



USAID
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Grid-Connected Renewable Energy

Pamela Baldinger
Energy Team
Office of Infrastructure and Engineering
U.S. Agency for International Development

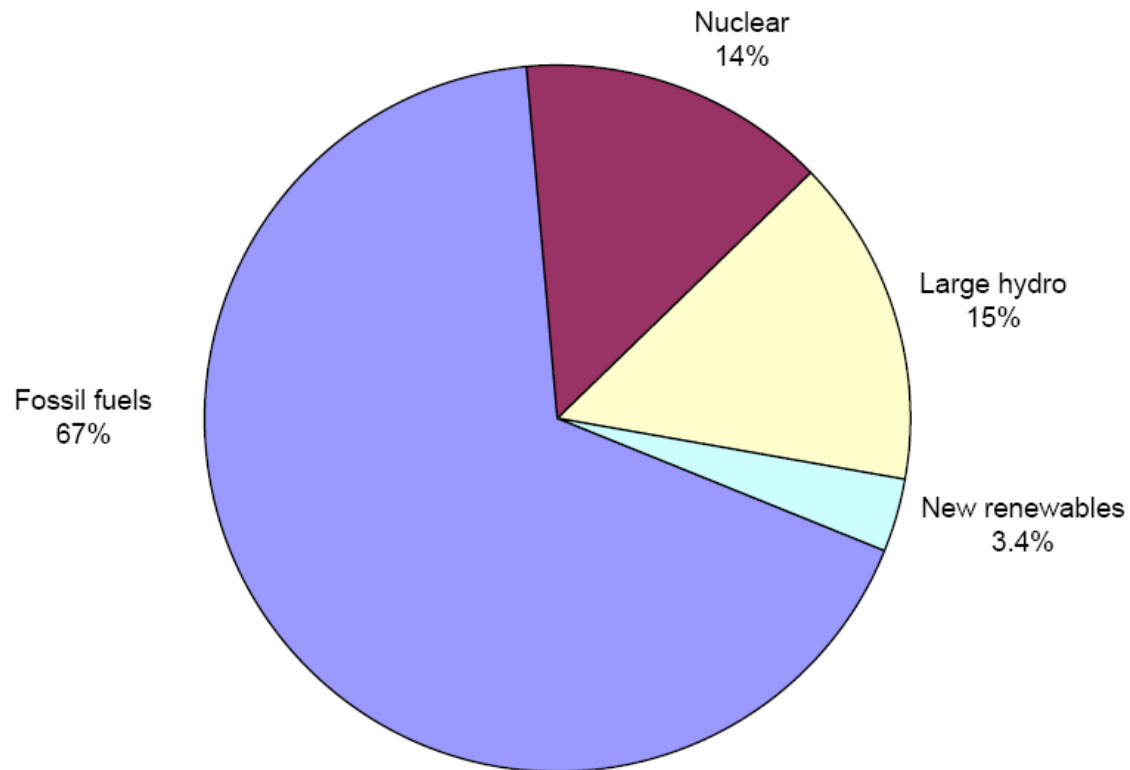
Infrastructure Training Course
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What is it?

- Large, centralized power generation, utility or privately owned, feeding the main electric grid
- With the exception of hydro, renewable projects bring special technology, financial, and policy challenges
- Most developing country renewable experience is with smaller, off-grid applications
- A new area for USAID and most USAID countries (with the exception of hydro)

Share of Global Electricity 2006



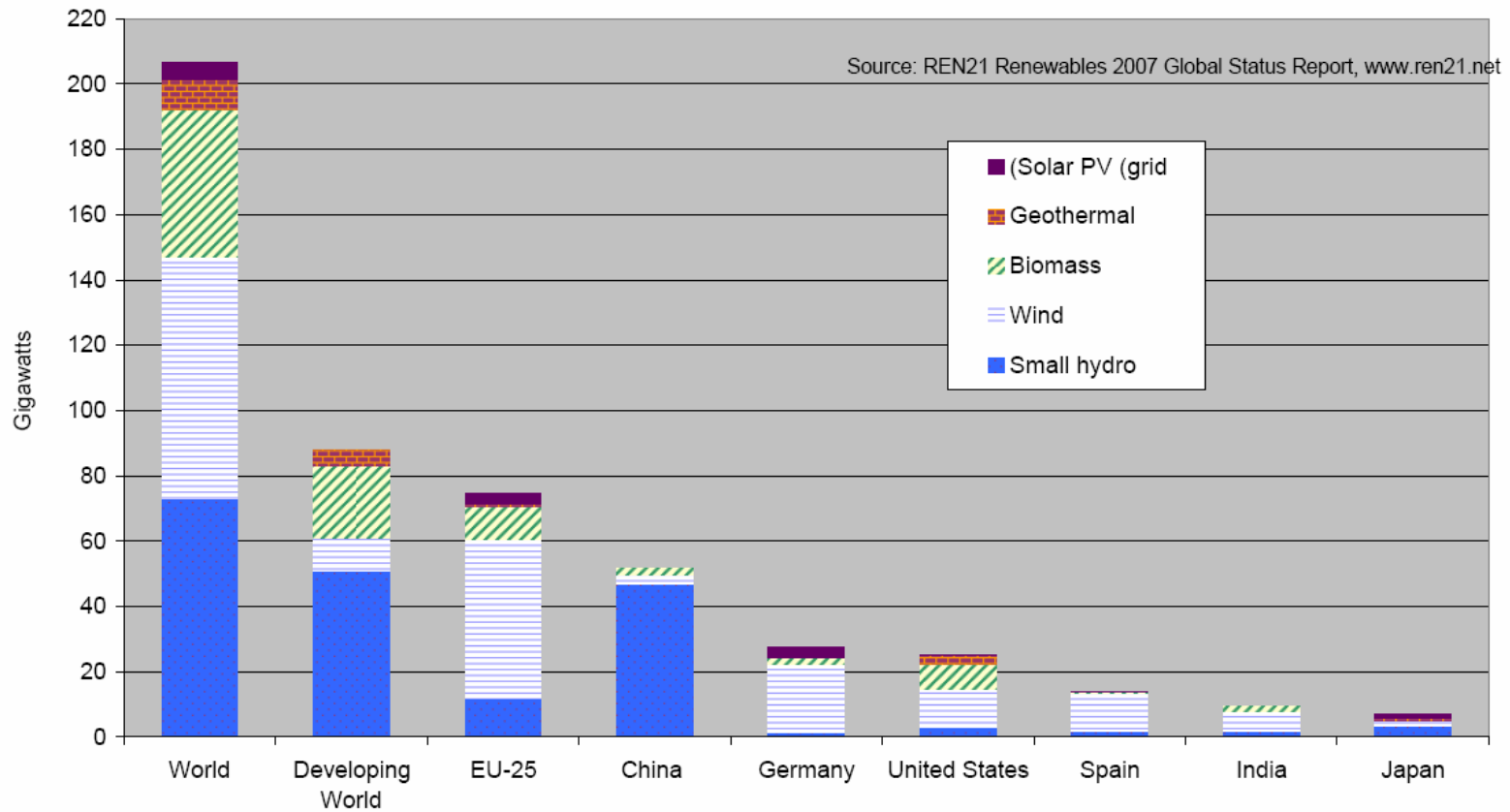
Source: REN21 Renewables 2007 Global Status Report, www.ren21.net

Why Renewables?

- Energy Security
 - every country has some renewable capacity
- Volatile Fossil Fuel Prices/Economic Competitiveness
- Maturing Renewable Technologies
 - more experience, costs decreasing in some cases
- Climate Change/Environmental Concerns

Total Renewable Installed Capacity

Renewable Power Capacities, Developing World, EU, and Top Six Countries, 2006



Note: Excludes large hydropower

Developing Countries: Existing Renewables and Targets, 2006

Country/region	Existing share (2006)	Future Target
Argentina*	1.30%	8% by 2016
Brazil*	5%	—
China	17%	—
Egypt	15%	20% by 2020
India	4%	—
Malaysia	—	5% by 2005
Morocco	10%	20% by 2012
Nigeria	—	7% by 2025
Pakistan	—	10% by 2015
Thailand	7%	—

Source: REN 21 Global Status Report – 2007

Energy Team Strategy

- **Grid-Connected Renewable Toolkit**

--composed of 6 modules and 2-3 case studies

- * Overview/enabling environment
- * Hydropower
- * Geothermal
- * Solar PV
- * Solar Thermal/CSP
- * Biomass

--highlight key issues and lessons learned in powerpoint format, provide reference materials for details, and sample key documents (PPAs, etc)

- **Training**
- **Follow-on TA**

For More Information

Pam Baldinger
pbaldinger@usaid.gov

