







### Introduction to Green Jobs

**SESSION 1** 

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### **Outline**



- 1. The two challenges of the 21st century
- 2. Green Jobs and the Sustainable Development Agenda
- 3. The Need for a Just Transition





## 1. The two challenges of the 21st century

- Green jobs address the two defining challenges of the 21<sup>st</sup> century
  - Climate change and other environmental issues (energy, water scarcity and contamination, biodiversity, etc)
  - Creation of millions of jobs and decent work for newcomers to the labor market and eradicate poverty
- Related challenges food production, resource productivity, etc.





## The employment and social challenge

- Unemployed: 205 million globally, 83 m in Asia-Pacific
- One in five workers in extreme poverty (< \$1.25/day)</li>
  - Two-thirds of these workers in A-P
- World's working age population to grow from 4.5 billion in 2010 to 5.2 b in 2025
  - Asia home to 300 m of these 700 m additional workers
- 1.5 b in vulnerable employment
- Only one in five working-age population have access to comprehensive social protection systems







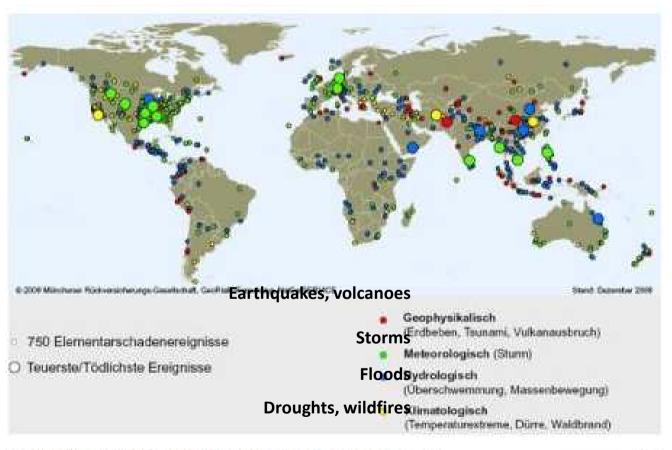
- Climate change sea level rise, increase in extreme weather events (storms, floods, droughts, water fall patterns, etc)
- (World population 1 bn 1900 9 bn 2050?)
- No access to potable water: nearly 900 million
- No household access to reliable energy: 3 billion
- Nearly ¾ of world's poorest depend on environment as a significant part of their daily livelihood
- These environmental challenges have an important impact on the labor market







Asia saw many disasters in 2008, many climate related











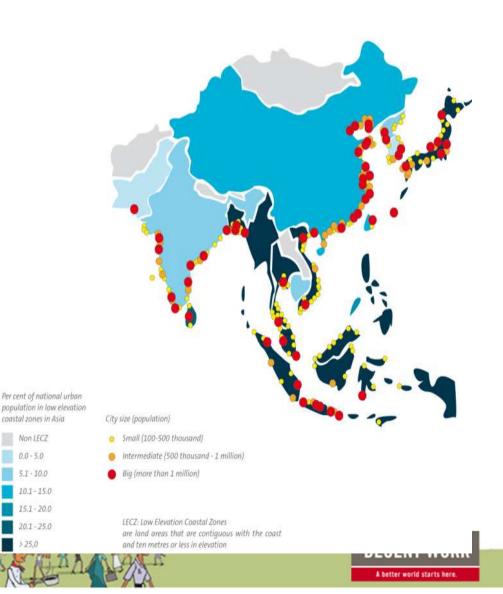
coastal zones in Asia

5.1 - 10.0

20.1 - 25.0



- Asia is highly vulnerable to sea level rise
- Out of 10 most vulnerable cities in the world, 8 are in Asia: Mumbai, Guangzhou, Shanghai, Miami, Ho Chi Minh City, Kolkata, Greater New York, Osaka-Kobe

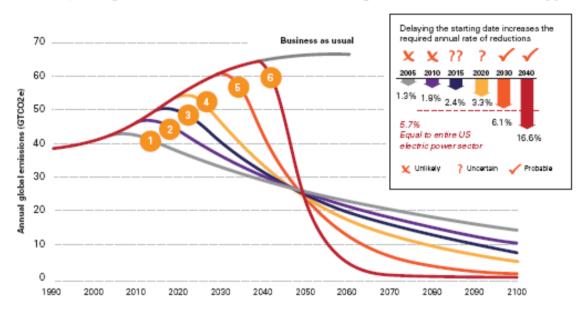


**DECENT WORK** 



### Delaying action requires more radical changes

Pathways for global emissions consistent with long-term stabilization at 450 ppn



Source: EDF calculations using the MAGICC climate model and IPCC assumptions, published in Kechane & Goldmark (2009) "What Will it Cost to Protect Ourselves from Global Warming? The Impact on the U.S. Economy of a Cap-and-Trade Policy for Greenhouse Gas Emissions", Environmental Defense Fund report.







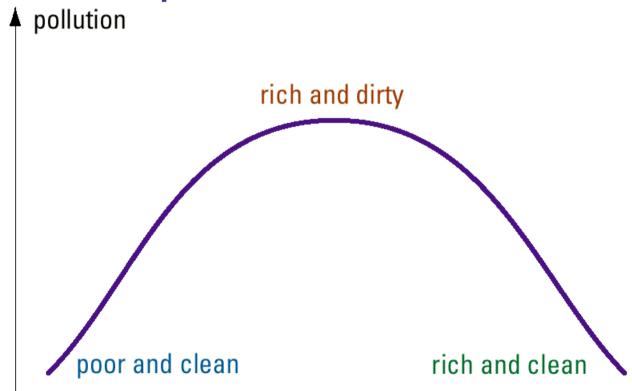


<sup>\*</sup>More than 200 international dimete scientists issued a declaration in December 2007 urging politicions at the United Nations Climate Change Conference in Ball to agree on strong targets for tackling climate change.

<sup>&</sup>quot;Based on CO requivalent volumes (CO, methane, N,O, HFCs, PFOs and SF,)



 Why are so many people thinking we should first become rich and deal with climate problems later? It is the convenient paradigm of the Kuznets curve of pollution



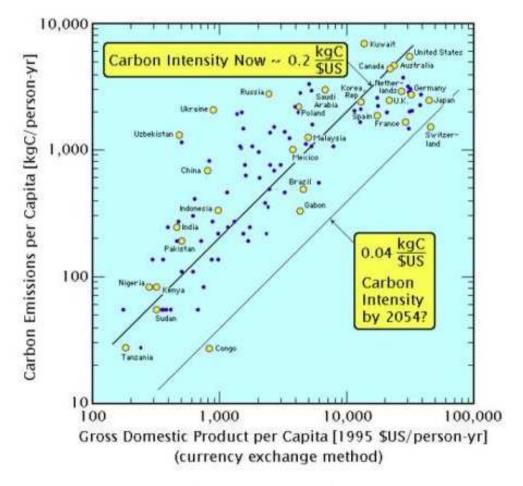






Conventional wisdom: More wealth, more carbon

intensity









### The options to respond to the challenge:

- Reduce carbon intensity of energy
- Reduce energy intensity of wealth
- Reduce wealth

#### **Problem**

No society has ever achieved the required transformation yet





# 2. The Green Jobs Initiative and the Sustainable Development Agenda



GJI links environmental policies and economic policies to achieve inclusive growth in the context of sustainable development

















# Green Jobs and Sustainable Development



- Defined by the ILO/UNEP as: "the direct employment created in economic sectors and activities, which reduces their environmental impact and ultimately brings it down to levels that are sustainable"
- Green Jobs are based on the two pillars of Decent Work and Environmental Sustainability (ES)
- Green Jobs = Decent Work + (ES)
- Green Jobs are Decent Work







# Green Jobs and Sustainable Development



#### Labor/social issues



The core ILS (8)



**Engine of Growth** 

OHS standards HRD/TVET

(ILC 2007 conclusions on sustainable enterprises )









# Green Jobs and Sustainable Development



- Decent Work is defined as opportunities for women and men to obtain productive work in conditions of freedom, equity, security and human dignity
- The ILO's Decent Work Agenda provides a framework to deliver its four strategic objectives:
  - Fundamental principles and rights at work and international labour standards
  - Employment and income opportunities
  - Social protection and social security
  - Social dialogue and tri-partism







## Core Decent work standards (8)



Decent work	Fundamental ILO Conventions
Freedom of association and the effective recognition of the right to collective bargaining	<ul> <li>C87 Freedom of Association and Protection of the Right to Organize Convention</li> <li>C98 Right to Organize and Collective Bargaining Convention</li> </ul>
Elimination of all forms of forced or compulsory labor	<ul> <li>C29 Forced Labour Convention</li> <li>C105 Abolition of Forced Labour Convention</li> </ul>
Effective abolition of child labor	<ul> <li>C138 Minimum Age Convention</li> <li>C182 Worst Forms of Child Labour Convention</li> </ul>
Elimination of discrimination in respect of employment and occupation	<ul> <li>C100 Equal remuneration         Convention     </li> <li>C111 Discrimination         (Employment and Occupation)         Convention     </li> </ul>







### **Environmental dimension**



#### CLIMATE CHANGE

- Greenhouse gases emissions reduction and capture
- Prevention of deforestation and forest degradation
- Adaptation to climate change and climate variability
- BIODIVERSITY DESERTIFICATION
- ECO-SYSTEMS, LAND USE MANAGEMENT
- POLLUTION CONTROL: air, water, waste, contaminated soils, etc.



### **Environmental dimension**



- Green jobs contribute directly to reducing the environmental impacts of the economy
  - by enhancing green sectors (Green Jobs in renewable energy, pollution control, forestry, mass transport, eco-tourism, etc.)
  - Improving the environmental performance of existing sectors (Greener Jobs in manufacturing, construction, tourism,)
  - Adapting to the effects of climate change (climate resilient infrastructure)







## Measuring & monitoring the difference



Sector	Example of environmental standard/voluntary code
Organic Agriculture	<ul> <li>SNI 01-6729-2002 (Indonesian National Standards) on Organic Food System by National Standardization Agency of Indonesia</li> </ul>
Green Building and Construction	<ul> <li>SNI 03-6759-2002 (Indonesian National Standards) on Codes for Energy conservation designation of buildings; Green Star (Australia)</li> </ul>
Green Finance	<ul> <li>Principles for Responsible Investment (UN- PRI)</li> </ul>
Sustainable Fisheries	<ul> <li>Sustainable Fisheries Marine Stewardship Council Fishery Standards</li> </ul>
Sustainable Forestry	<ul> <li>Forest Stewardship Council (FSC)</li> </ul>
Tourism	Tourism Green Globe 21 Standard
Manufacturing and Industry	<ul> <li>(ISO) 14064 of Greenhouse Gas Accounting and Verification</li> </ul>











## A cross-walk from environmentally friendly activities to green jobs

Mitigation - GHGs reduction and capture	energy supply, energy demand, prevention of emissions from biological sources, biological carbon sink services, etc;	
Biodiversity conservation, natural resource Mgt	Ecosystem management, conservation, sustainable agriculture, sustainable forestry, sustainable natural resource management, etc.	EDUCATION, TRAINING, RESEARCH,
Desertification prevention	Adaptation to desertification, land use planning	MONITORING
Water	In-land water services, water harvesting, sustainable agriculture, water efficiency (building).	& CONTROL, PLANNING, ADVOCACY
Pollution control	environmental goods and service industry (OECD,	
Air emissions prevention	1999): air pollution control, waste management,	ACTIVISM, FINANCIAL &
Waste water	waste water management, monitoring and	INSURANCE
Waste, soil decontamination	auditing, etc;	SERVICES,
Adaptation to climate variablity	Climate related disaster management (preventive, reactive action related services)	etc,
Adaptation to climate change	Agricultural services, health related services,	
	natural resource management services, etc	
Eco-system services	Environmental services, eco-tourism, etc;	
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ASIAN 2006 DECENT WORK 2015





### Examples of potential green jobs



- Mangrove planter
- Mechanic for CNG propelled buses
- Manufacturer of fuel efficient car
- Sustainable farmer (resource management, carbon capture)
- Farmer in agro-forestry
- Workers in certified forestry
- E-Waste collector
- Architects and engineers designing renewable technologies and energy efficiency products

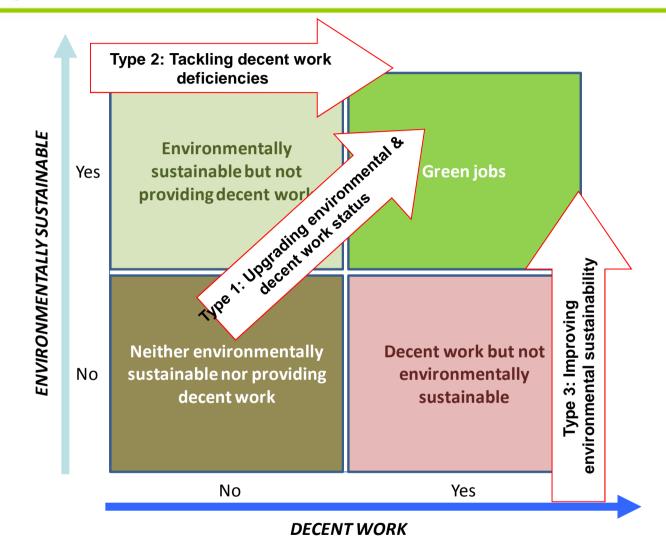






### A journey towards sustainability











### 3. Need for a Just Transition



- Based on the decent work agenda:
  - Workers' rights (to allow a Just Transition to take place)
  - Social protection (to support new forms of sustainable economic activity)
  - Social dialogue (to allow negotiation, consultation or exchange of information)
  - Employment and job creation (through promotion of sustainable enterprise)







### **Need for a Just Transition**



- A Just Transition for Workers and employers to adapt to a changing socio-economic environment;
- Enterprises need to engage in low-carbon production, workers need access new skills, shifts in the labour market need to be anticipated and accompanied, etc;
- The Cancun Agreement (UNFCCC Dec 2010)
   contained a recognition of the need for a Just
   Transition as part of the shared vision for long term
   global action
  - "Ensure a just transition of the workforce that creates decent work and quality jobs"







### **Need for a Just Transition**



### The Global Jobs Pact (ILC, 2009) promotes:

- The policy framework for strong, sustainable and balanced growth must embrace a global strategy for greening the economy.
- The transition to a lower carbon economy will take place in enterprises and workplaces all over the world and create opportunities for green jobs from the reorientation of consumption, production and employment patterns.







### **ILO** work on the Just Transition



Employment Services	The labour market shifts induced by the impact of climate change and its related policies must be understood, anticipated and accompanied. Employment services aim to improve the functioning of the labor market.
Social Dialogue	Realizing the objectives of climate mitigation policies and the opportunities will depend on the extensive use of the ILO tool of social dialogue with industry and trade union.
Sustainable Enterprise	While these apply to all enterprises, adjusting to climate change will require a particular focus on SMEs which are likely to face significant information deficits relative to large firms, and also face financial constraints relative to large firms. 2007 ILC on Sustainable Enterprise.
Occupational Safety and Health	Investments and employment promotion policies in green sectors and greening sectors will require a focus on occupational safety and health (ILO standards)











	Organi
Disaster Management	Capacity of intervention in the context of climate related natural disasters, both prevention and reactive strategies (CRISIS).
Migration	Climate variability & climate change migration and emigration
Standards and Rights	Ex: The climate change gender double deficit.
Employment Intensive Env.t related Programs	Government driven policies in employment intensive infrastructure programs. ILO EIIP, national such as NREGA (India), Working for Water Program (South Africa), Retrofitting public program (Germany, US,), etc.
Social Protection	Climate change will exacerbate the needs through, higher frequency of severe weather events (ex. South East Asia) and the higher rate of job turnover
Skills	Surging of new skills, transformation and expansion of existing ones, such as in 'greening' existing processes.









## DECENT WORK DECADE 2015



## Thank you

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