

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!

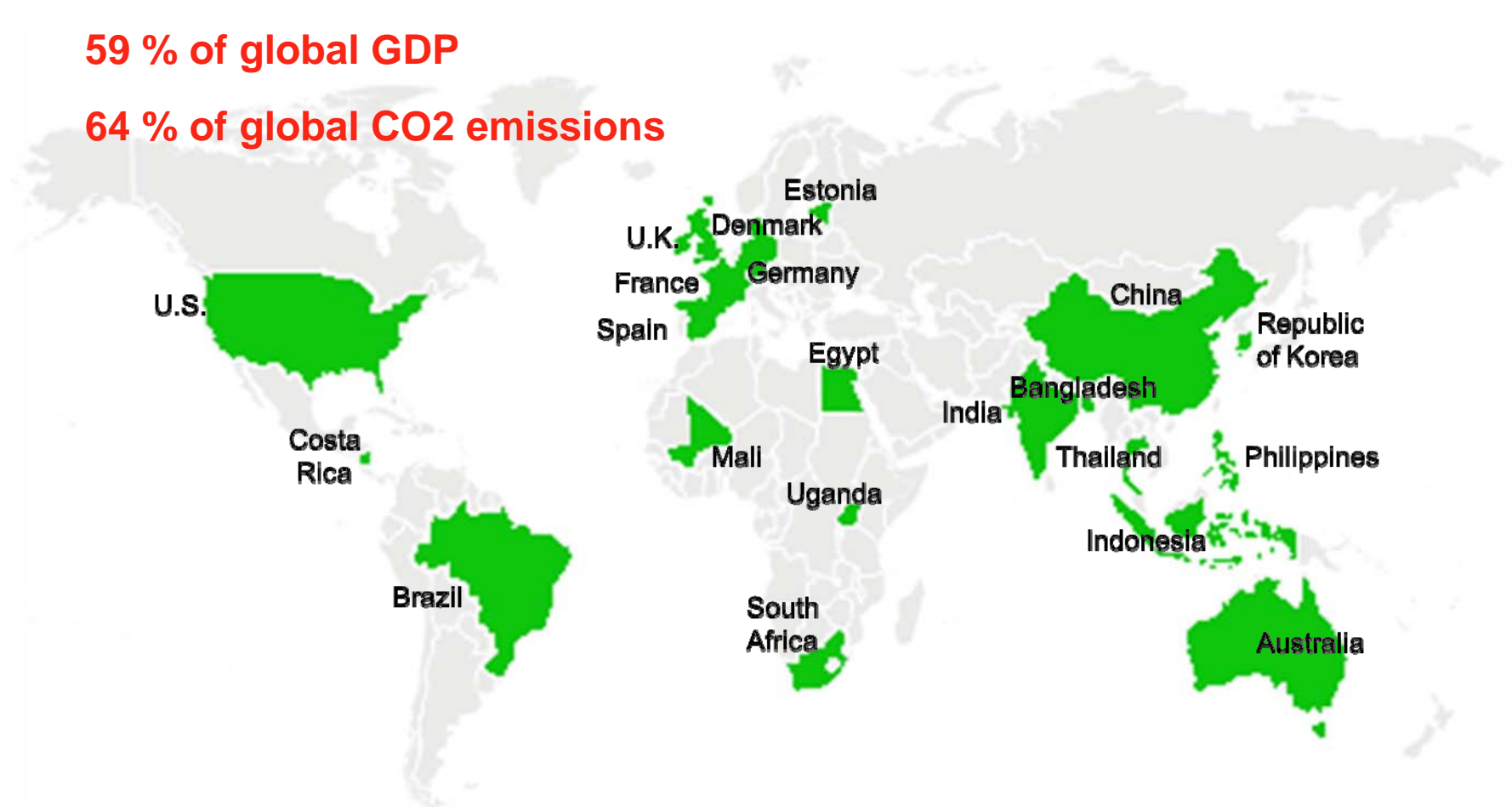


Country coverage

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

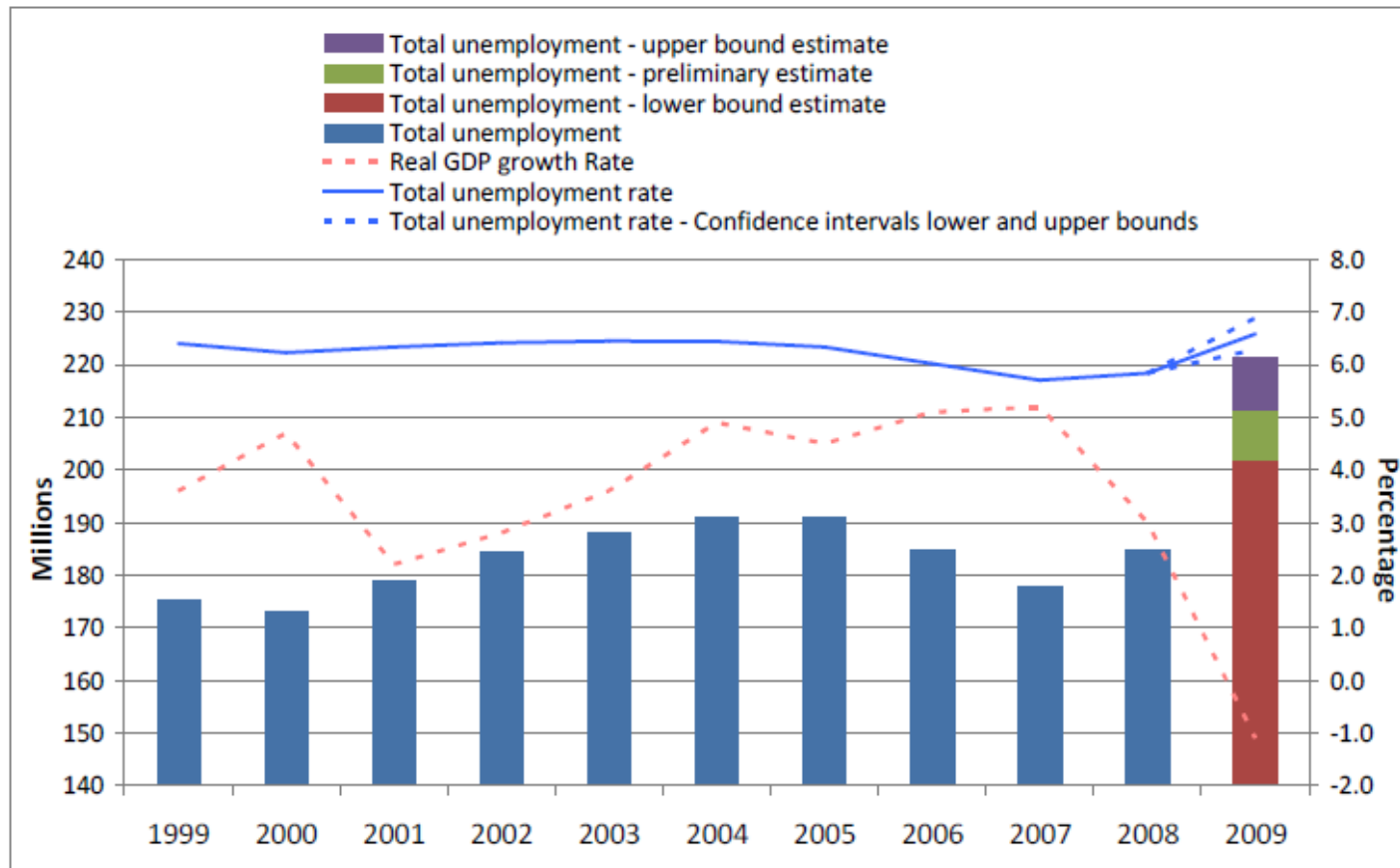
- Environmental challenges
 - Climate Change
 - Environmental degradation



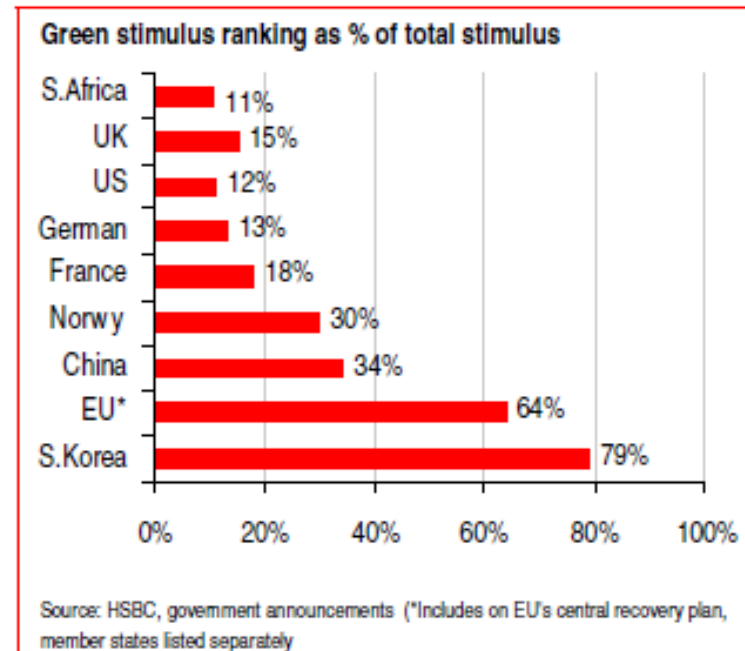
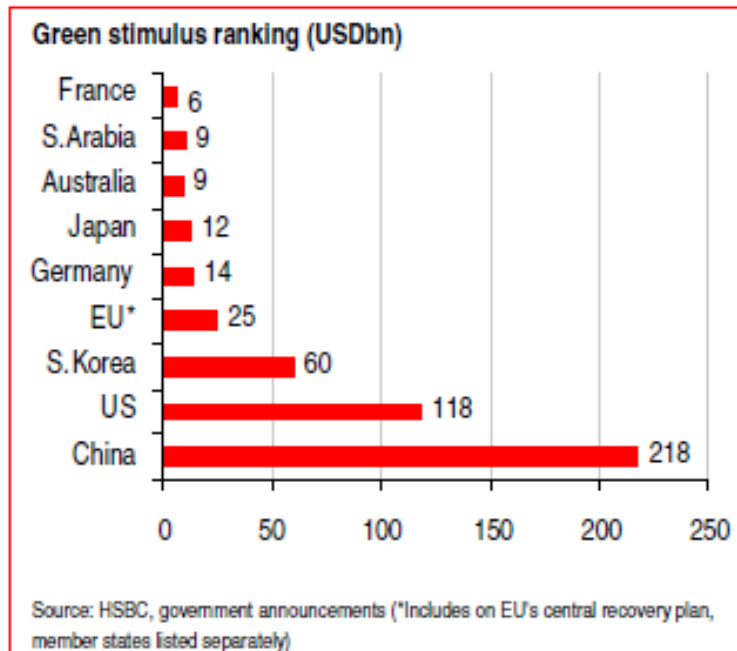
- Economic and social impacts
- Energy crisis and diminishing natural reserves
- Aggravated by the current labour market situation

Will investments and stimuli into green industries save the world?

Global unemployment trends, 1999-2009

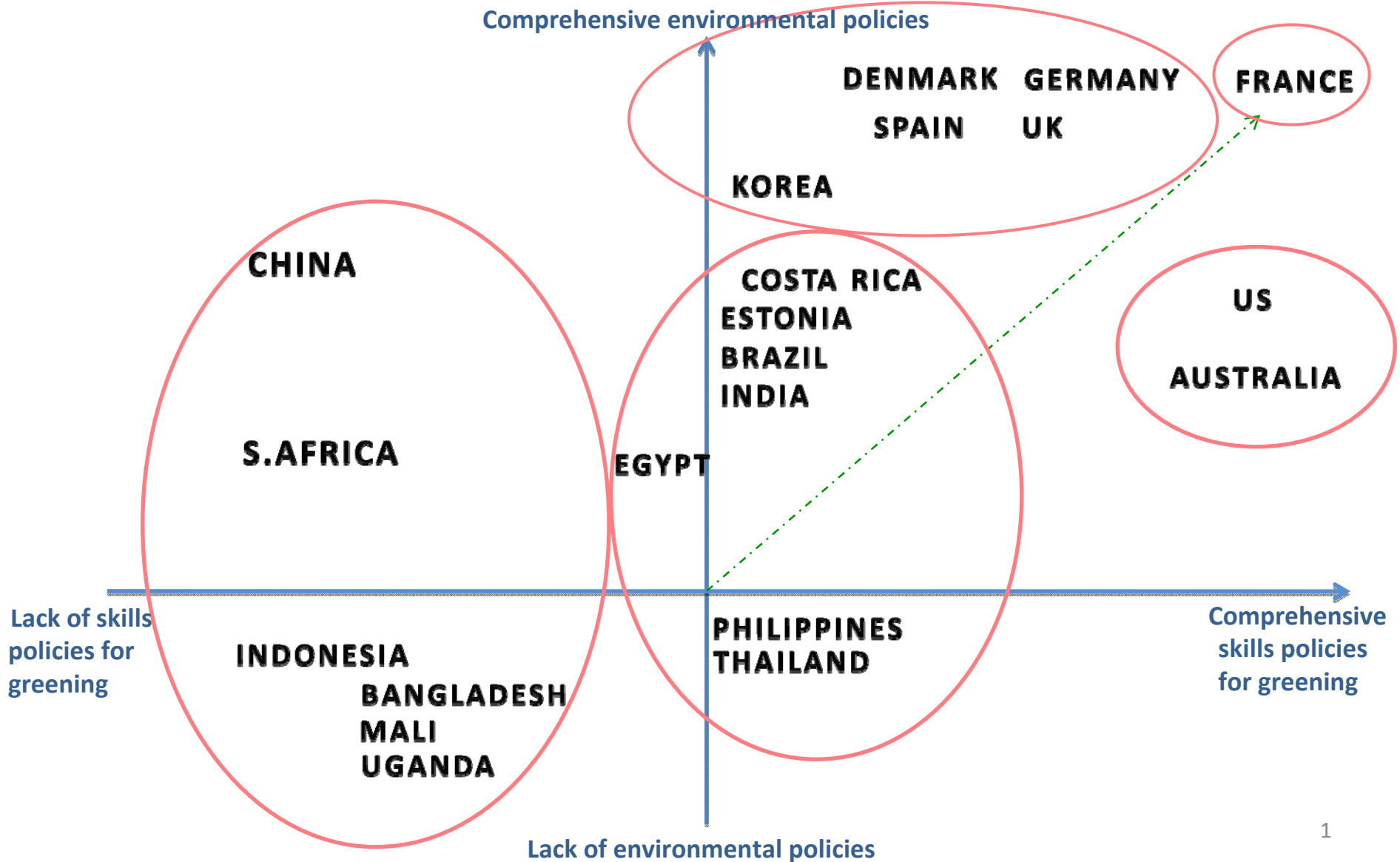


Green stimulus packages



- 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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