

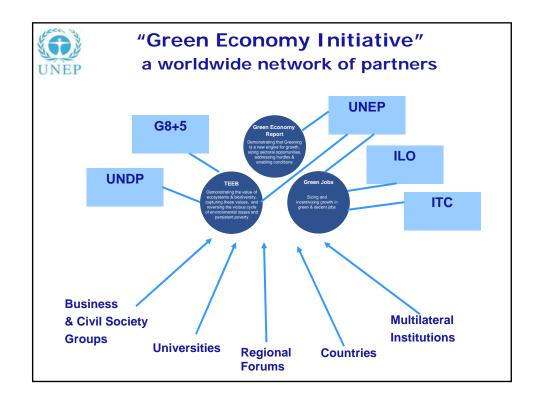
Panel on Green Growth & Sustainable Development New York, 26th October, 2009

UNEP's "Green Economy Initiative"

Pavan Sukhdev

Special Adviser & Head, Green Economy Initiative UNEP

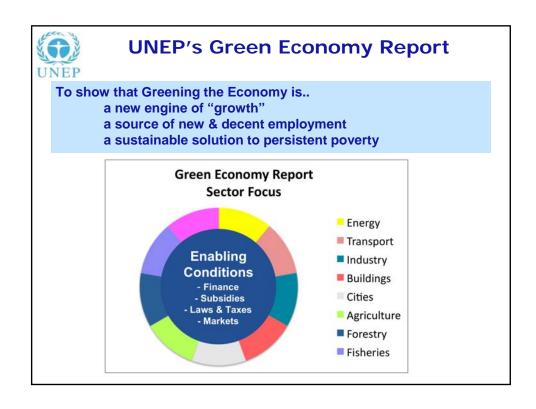
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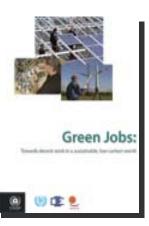
"Green Economy Initiative" a worldwide network of partners

EEA, UNFAO, De La Salle University, UNFCCC, ICTSD, ECN, IEA, UNIDO, HED, ILO, UNSD, IISD, UNSGO, IMF, ITPS. OECD, **UN Foundation**, KEI, UNCEB, World Bank, LSE, UNCSD, **Center for American** Progress, Millenium Institute, UNCTAD, Pew Center, Nagoya University, UNDESA, **Peterson Institute of** TERI, UNDP, International Economics, TRL, UNECE, **Union of Concerned** Universidade de Sao UNECLAC, Scientists, Paolo, UNEP, World Resources Institute, **University of Cape** UNESCAP. Worldwatch Institute Town, **University of** Stellenboch





"GREEN JOBS REPORT"



- Renewable energy has more jobs than fossil fuels, and could reach 20 million jobs by 2030
- Climate change will continue to impact workers and their families, especially those dependent upon agriculture and tourism









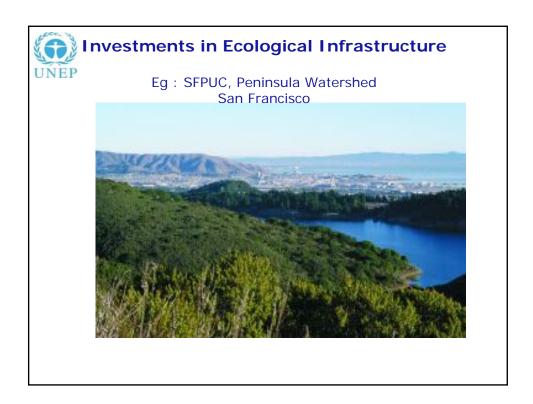
United Nations Environment Programme

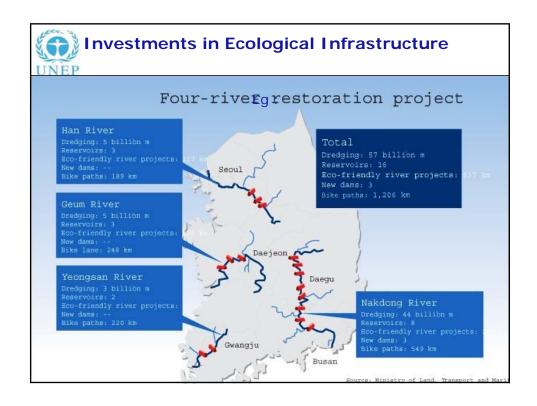
ernational Labour Organization

Organisation of Employers

International Trade Union Confederation

SO INTERPRETATION OF THE PROPERTY OF THE PROPE	Mapping "Green Jobs" Potential						
Country	Renewable Energy	Building Energy Efficiency	Sustainable Transport	Sustainable Agriculture	Ecological Infrastructure		
United States	2 million Jobs						
South Korea	171,000 Jobs	148,000 Jobs			350,000 Jobs		
European Union	1 to 2 million Jobs						
United Kingdom	160,000 Jobs						
Thailand		182,000 Jobs					
Colombia				170,000 Jobs			
TOTALS	20 million ?	?	?	?	?		









Ecological Restoration for Adaptation



ADAPTING TO THREE BIG CLIMATE IMPACTS

- **1.Freshwater Scarcity:** Maintain and Restore Forests, Lakes, Wetlands
- **2.Agricultural & Fisheries Productivity**: Forests for nutrients and freshwater flows, Mangroves and Coral reefs as fish nurseries, and small-scale natural buffers (forest and grassland patches) agricultural areas
- **3. Natural Hazards**: Storm & Cyclone damage reduction through Coral reefs, mangrove forests; flood and drought damage limitation through forest cover

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Ecological Restoration for Adaptation



Federal Ministry for the Environment, Nature Conservatio and Nuclear Safety

Table 3: Estimates of costs and benefits of restoration projects in different biomes

	Biome/Ecosystem	Typical cost of restoration (high scenario)	Estimated an- nual benefits from restoration (avg. scenario)	Net present value of benefits over 40 years	Internal rate of return	Benefit/cost ratio
		US\$/ha	US\$/ha	US\$/ha	%	Ratio
1	Coral reefs	542,500	129,200	1,166,000	7%	2,8
2	Coastal	232,700	73,900	935,400	11%	4.4
3	Mangroves	2,880	4,290	86,900	40%	26.4
4	Inland wetlands	33,000	14,200	171,300	12%	5.4
5	Lakes/rivers	4,000	3,800	69,700	27%	15.5
6	Tropical forests	3,450	7,000	148,700	50%	37.3
7	Other forests	2,390	1,620	26,300	20%	10.3
8	Woodland/shrubland	990	1,571	32,180	42%	28.4
9	Grasslands	260	1,010	22,600	79%	75.1

Note: Costs are based on an analysis of appropriate case studies; benefits have been calculated using a benefit transfer approach. The time horizon for the benefit calculation are 40 years (consistent with our scenario analysis horizon to 2050); Discount rate = 1%, and discount rate sensitivity by flexing to 4%, consistent with TEEB 2008). All estimates are based on ongoing analyses for TEEB (see chapter 7 TEEB D0 forthcoming). As the TEEB data base and value-analysis are still under development, this table is for illustrative purposes only.



Objectives of a Global Green New Deal

- 1 Revive the world economy, create new and decent jobs, and protect the vulnerable
- 2 Reduce carbon dependency, ecosystem degradation, and water scarcity
- 3 Eliminate persistent poverty by 2015.... achieve the MDG's

From: Edward B. Barbier, "A Global Green New Deal", UNEP, Feb 2009



Components of a Global Green New Deal

- International Policy Architecture
 - International Trade
 - International Aid
 - Global Carbon Market
 - Global Markets for Ecosystems Services
 - Development and Transfer of Technology
 - GGND International Coordination
- Fiscal Stimulus in 2009-2010
- Energy Efficient Buildings
- Sustainable Transport
- Sustainable Energy
- Agriculture and Freshwater
- Domestic Policy Initiatives
 - · Perverse Subsidies
 - Incentives & Taxes
 - Land Use and Urban Policy
 - · Integrated Management of Freshwater
 - Environmental Legislation
 - Monitoring and Accountability



Components of a Global Green New Deal

Most Important to Ensure Private Sector Investment..

- International Policy Architecture
 - International Trade
 - International Aid
 - Global Carbon Market
 - . Global Markets for Ecosystems Services
 - · Development and Transfer of Technology
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- Energy Efficient Buildings
- Sustainable Transport
- Sustainable Energy
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 - Environmental Legislation
 - · Monitoring and Accountability



Objectives of a Global Green New Deal.. related to poverty

- 1 Revive the world economy, create new and decent jobs, and protect the vulnerable
- 2 Reduce carbon dependency, ecosystem degradation, and water scarcity
- 3 Eliminate persistent poverty by 2015.... achieve the MDG's

From: Edward B. Barbier, "A Global Green New Deal", UNEP, Feb 2009



Ecosystem Losses & Links to MDG's

Example: MDG # 1, 4, 5, 8...



extreme poverty and hunger

MDG 1: Eradicate

MDG 8: Develop a Global Partnership for Development

MDG 5: Improve maternal health

MDG 4: Reduce child mortality



Ecosystem Losses & Poverty

"GDP of the Poor" is most seriously impacted by ecosystem losses...

India Example: 480 Million people earn their livelihood mainly in small farming, animal husbandry, informal forestry, fisheries ...

Ecosystem services / classical GDP



"GDP of the Poor"



Source: GIST's Green Accounting for Indian States Project, 2002-03 data



GND "Next Steps" : Sustained Investment in a "Green Economy"

Eg: South Korea's 5-Yr Green Growth Plan 3 Action Plans, 10 Policy Directions, 50 Specific Projects 2009-2013

Three action plans and 10 policy directions in Korea's 5-year green growth plan

3 Action plans	10 Policy directions		
Measures for climate change	Reduce carbon emissions		
and securing energy independence	2. Decrease energy dependence on oil and enhance energy self-sufficiency		
macpendence	3. Support adapting to climate change impacts		
	4. Develop green technologies as future growth engine		
Creation of	5. Switch industry into green		
a new growth engine	Develop cutting-edge industries		
a new growth engine	7. Set up infrastructure for Green Economy – set up new tax		
	schemes to attract private funds into green industries		
Improving quality of life and	8. Green city and green transport		
strengthening the status of	Green revolution in lifestyle		
the country	10. Enhance national status as a global leader in green growth		

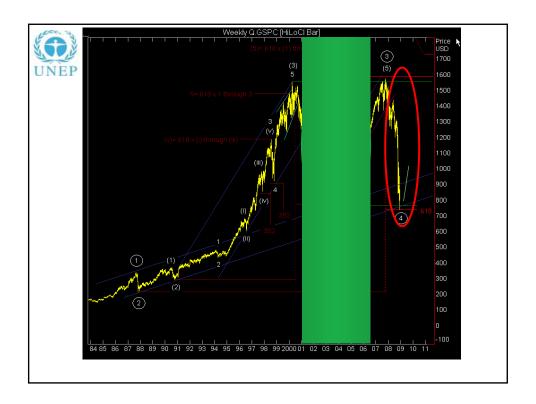


GND Execution Risks...

	Feb, 2009	July, 2009	% Change
Fiscal Stimulus Announced	\$ 2,800 Billion	\$ 3,130 Billion	+12%
Of which: "Green Stimulus"	\$ 430 Billion	\$ 512 Billion	+19%
Of which: "2009" Plan Deployment	\$ 121 Billion (28%)	\$ 114 Billion (22%)	- 9%



... the risk of deferral or misdirection of planned "green" investments needs to be proactively managed ...





Thank You!

26.10.2009