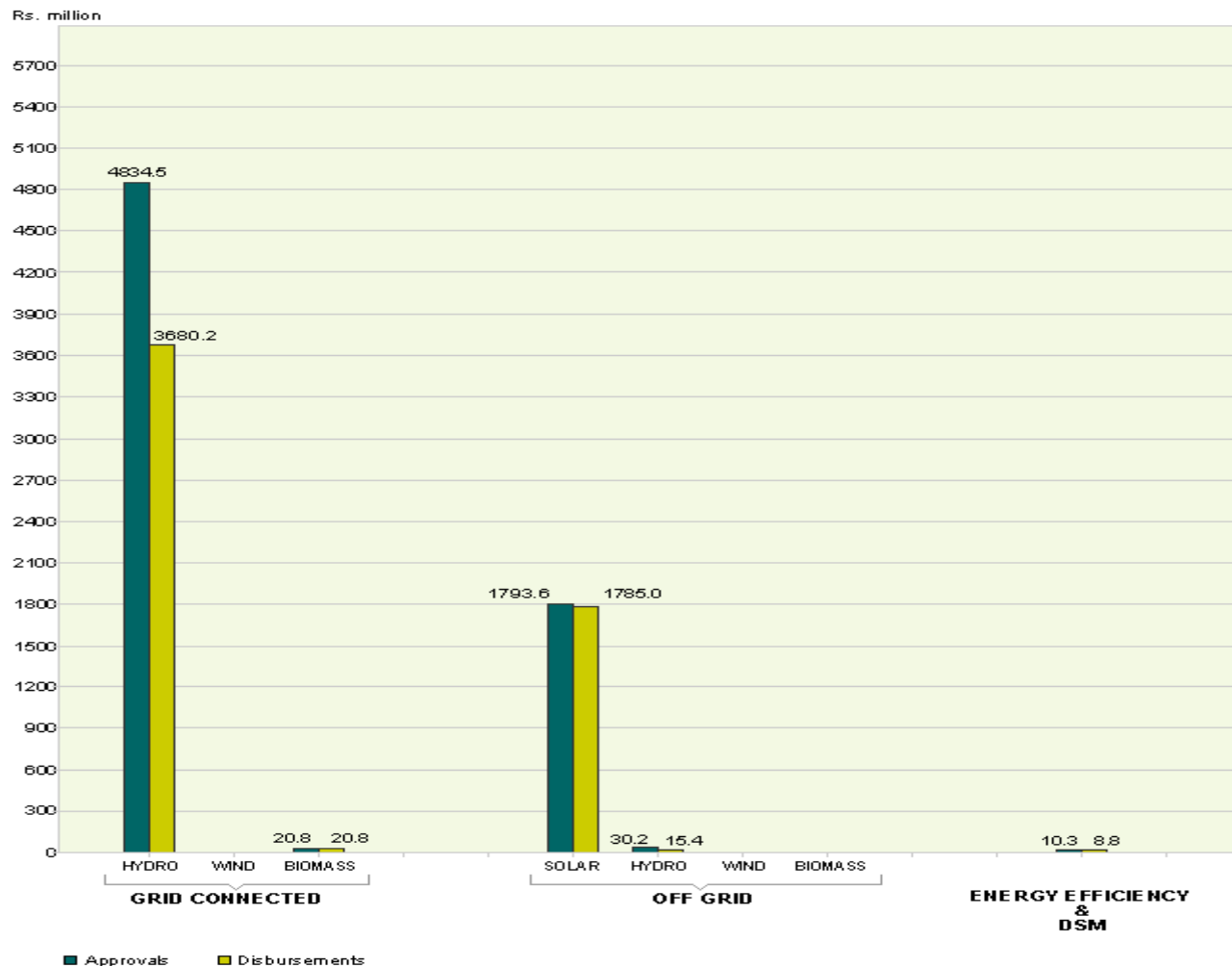
Working through 6 Commercial Banks

2 leasing company

and 2 micro finance organizations

Bank's provide technical know how, clears projects for the Banks' credit committees

Commercial Bank's portfolio now US\$130 million





ESD +RERED Project Sri Lanka

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Over 10% of
Generated
Electricity
comes from
small
privately
owned micro
hydros (total
117 MW) or
investments
of over
US\$150
million



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Bank's Role

- Independent Advisor
- Technical Know how
- Lender of last resort



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Thank You

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