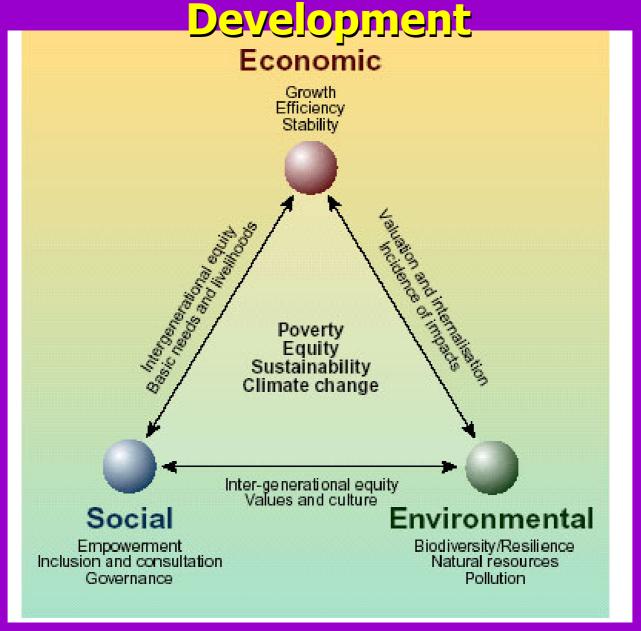


UNDP's Response to Climate Change

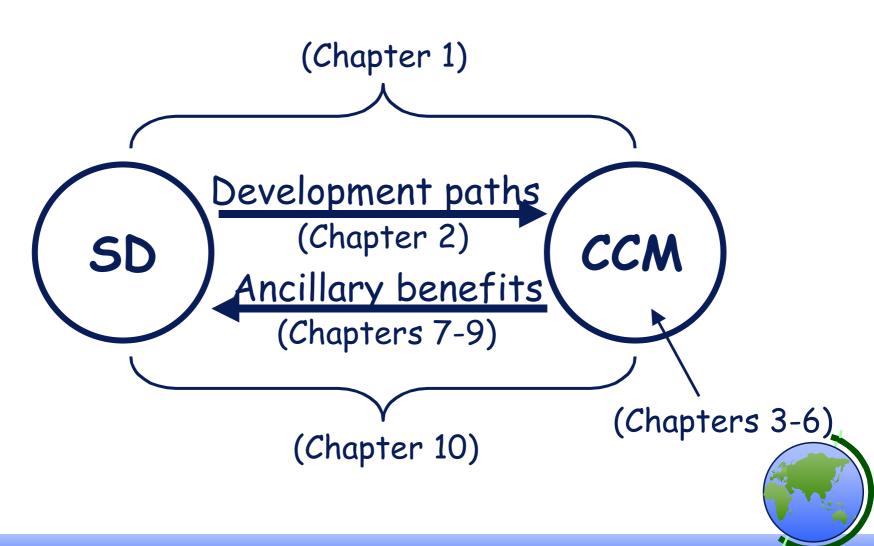
- Partnerships in Asia and the Pacific

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Climate Change & Elements of Sustainable



Linkages between Climate Change Mitigation and Sustainable Development in WGIII





Main Findings of WEA

-(World Energy Assessment)

Huge opportunities for increased efficiency, especially at point of end use: 30-45% in developing countries over next 20 years

- Much greater use of renewable energy possible and prices are falling:20-50% generation possible from renewables over next 100 years, depending on the chosen technology path
- Advanced fossil fuel and clean energy technologies are an essential part of the solution

Challenge is to use the above information for effective dialogue and agenda for action



UNDP CLIMATE CHANGE INITIATIVES

UNDP Climate Change Initiatives

- UNDP Core
- UNDP /GEF

Regional CC enabling initiatives:

ALGAS –UNDP/GEF funded, ADB executed; PICAAP –UNDP /GEF Funded, SPREP executed

Regional CC / Energy

PIREP Pacific Island Regional Renewable Energy program: :Joint execution by national & regional institutions



Core UNDP: Thematic Trust Funds (TTF)-\$ 4.2mill (*Phase 1, June 2002*)

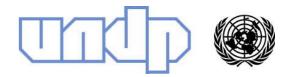
- **Problem:** development objectives not linked to energy planning, nor energy to development
- Service line 1: strengthening national policy frameworks to support energy services
- **Problem:** without energy services poverty cannot be reduced in rural areas, urban poverty increases
- Service line 2: promoting rural energy services to support growth and equity
- **Problem:** technology choice in developing countries affects growth options and future of environment
- Service line 3: promoting clean energy technologies for sustainable development Problem: developing countries lack adequate capacity to shape and benefit from new financing mechanisms
- Service line 4: capacity building on new energy financing mechanisms including those related to Kyoto Protocol



UNDP's Role in Mitigation of Climate Change

Implementing Agency of GEF

- Manage a total portfolio valued at US\$450m of GEF resources
- Focused on Capacity Building, Technical Assistance and Small-scale investments
- Enabling Activities (US\$100m)
- Energy Efficiency projects (US\$100m)
- Renewable Energy projects (US\$140m)
- Transport Sector projects (US\$40m)
- Typical structure: technical assistance activities designed to remove perceived barriers and formulate correct policy environment for a few key demonstration installations plus follow-on investment funds to stimulate further market transformation and replication



Global Environment Facility/UNDP:\$180 mill grant to Asia & Pacific countries

(1992-2001)

- Largest source of energy-CCM project financing for UNDP
- Focus on activities and energy use that reduce Greenhouse Gas (GHG) Emissions
- Barrier removal to new energy approachespolicy,market ,financing ,information & institutional
- Focus on energy efficiency, renewable energy, new technologies
- Increasing access to basic services and support for sustainable energy use is an inherent logic of project design, though not explicit for GEF funding eligibility

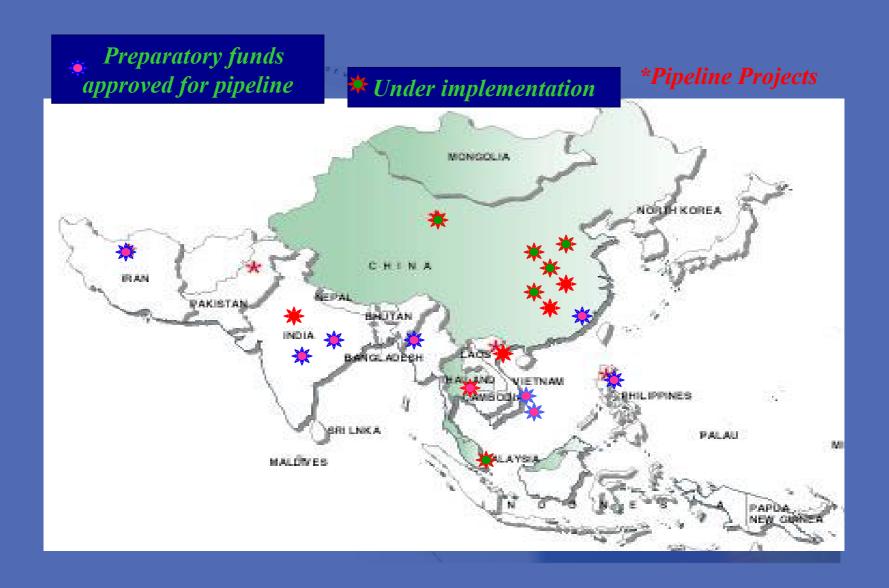


Energy Efficiency & Conservation project examples

- Portfolio: Barrier Removal for Efficient Lighting Products &
 Systems in China, Vietnam, Philippines
 Barrier Removal for Industrial Energy Efficiency in Malaysia,
 Energy Efficiency and Conservation for Township and Village Entps in China;
 Energy Efficiency improvements in Refrigerators in China, Portfolio: Energy
 Efficiency Improvement in the Building Sector: Mongolia;
- Project preparatory work, PDF -B: Vietnam SMEs, Iran-EE &C, India:
 Steel Re-rolling: Energy Efficiency Programmatic Framework in China, (multidonor, multi sector initiative with 3 phases;



Energy Efficiency and Energy Conservation





Renewable energy project examples

Removal of the barriers to the use of commercial or near commercial renewable energy technologies (RETs) and reduction of implementation costs:

Srilanka, Fiji, Philippines RE commercialization through capacity building and RE service company.

Biomass Cogeneration from Palm oil mill waste in Malaysia,

Biomass power generation and cogeneration from rice husk and rubber *Thailand; Pacific Regional Energy Program*

Renewable Energy in Asia (UNDP/GEF



*Approved and Pipeline of Projects with prep funding



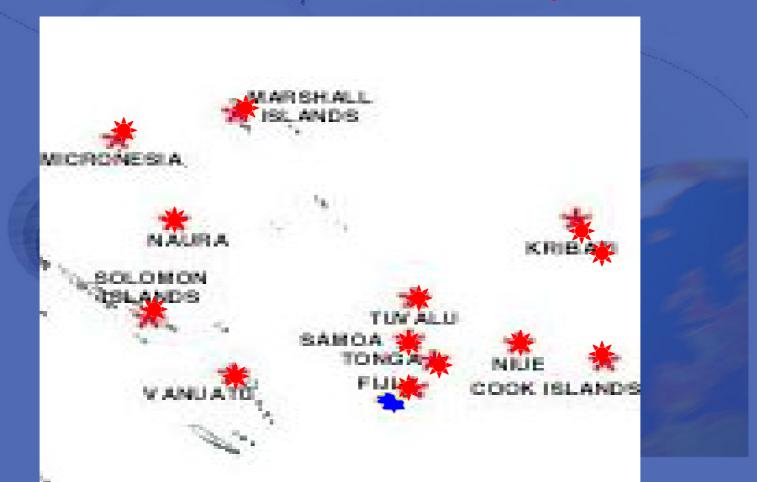


Renewable Energy in the Pacific

GEF Resources requested for: \$1.5 Mill

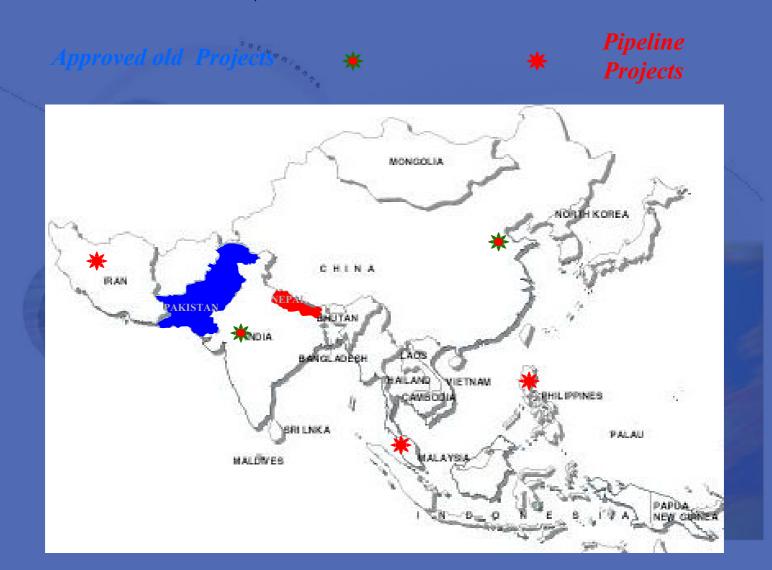
Project under implementation \$750 Th

*Regional Portfolio of Projects



Promoting Environmentally Sustainable Transport

\$23.8 mill GEF /UNDP



Climate Change Enabling Activities & Tech Transfer needs with UNDP/GEF in support of National Communication (25 countries) *EA Projects (Top-Ups 0n going/eligible)





NCSA & Adaptation measures

- National Capacity self assessment (NCSA)
- NAPAs: National Adaptation Program (LDCs in the region)
- APF: Adaptation Policy Framework



UNDP and Its Role in the Clean Development Mechanism (CDM)

- UNDP's Role has been and will continue to focus on capacity development, helping to promote CDM as a tool for greater investments in sustainable development:
 - Human resource capacity: focus on training national personnel in "hands-on" project identification, preparation, and financial facilitation
 - Institutional capacity: focus on helping create transparent governance mechanisms
 - Systemic capacity: focus on helping systems in developing countries function well



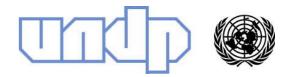
UNDP Experiences to Date with CDM (I)

- Norwegian-sponsored project: 1998-2000
 - Focused on project identification in Bulgaria (Joint implementation); Peru; and Philippines
 - Found some promising projects in each case
 - Experience of screening projects requires time,
 patience, and capacity strengthening
 - Transparent institutional framework is essential to hold down transaction costs



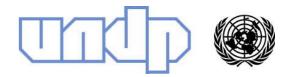
UNDP Experiences to Date with CDM (II)

- World Business Council for Sustainable Development Project (WBCSD)
 - Focused on Brazil and South Africa
 - Identified several model projects
 - Identified the need to ensure that CDM projects are viewed as Sustainable Development Projects and can be approved by national governments as such through public-private partnerships



UNDP Future Directions under CDM

- Focused Pilot Program with limited number of countries
- Direct attention to developing capacity—without capacity development, investments will not happen
- Help country teams identify, evaluate, prepare and obtain investments for CDM projects
- May work more on biomass-related methane projects, as costeffectiveness is clearly shown (UAC < \$5/ton of CO2)
 - China Landfill Gas project, India, Malaysia biomethanation projects, Thailand biomass,



Conclusion: UNDP and Climate Change Mitigation

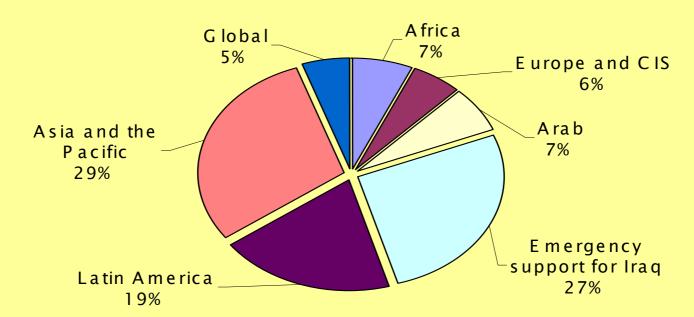
- UNDP has considerable experience in preparatory activities for climate-change mitigation projects
 - Not simple, straightforward projects
 - Require considerable technical assistance and
 - Capacity Development
 - Range of financial mechanism for market penetration and long term sustainability
 - Identify and help introduce "smart -subsidy"
 - Direct benefit from cross project learning and experience sharing

UNDP Energy Activities share in Asia and the Pacific

Regional Distribution Of Resources for Energy and Climate Change Related Projects.

1991 to 2000

Total: US\$1,190 million.





More Information

Information on the activities of UNDP in Climate Change & sustainable energy can be found at:

www.undp.org/gef

www.undp.org/seed/eap

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