

# Decent work and green jobs: assessment, modelling, just transitions

In-Forum Workshop: Cooperation on response strategies  
UNFCCC, Warsaw, 12 November 2013

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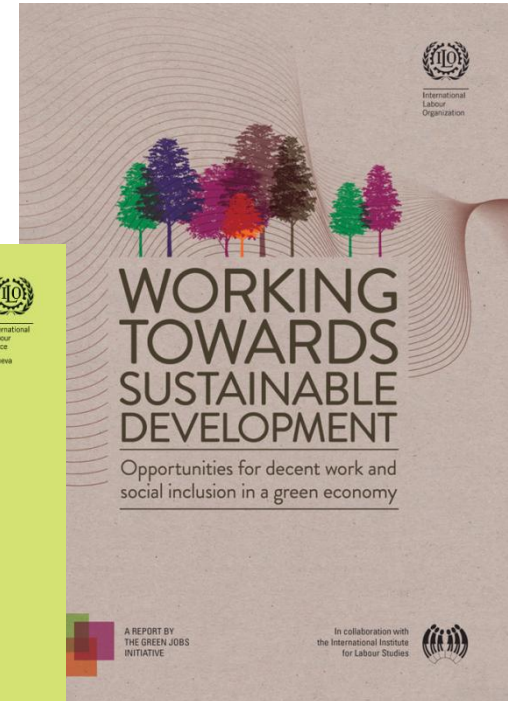


## 2 ILO reports on sustainable development, environment and employment

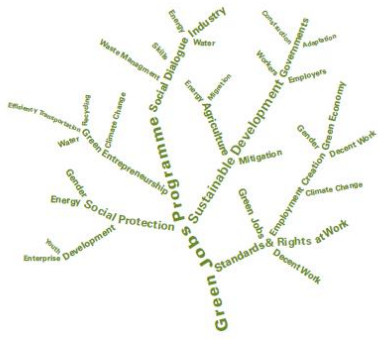
**Rio+20:** quality jobs and decent work key to sustainable development and poverty reduction

### International Labour Conference 2013:

- Opportunities?
- Challenges?
- Trade-offs?
- Just transition?







# Opportunities for job creation

## 1. Job creation

- A greener economy could lead to net gain of **+0.5-2 % more employment** i.e. 15- 60 million additional jobs
- More with higher investment
- Gains may be higher in emerging economies and developing countries than in industrialized ones

## 2. Improving the quality of existing jobs

- Major opportunity and need for improved working conditions, better OSH, and higher incomes  
e.g. in agriculture, waste management and recycling, building sector

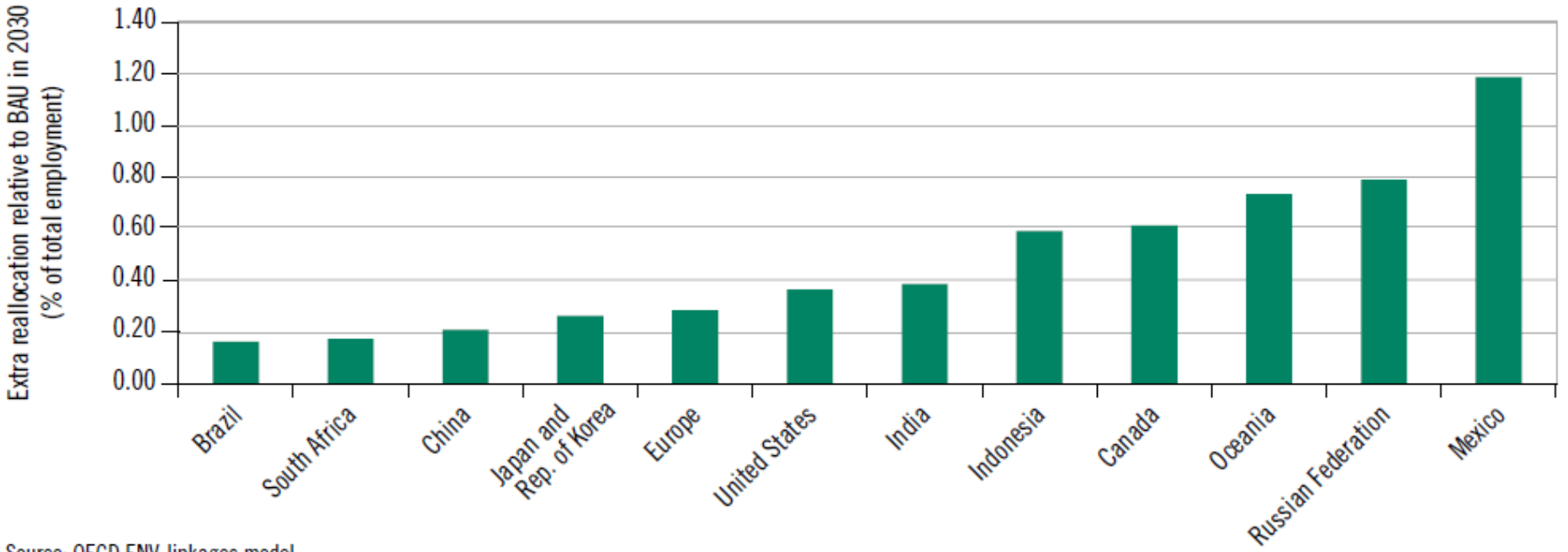


# Transition:

## OECD: 'much smaller than globalization' (?)

Shifts between sectors: ~ 1% (globalization 20%)

Figure 4. Simulated increase in job reallocation associated with an ambitious climate change mitigation policy, selected countries  
In % deviation from the business-as-usual (BAU) scenario in 2030



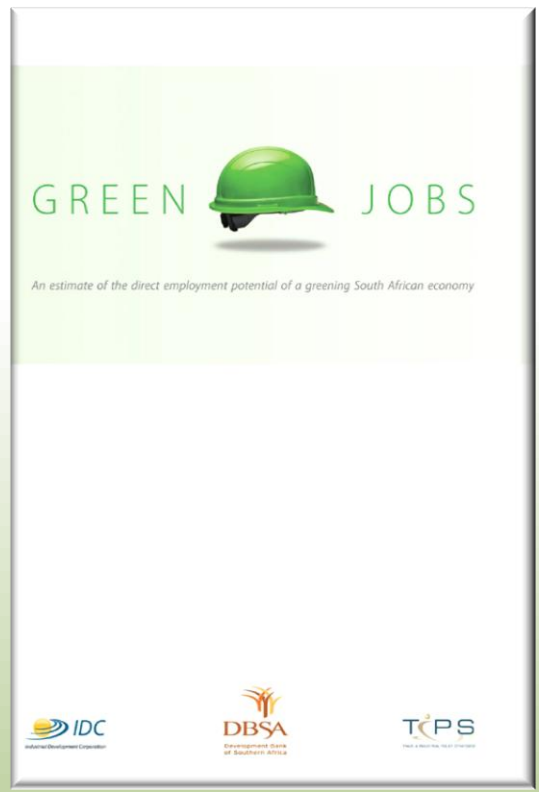
Source: OECD ENV-linkages model.



# Green Jobs Potential: South Africa's New Growth Path

- Development Strategy
- Component green jobs
- Assessment green jobs potential:

Net direct jobs	Short term (2012)	Medium term (2017)	Long term (2025)
<b>Total</b>	<b>98,000</b>	<b>255,000</b>	<b>462,000</b>
Energy generation	13,565	57,142	130,023
Energy efficiency	31,569	70,193	67,979
Pollution control	8,434	13,189	31,641
Nat. resources	44,512	114,842	232,926

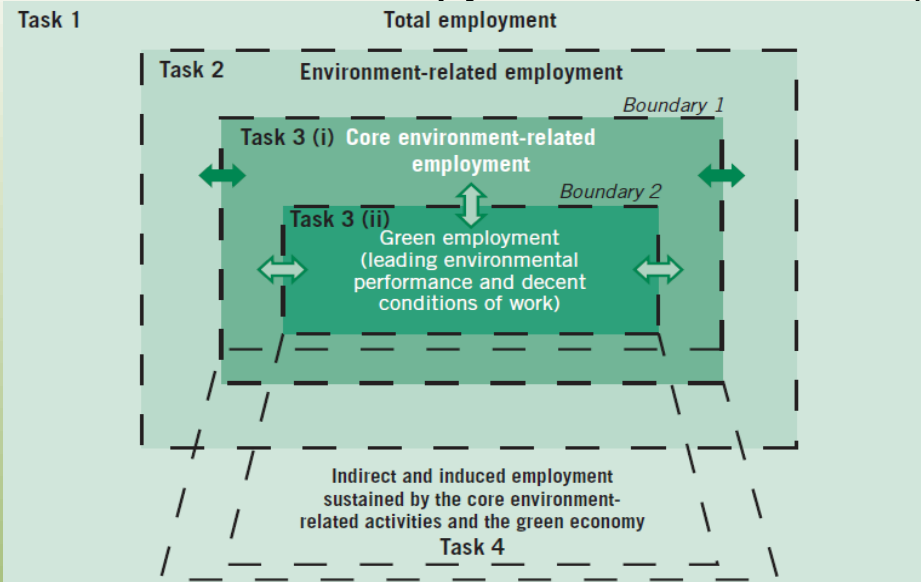


The Green Jobs Programme of the ILO



# Assessment methodology

- Based on **Social Accounting Matrix**
- Estimates Direct, Indirect & Induced effects
- Allows for ‘What if’ Scenarios  
(E.g. if policy shifts 5% investment into green sectors - how many jobs will be created?)





# Mexico US\$8.6 bn RE invest: Job gain & loss?

8 most affected Subsectors (selected out of 86)	Employment	Output (1,000 peso)	Output multiplier (per 1m peso)	Employment Multiplier (per 1m peso)
Agriculture	5,100,460	244,020,699	1.25	22
Organic Agriculture	290,026	5,266,653	1.26	57
Forestry	123,178	22,185,749	1.20	6
Livestock y fisheries	1,555,795	110,832,285	1.75	19
Extraction of oil and gas	354,558	1,038,839,692	1.23	1
Conventional electric energy	64,441	106,230,778	2.19	(22,360) 2.6
Renewable electric energy	67,071	69,983,023	1.84	(+24,080) = +1720 2.8
Water and gas	139,951	22,986,995	1.57	8
Construction	5,212,546	804,604,071	1.67	9
Sustainable construction	572,496	60,561,597	1.67	12
Manufacturing (food & textile)	1,845,010	627,446,259	1.74	8
Green Manufact. (food&textile)	138,872	26,143,594	1.74	10
Manufacturing (raw materials)	935,913	271,529,729	1.58	5
Green Manufact. (raw material)	70,445	11,313,739	1.57	8
Manufact. petroleum/coal	66,732	129,538,130	1.97	1
Chemical Industry	240,987	181,294,044	1.81	3
Manufacturing (equipment)	1,885,374	730,689,547	1.33	4
Green Manufact. (equipment)	141,910	30,445,398	1.33	6
Commerce	9,389,055	2,001,147,745	1.36	6
Transportation	1,560,233	531,221,505	1.52	4
Public Transport	953,573	291,778,132	1.46	4
Waste management	11,928	3,395,351	1.73	5
Education	2,058,941	554,208,187	1.14	4
Sustainable Tourism	4,422	2,224,985	1.48	3
<b>TOTAL (all sectors)</b>	<b>44,151,091</b>	<b>11,863,314,346</b>	<b>11,863,314,346</b>	

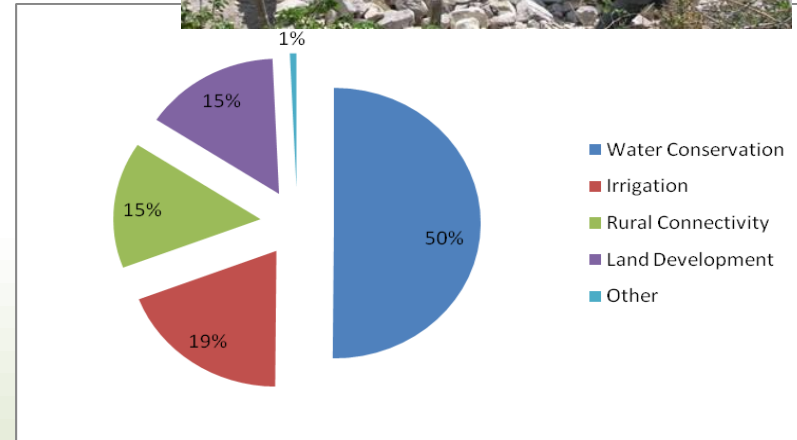




# Social protection

## India: MGNREGA

- US\$ 8 bill (~ 0.4% GDP)
- Benefits 59 million households
- Adaptation, irrigation, reforestation



## Poland: 1990-2006 restructuring

- 388,000 => 119,000 jobs
- Social program and retraining
- 75% transitioned to new jobs

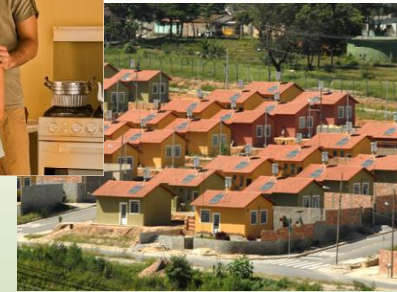
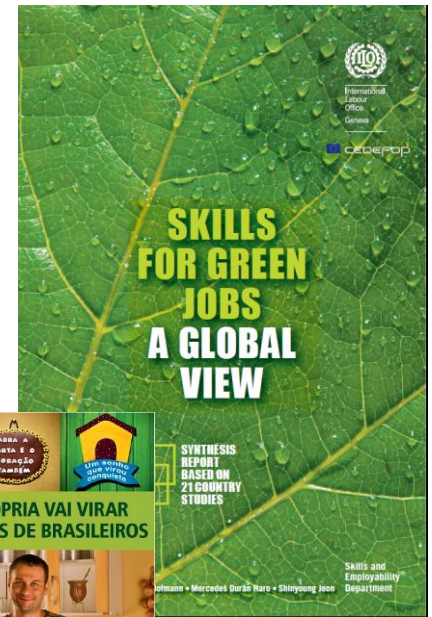




# Skills training

## Brazil 'My house-my life' social housing program

- 350,000 houses+ solar heating
- 40% saving energy bills
- + 18,000 jobs in manufacturing & installation
- Massive training effort

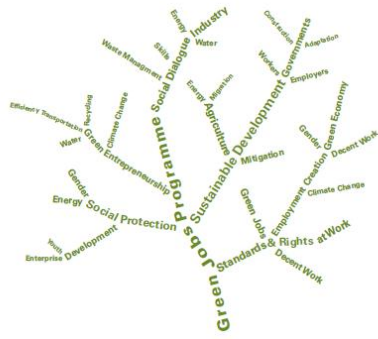


## Bangladesh 'Solar System' 100,000 jobs by 2015

- Institutionalisation of training curricula in Technical and Vocational Institutions
- Job placement and linking trainees with renewable energy service providers
- Promoting solar entrepreneurship through business skills and finance



# Small and Medium Enterprises targeted measures

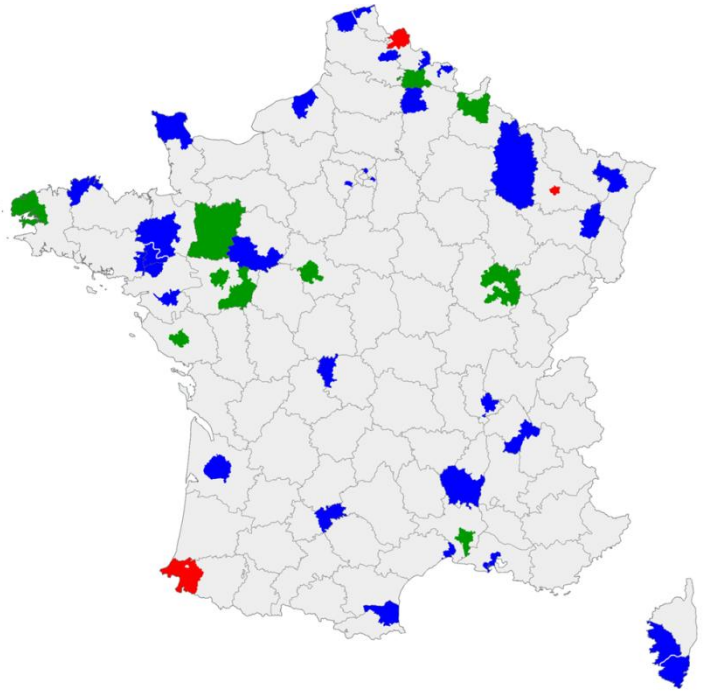


## Example France: Energy-saving refurbishments of buildings

- 2009 = 17% of the construction volume
- 2014 = 42%

New Qualification: Methods, Materials, Tools

Local Partnerships: 'Maisons de l'Emploi et Développement Durable'  
EU project





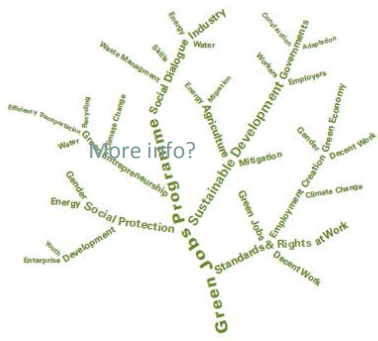




## Conclusions

# International Labour Conference 2013

- Sustainable development (including arresting climate change and adapting to it) only possible with active participation of world of work
- Identifies principles and sets out a policy framework for a just transition for all
- Just transition:
  - Country specific assessments social impacts
  - Social dialogue on policy
  - Coherent policies: macro, sectoral, social protection, skills and education, enterprises, labour markets



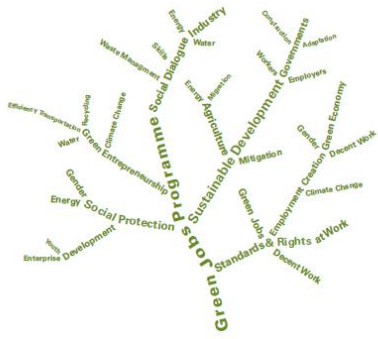
**For additional information please see:**

[http://www.ilo.org/ilc/ILCSessions/102/reports/reports-submitted/WCMS\\_207370/lang--en/index.htm](http://www.ilo.org/ilc/ILCSessions/102/reports/reports-submitted/WCMS_207370/lang--en/index.htm)

[ILO.org/greenjobs](http://ILO.org/greenjobs)

[www.ilo.org/green-jobs-programme](http://www.ilo.org/green-jobs-programme)

[www.ilo.org/sustainable-enterprises](http://www.ilo.org/sustainable-enterprises)



# Ecoefficiency in Enterprises

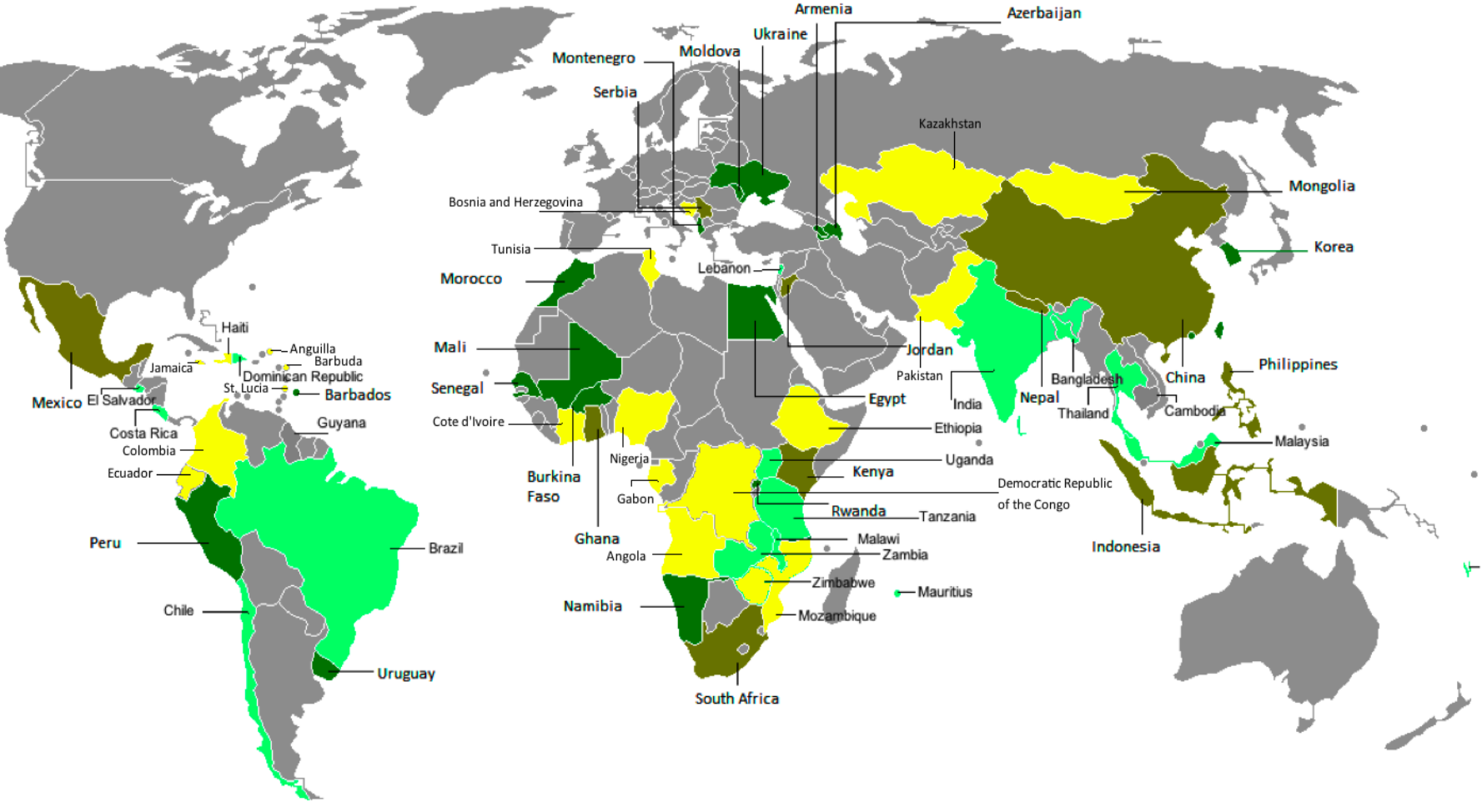
## High Potential

### e.g. Multinational Enterprise 3M: 'Pollution Prevention Pays'

- > 8600 Projects suggested by employees
- Global reduction GHG -72% (1990-2011)
- Since 1975 avoided emission pollutants 1,4 Billion Kg
- Cost savings of US\$ 1.4 Billion



# Demand for Green Economy Advisory Services



- UNEP
- ILO
- Requested Support
- UNEP & ILO

### Services requested:

Angola, Bosnia and Herzegovina, Colombia, Cote d'Ivoire, Ethiopia, Gabon, Kazakhstan, Mongolia, Mozambique, Nigeria, Pakistan, Tunisia, Uganda

The Green Jobs Programme of the ILO