Climate Change Initiatives & Opportunities In Asia and the Pacific

United Nations Development Program Global Environment Facility

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Explaining Climate Change, GHG effect & Global Warming



GLOBAL CLIMATE CHANGE

- What are the implications of accelerated climate change?
- Global warming (between 1.5 and 4.0 C over next 50 years)
 - ice-cap melting
 - sea-level rise (up to 1 m)
 - increased intensity of storms in some areas
 - increased drought in others; degrade agro/ecosystems, spread desertification

GLOBAL CLIMATE CHANGE

What can be done about it ?

- Reduce emission and level of GHG's in atmosphere
 - Reduce use of fossil fuels (iner-fuel substitution)
 - Use fossil fuels more efficiently
 - Reduce burning of grasslands/forests
 - Reduce deforestation, increase and protect forest areas
 - Utilize waste methane (CH4)
 - Produce and Use Clean Fuel

The main objectives of UNDP Climate Changes initiatives are:

- to help, identify, finance, and carry out "win -win" programmes and policies that simultaneously maximize sustainable development objectives and limit greenhouse gas emissions.
- to provide technical backstopping and capacity building to developing countries and utilize the new mechanisms under the UNFCCC.
- to build networks and partnerships with the UN systems, international organizations, non-governmental organizations (NGOs), academic, and the private sector to raise awareness & initiate dialogue on climate change.

This approach entails four kinds of activities:

- National Sustainable Development Activities
 Activities for Implementing UNFCCC Commitments
- 3) Capacity Building for New Mechanisms under the UNFCCC
- 4) International Dialogue and Policy Development

The above is to be achieved through

- New Thematic Trust Funds (TTFs)
- Window for all non-core resources & complement existing trust funds e.g GEF
- Support mechanism for country, regional and global activities through country cooperation dialogues

Overview of UNDP Climate Change Initiatives © UNDP Core © UNDP /GEF

Thematic Trust Funds

| Environment | Energy |
|---------------------------|--------------------------|
| Mainstreaming | Energy in macro–policies |
| environment in national | and frameworks (poverty, |
| development frameworks | economic, energy sector) |
| Strengthening local | Rural energy services: |
| environmental governance | thermal and electricity |
| Global and regional | Low emissions technology |
| environmental problems | (compliment to GEF) |
| Climate change adaptation | Clean Development |
| linked to all above | Mechanism (CDM) |
| Knowledge networking | Advocacy/Analysis |

Climate Change and TTFs

Thematic Trust Fund for Environment

- Climate change link: *impact/vulnerability*
- Adaptation and land use emphasis
- Frameworks and governance

- Thematic Trust Fund for Sustainable Energy
- Climate change link: causes - energy
- Mitigation and emissions reduction
- Support for CDM

- Capacity building to address national communication preparation obligations to the UNFCCC - what activities?
- Where all in Asia and Pacific ? Recent capacity building initiatives through UNDP/GEF: (in historical order)
 - Regional ALGAS project : (12 countries of Asia and the Pacific region) & Other Enabling Activities supporting preparation of National Communication
 - ^o Regional PICCAP 1 & 2
 - Continuation of Nat Com activities through the EA Top -Ups

Other UNDP /GEF CC initiatives addressing mitigation and abatement projects and programs supporting the climate convention through barrier removal to policy, financial ,institutional , market delivery mechanism , sustainable replication etc;

Support to the integration of adaptation policy (while awaiting the final GEF Operational program / guidance) into national development by helping to develop a common policy relevant methodological approach addressing short and medium term climate change

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- The GEF is the designated "financial mechanism" for the:
 - Convention on Biological Diversity (CBD)
 - Convention on Climate Change (UNFCCC)
- The GEF collaborates closely with other treaties and agreements to reach common goals (International Waters, POPs, CCD, Montreal Protocol)



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GEF Pilot Phase
 1991 - 1994
 \$1 Billion US Dollars

Replenishment: 1995 - 1998
\$2.2 Billion US Dollars

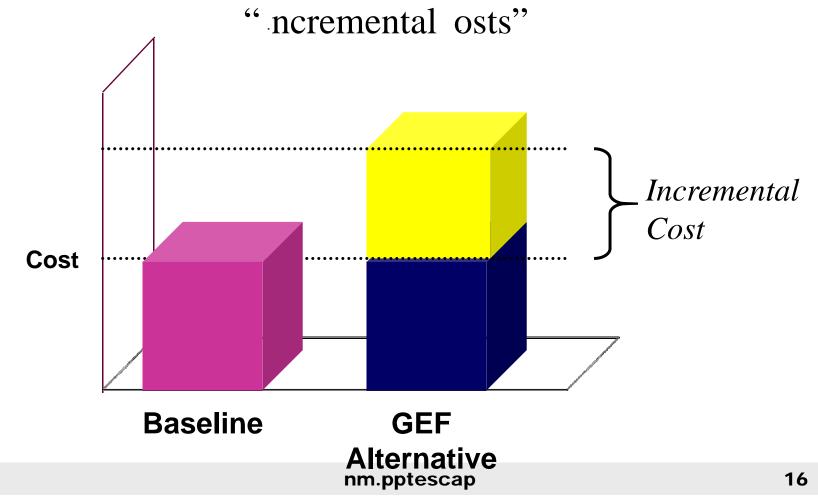
> 1999 - 2001 \$2.8 Billion US Dollars ; Next Replenishment debate on at the mommentescap



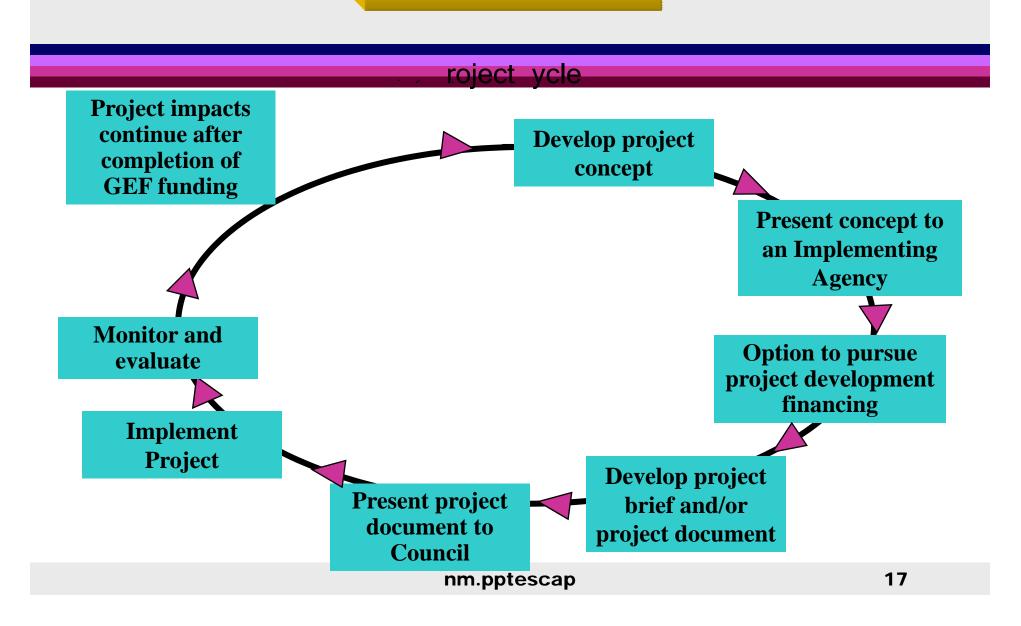
"ncremental osts"

- Cost of activities for the global environment beyond what is required for national development
- GEF projects must complement national programs and policies to maximize global benefits <u>GEF is a co-financer of projects and</u> <u>not a financer.</u>
 - 1) Establish the baseline
 - 2) Determine cost of GEF alternative
 - 3) Incremental cost (project budget) = cost of GEF alternative - cost of baselineap



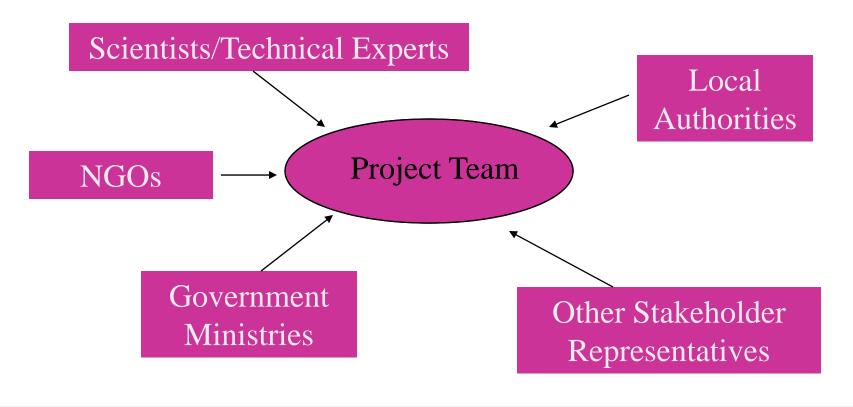


SUSTAINABLE ENERGY



Sustainable Energy

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Overview of United Nations Development Programme /Global Environment Facility

(\$172 mill cumulative from GEF and \$310 mill in co-funding for Asia & Pacific Climate Change initiatives through GEF/UNDP)



- Enabling Activities :GHG inventory, mitigation and V&A
- **Energy Efficiency and Conservation**
- Removing Barriers to Renewable Energy
- Reducing Costs of Low GHG Emitting Technologies
- Environmentally Sustainable Transport
- Integrated Ecosystem & Natural Resource Management

GEF CLIMATE CHANGE INITIATIVES - National Communication preparation & support in Asia

| | | Expected N | EA Phase II | | | |
|-----------------|---|------------|-------------|----------------|-------|----------------|
| | | 1999 | 2000 | 2001 | 2002 | Approved |
| 1. Bhutan | | | 13 November | | | Х |
| 2. Cambodia | | | | December | | |
| 3. China | | | | | 2002? | |
| 4. India | | | | | 2002? | |
| 5. Indonesia | * | 27 October | | | | Х |
| 6. Iran | | | | End year | | Х |
| 7. Korea DR | | | | Mid year | | |
| 8. Lao PDR | * | | 2 November | | | |
| 9. Malaysia | | | 22 August | | | |
| 10. Maldives | | | | April | | |
| 11. Philippines | | | 19 May | | | X |
| 12. PNG | * | | | Mid year | | |
| 13. Sri Lanka | | | 6 November | | | X |
| 14. Thailand | | | | 01 March | | X |
| UNEP | | | | | | |
| 15. Bangladesh | | | | December | | |
| 16. Mongolia | | | | Мау | | X (World Bank) |
| 17. Pakistan | | | | August | | |
| 18. Vietnam | | | | June | | |
| 19. Nepal | | | nm pateood | | June | 20 |
| Total | | 1 | nm,pptesca | 9 9 | 3 | - 29 |

- ALGAS: (Regional Capacity Building project) Bangladesh, China, Indonesia, India, Mongolia, Myanmar, Pakistan, Philippines, Korea DPR, Korea RO, Thailand, Vietnam
- NCSP REGIONAL PROJECTS ENDORSED:

 - Inventories (9 countries)
 Submitted October 9, 2000
 - Adaptation (7 countries) Submitted October 9, 2000
- WORKSHOPS under NCSP :
- May 1999 (Philippines) INV: \checkmark
- ✓ MIT: May 1999 (Philippines)
- ✓ V&A: May 2000 (Indonesia)
- **RE(ASIA)**: 26-29 September 2000 (Malaysia)

UNDP-GEF CLIMATE CHANGE INITIATIVES -National Communication preparation & support in the Pacific

PACIFIC

| | Expected NC submission date as reported by countries | | | | | Phase II Approved | |
|--|--|--------|--------|----------|------|----------------------|----|
| | Pre-1999 | 1999 | 2000 | 2001 | 2002 | 2003 | |
| | | | | | | | |
| 1. Cook Islands | | 30 Oct | | | | | Х |
| 2. Fiji | | | | Dec | | | Х |
| 3. Kiribati | | 30 Oct | | | | | Х |
| Marshall Islands | | | 24 Nov | | | | Х |
| 5. Micronesia | 4 Dec 97 | 300ct* | | | | | Х |
| 6. Nauru | | 30 Oct | | | | | Х |
| 7. Palau | | | | | | Jan | |
| 8. Tonga | | | | | | Feb | |
| 9. Samoa | | 30 Oct | | | | | Х |
| 10. Solomon Islands | | | | Mid-year | | | Х |
| 11. Tuvalu | | 30 Oct | | | | | Х |
| 12. Vanuatu | | 30 Oct | | | | | Х |
| UNEP | | | 1 | | | | |
| 13. Niue | | | | Feb | | | |
| Total | 1 | 6 | 1 | 3 | 0 | 2 | 10 |

Number of UNDP countries potentially to submit by COP-6 bis: up to 1 countries (in bold)

WORKSHOPS:

INV: May 1999 (Philippines) RE (SIDS): 26-27 July 2000 (Samoa)

MIT: May 1999 (Philippines)

V&A:May 2000(Indonesia)

PICCAP

The project phase 1 had six major capacity building objectives that lead to the following outputs:

- 1) an inventory of greenhouse gas sources and sinks
- 2) an evaluation of mitigation options
- preliminary national vulnerability assessments made & was identified as the most important component of PICCAP follow on activities
- 4) an evaluation of adaptation options
- 5) a national implementation plan
- 6) the first National Communication to the Conference of the Parties to the UNEPPeescap 23

Climate Change Enabling Activities : Phase 2

 Phase 2 Climate Change Enabling Activities or Top -Up funds in support of national Communication are provided in support of undertaking activities (ceiling of \$100 Thousand per country) reflected in the next slide.

All PICCAP member countries from the Pacific Islands, Thailand, Philippines, Iran, Cambodia, Srilanka, Bhutan are currently undertaking EA follow up activities through the above funding window.

TABLE C 2

ACTIVITY MATRIX FOR PHASE II OF CLIMATE CHANGE ENABLING ACTIVITIES: Priority activities for additional (interim) funding

Note: x denotes activities covered by the proposed project

| | | Capacity Maintenance/ Enhancement | | | | |
|--|------------------------------|-----------------------------------|--------------------------------|--|--|--|
| Activity | Planning and Execution | Data Gathering and Research | Institutional Strengthening | Training, Education and Public Awareness | | |
| 2. A (i) Identification and submission of technology needs | | | | | | |
| 2. A. (ii) Capacity building to assess technology needs, modalities to acquire and absorb them, design, evaluate and host projects | | | | | | |
| 2. B. Capacity building for participation in systematic observation networks | | | | | | |
| 2. C. Preparation of programs to address climate change | | | | | | |
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- The Eligibility Test
- The Global Significance Test
- The National Priority Test
- The Co-Funding Requirement
- The Portfolio Test



he " ine ilter" est for ... funding

- Does your concept fit within one of GEF's focal areas and associated Operational Programs?
 - Biodiversity 4 OPs
 - Climate Change 4 OPs
 - International Waters 3 OPs
 - Multiple Focus 1 OP

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- Assess the economic scope of energy conservation or renewable energy technologies
- Estimate how much the project will reduce GHGs
- Identify all key barriers
- Propose measures to remove barriers, and estimate their costs, and
- Demonstrate the sustainability of "win-win" projects

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, Township and Village Entps in China;

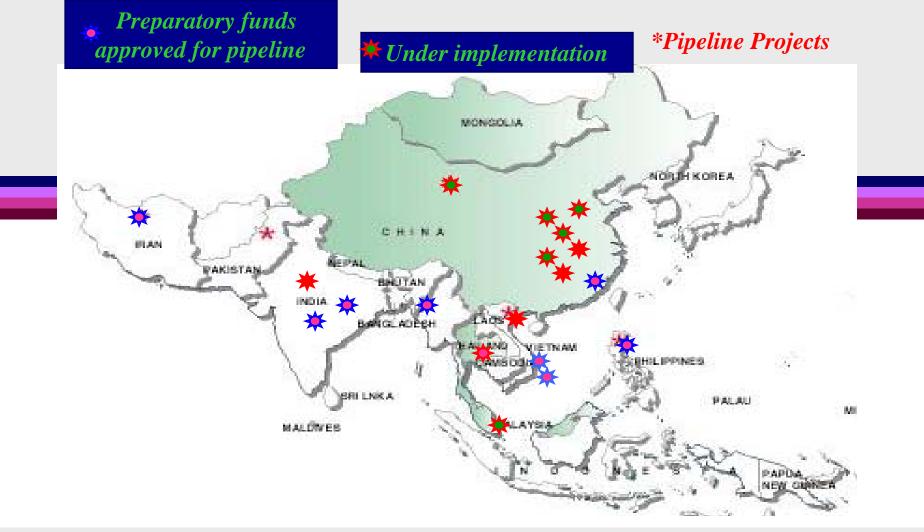
- *PDF -B :Vietnam SMEs, Iran, India : Steel Rerolling: Energy Efficiency Programmatic Framework in China, (multi donor, multi sector initiative with 3 phases;*
- **Portfolio:** Energy Efficiency Improvement in the Building Sector : Mongolia ;

Climate Change Enabling Activities & Top-ups with UNDP/GEF in support of National Communication (25 countries)



Energy Efficiency and Energy Conservation

(GEF Resources: \$42.5 mill)





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- Removal of the barriers to the use of commercial or nearcommercial renewable energy technologies (RETs)
- Reduction of any additional implementation costs for RETs through economically profitable "win-win" transactions and activities

Renewable Energy Initiatives Portfolio

- India : Optimizing Development of Small Hydro resources, Development of High Rate Biomethanation Process, Carbon Emission Reduction through Biomass Energy for Rural India, Commercialization of Biomass Cogeneration;
- *China* : Capacity building for Rapid Commercialization of Renewable Energy Development ; Power Supply through Renewable Energy offgrid and hybrid systems(PV/Wind /Solar), Wind Energy
- Commercialization, Srilanka, Fiji, Philippines : RESOs; India & China : Coalbed methane capture and use; Landfill methane capture and use;

Renewable Energy in Asia (UNDP/GEF)

Approved Projects

*Pipeline Projects with prep funding

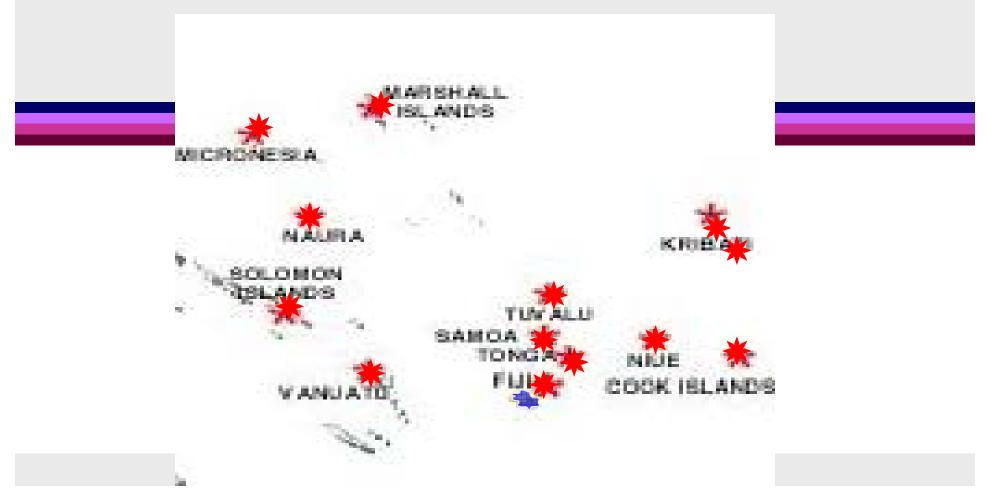


Renewable Energy in The Pacific

GEF Resources requested for : \$1.5 Mill

Project under implementation \$750 Th

*Regional Portfolio of Projects

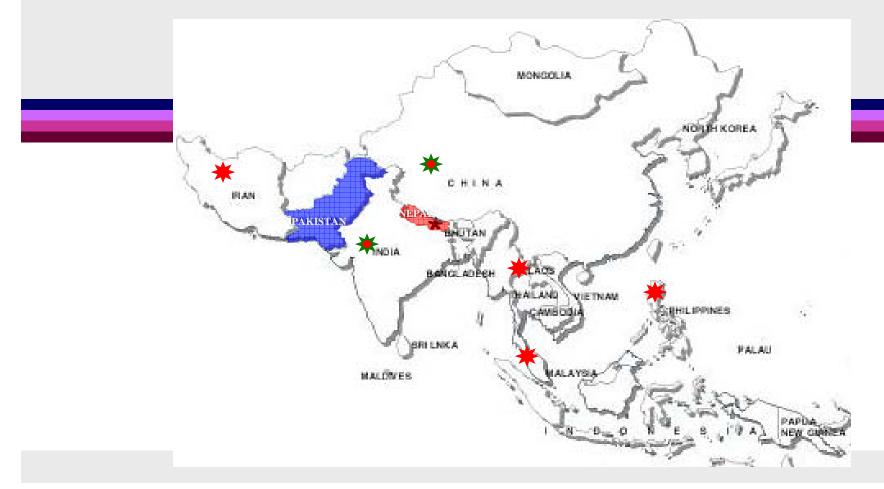


Promoting Environmentally Sustainable Transport \$23.8 mill GEF /UNDP

Approved old Projects

*

Pipeline Projects



What is UNDP's Adaptation Policy Framework ?

<u>Goal</u> : A practical tool to help countries choose or modify their sustainable development pathway under future climate through adaptation consistent with national priorities

- <u>Purpose</u> : To minimize vulnerability and risk of exposure to future climate in the near , mid and longer term
- Principles: Vulnerability to CC can be largely reduced by policy and human behavior

Adaptation like mitigation is a development not only an environment issue Socio economic scenarios can be used to test sensitivity , not as forecasts

Where do we go from here?

- Continue to support Climate Mitigation Activities (see attached list of pipeline projects; list flexible)
- Adaptation : Support Integration of Adaptation policy into national development
- 8 Short Run : Through the Enabling Activity window
- Longrun : Await GEF Council guidance and GEF Operational window as a follow up to COP8

Conclusion :

- Climate Change is an integral part of UNDP's sustainable human development and energy sector activities.
- Many on-going UNDP programmes to date have supported efforts to mitigate greenhouse gas emissions.
- In the context of SHD and support to Climate Change, UNDP is intensifying work on climate change issues, through the Energy Trust Fund and Environment Trust Fund in conjunction with activities as an implementing agency of the GEF nm.pptescap 39

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THANK YOU