

Skills for Green Jobs: A Global View.



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The project

- Started in early 2009
- Partnership with Cedefop
- Standardised template for all
- Qualitative research. Methods varied.
- 148 case studies (107 by the ILO and 41 by Cedefop)
- The report is not only our product but also of those of you who prepared background reports!

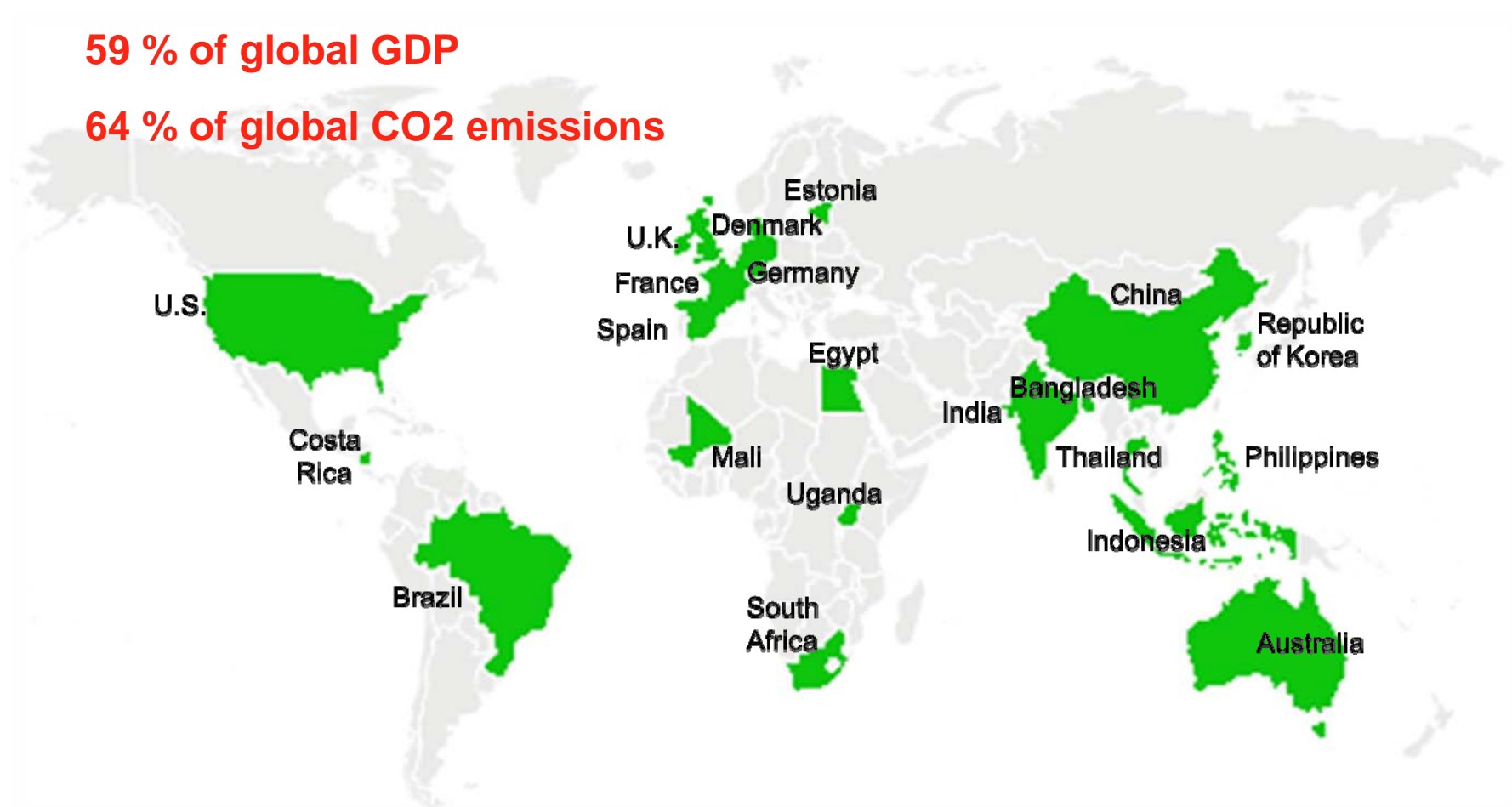


Country coverage

60% of world population

59 % of global GDP

64 % of global CO2 emissions



Drivers of change

- Changing natural or built environments;
- Environmental / climate change policy and regulation;
- Green technology and innovation;
- Markets for green industries and consumer habits



Key challenges

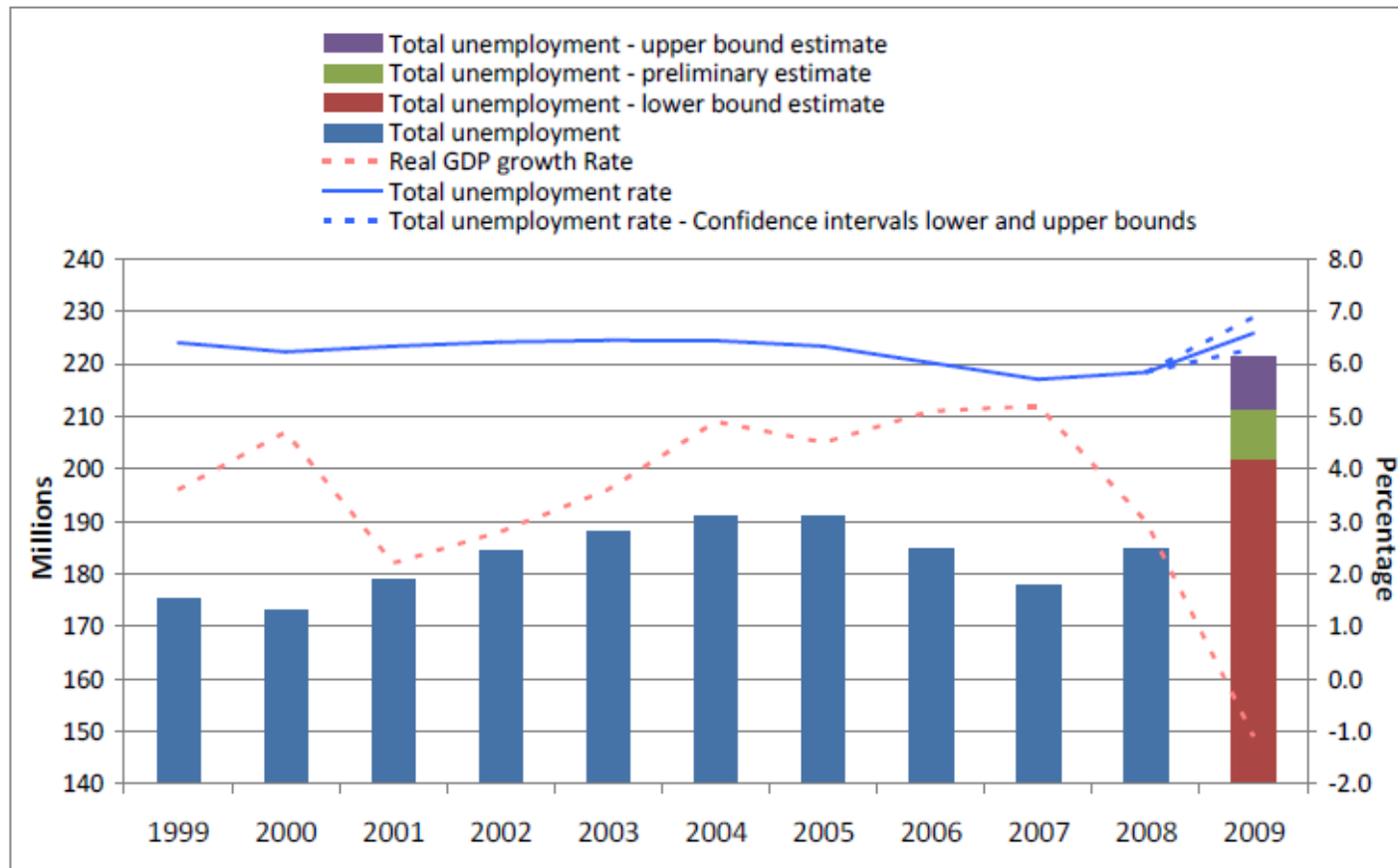
- Environmental challenges
 - Climate Change
 - Environmental degradation



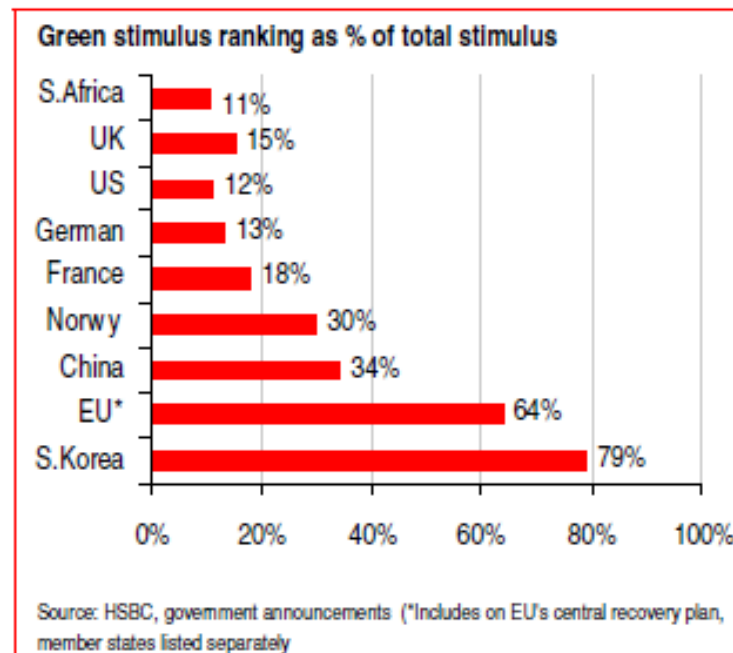
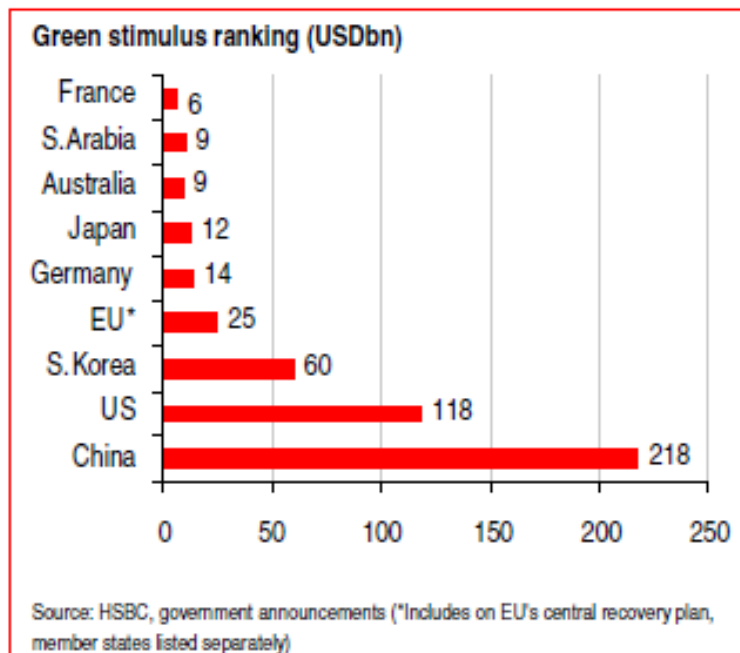
- Economic and social impacts
- Energy crisis and diminishing natural reserves
- Aggravated by the current labour market situation

Will investments and stimuli into green industries save the world?

Global unemployment trends, 1999-2009

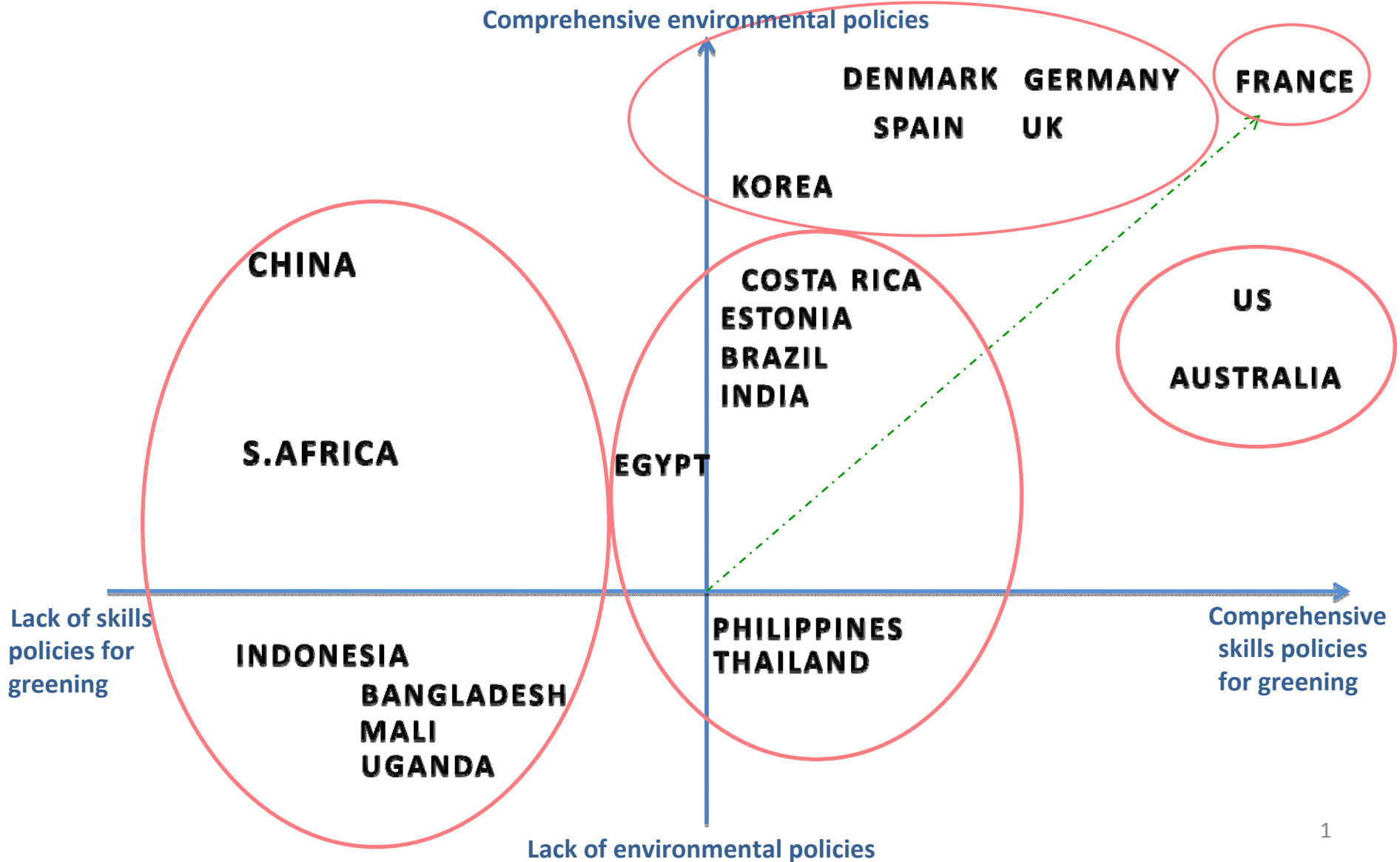


Green stimulus packages



- In the US, skills measures constitute **0.6 %** of the total amount spent on green recovery
- In Switzerland – the estimate is **4,6%**

Environmental and skills policies



Green structural change

- Additional jobs will be created.
- Some employment will be substituted
- Certain jobs may be eliminated without direct replacement
- Many existing jobs will be redefined
- New jobs created will offset those lost
- But those who will get green jobs are not necessarily those who will have lost their jobs

Retraining matters



Sectors affected and retraining needs



- Agriculture, forestry and fisheries
- Extracting industries and fossil-fuel energy generation
- Emissions intensive manufacturing, in particular:
 - Automotive sector and related supply chains;
 - Ship-building and related marine engineering activities.

Changing and emerging occupations

Degree of skill change	Occupational change	Typical skills response	Examples
None	None or only quantitative	None or increased training in existing occupation	Bus driver in CNG driven buses; forester
Low	Changing occupation	On-the-job learning or short training courses	Welder in wind turbine production; Organic farmer
Medium	Changing or emerging occupation	Short courses or longer continuous training	Energy consultant in building; car mechanic for electric cars or CNG cars
High	Emerging occupation	Initial training, university degree or longer continuous training	Solar energy technician; eco-designer; biofuels technician

Changes in existing occupations outnumber new ones

- Quantitative and qualitative changes
- Skill content for occupations to become greener is far from being uniform across countries
- Many changes relate to knowledge about regulation and new technologies, some to new markets and demand
- Emerging occupations more often require higher level qualifications
- Changes in existing occupations happen more often at the low and medium-skill level
- Gender dimension

Generic and core skills

- Strategic and leadership skills for policy-makers and business executives
- Adaptability and transferability skills,
- Environmental awareness and attitude and willingness to learn about sustainable development;
- Co-ordination, management and business skills;
- Systems and risk analysis skills;
- Entrepreneurial skills;
- Innovation skills;
- Communication and marketing skills;
- Consulting skills to advise consumers;
- Networking, IT and language skills.



Skills shortages

Skills shortages **already pose a major barrier to transitions to green economies and green job creation**

- In certain sectors and occupations
- Particular core skills
- Multiskilling requirements

Why are there shortages?

- Underestimated growth of some sectors, such as for green technologies
- General lack of scientists and engineers
- National skill structure which does not meet skills demand
- Low reputation of sectors – failure to attract trainees

Skills responses for greener economies

- At different levels: enterprise, industry, government (national, regional, local), by universities, training providers, research institutes, NGOs and international donors
- Inside and outside existing education and training systems and mechanisms
- Variety of mechanisms, some innovative

Effectiveness - difficult to assess

- Targeting responses
- Industry level, PPPs, and coherent multi-level responses most effective
- Generally stronger in basic and higher education and weaker in TVET



Anticipating the skill change



- The dynamic and inclusive nature of the GJs concept brings the measurement challenge
- Paucity of data on classification and incidence of green jobs
- The established LMI and skills identification systems proved useful, although not always used in the GJs context
- The standard systems in non-standard situations are not sufficient
- Reliance on the grassroots level of research in all countries
- Tripartism in identification of qualifications' content and of competences needs is crucial
- Sectoral approaches alone are seen as delimiting
- More coordination is asked when it comes to skills for GJs

Where no LMIS exists...

- Demography matters: surplus of the workforce gives a wrong impression of abundance of available skills
- Where no LMIS exists, countries rely on ad-hoc surveys by NGOs, donors, universities and line ministries
- Enterprises bare the burden trying to adjust to the changing situation on their own
- Sectoral approaches are much sought
- And also more coordination – one-stop shop for GJs

Some preliminary general conclusions

- The change is happening
- The rate of it depends on the degree of effects of environmental degradation, policy, legislation and technology diffusion, as well as the role of market and consumer demand
- The success in response measures depends on policy coherence, targeted measures and collaboration of various actors and levels



**Thank you for your attention and
for the forthcoming discussion
and feedback!**

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