Measuring green jobs:
Initial reflections on ILO-OECD proposal on definition and methodology

OECD

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What have we been asked to do?

➢ G7 Labour and Employment Ministers asked the ILO and OECD to develop a methodology and definition "to monitor the creation of decent work and good quality jobs that are contributing to a green, nature-positive economy and a just transition".

➢ We were also asked to develop indicators for monitoring green job creation in overseas development assistance provided by G7 members.

Definition and concept of "green" jobs

➢ There are many definitions of what constitutes green activities and green jobs.

➢ ICLS guidelines provide international standards on the definition of employment in the environmental sector.

➢ We propose to align our definition of green jobs with these guidelines

➢ The term "green jobs" will be equated with employment in the environmental sector, including the quality of those jobs as an integral part of the measurement.

➢ But also important to measure employment in the brown sector which can be defined in terms of occupations with a high probability of being found in polluting sectors.

Selection of measurement methodology

➢ Many ways of measuring green jobs and jobs in brown sectors.

➢ While some have distinct advantages, no single best method.

➢ What matters is objective and data availability

➢ A number of criteria used to select the measurement methodology best suited to the G7 request.

Sectoral

Occupations

Task based

Big Data
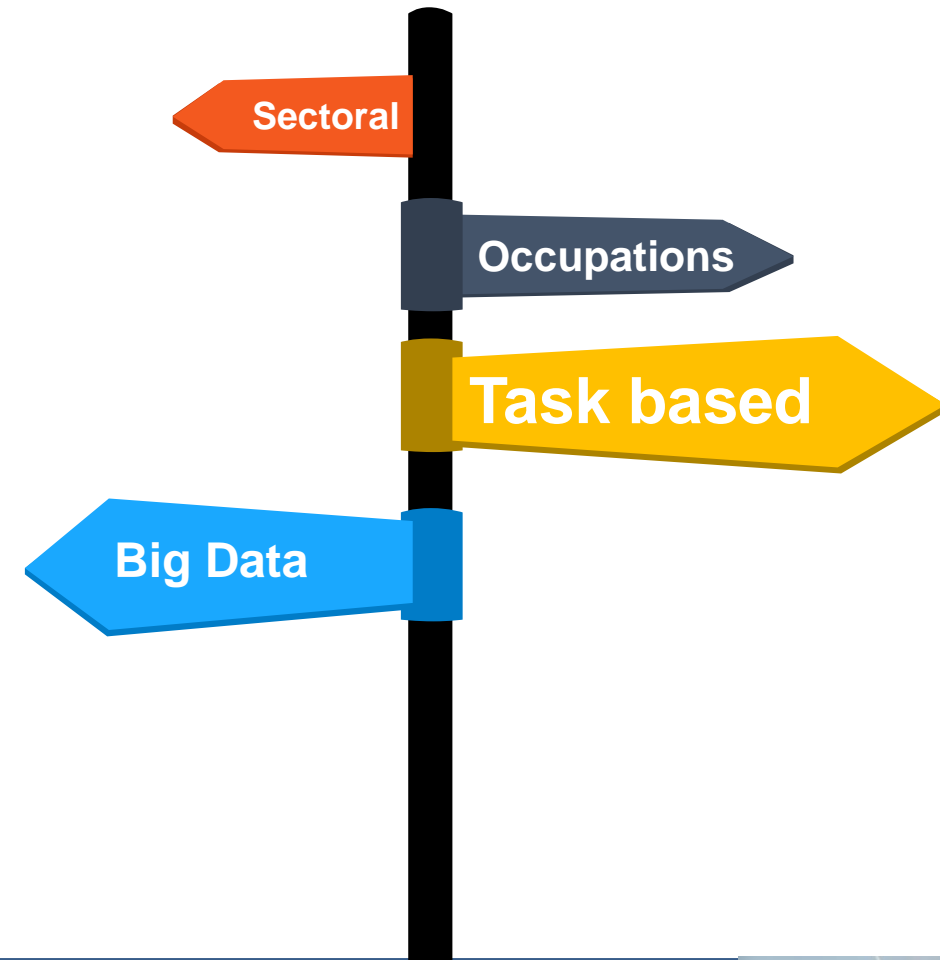
1. Criteria for selection of methodology: SCORe

Scope
- Covers whole economy

Comparable
- Results comparable across countries & coherent across sources and domains.

Operational
- Can be estimated with existing data

Relevant
- Conforms with definition of green jobs

2. Criteria for selection of methodology: Policy focus

1. Stocktake
- Backward-looking picture of green and brown jobs (stocks)

2. Emerging jobs
- Identifies green jobs and skills emerging today (flows)

3. Forward looking
- How green and brown jobs may change in the future (stocks)

1. Stocktake exercises

Task-based approach as pioneered by Vona et al. – typically uses labour force survey data

Plus

Economy-wide estimates of incidence of green jobs (green intensity of jobs)

Rich set of information on worker and job characteristics, including locality

Can answer questions about jobs in the environmental sector in terms of job quality, skill requirements, inequality
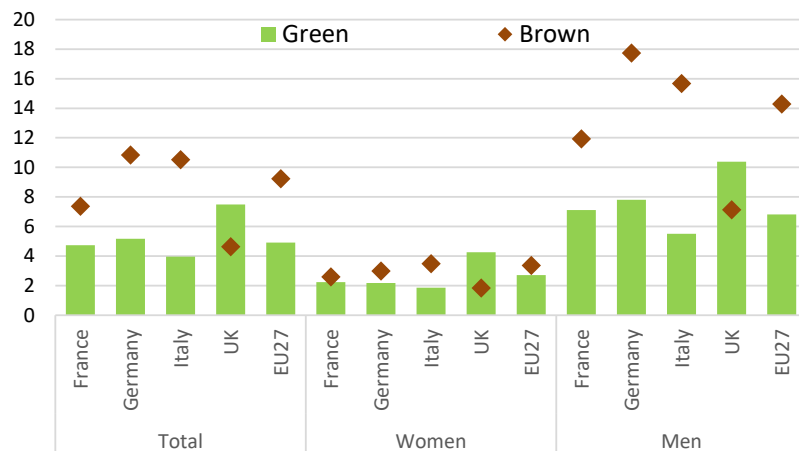
Changes over time in incidence and distribution of jobs

Minus

Based on US classification of occupational task requirements

Requires detailed occupational data (issues of cross-walks, reliability, etc.)

OECD work using (Vona) task-based methodology

I. Green and brown jobs

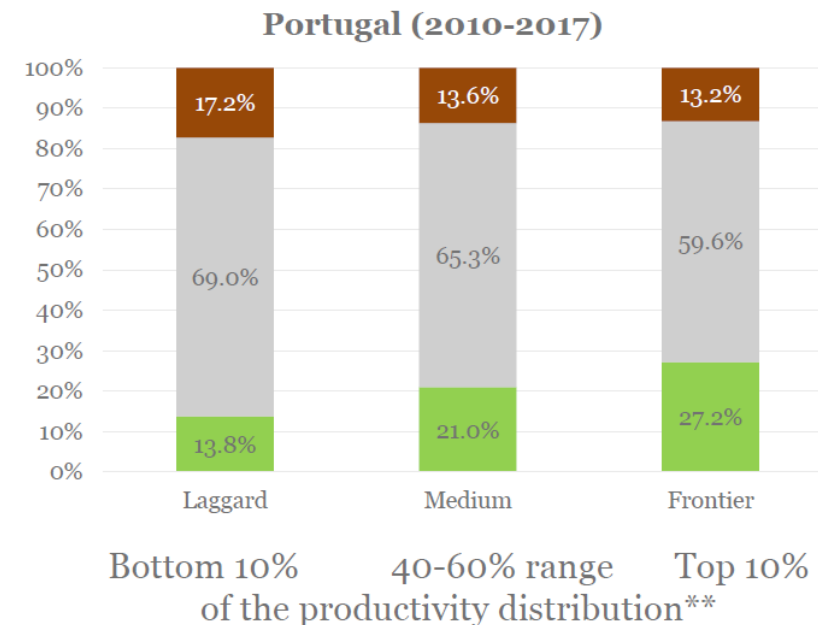Source: OECD calculations based on 4-digit ISCO occupations.

II. Regions and green and brown jobs

➤ **Labour market implications of the green transition are highly localised**
➤ **The green transition may deepen divides within local labour markets**

Source: OECD (2022, forthcoming), *Job Creation and Local Economic Development 2022 – Going Green.*

III. Green jobs and productivity

➤ **More productive firms rely more on green occupations**

Portugal (2010-2017)

	Laggard	Medium	Frontier
Brown	17.2%	13.6%	13.2%
Grey	69.0%	65.3%	59.6%
Green	13.8%	21.0%	27.2%

Bottom 10%   40-60% range   Top 10%
of the productivity distribution**

Source: Scholl, N., and S. Turban (202, forthcoming): GFP Methodological Note "Green Side of Productivity": Classifying Green, Brown, and Grey occupations in ISCO-08, OECD Productivity Working Papers, OECD Publishing, Paris.

2. Methodology for emerging jobs exercises

Use of Big Data on job vacancies

Plus

Economy-wide estimates of where new green jobs are emerging

Breadth of data: Rich set of information on job characteristics, including earnings, and experience, qualifications and skills required

Depth of data: Highly detailed information about skill requirements, sector, locality

Timely data

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Coverage issues

No consensus method for identifying green job vacancies (or green intensity)

No information on characteristics of eventual jobholders

3a. Forward-looking exercises

General Equilibrium Models

Plus

Provide integrated picture of how green and brown jobs by sector may change under different policy and economic scenarios

Take into account both direct, indirect and induced effects of green job creation

Allows for changes in behaviour in response to changing prices

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Typically limited in detail of the employment data that is included

Require many assumptions and issues of transparency

More useful for planning purposes rather than monitoring exercises

3b. Forward-looking exercises

Input-Output approach used by ILO and Green Jobs Assessment Institutions Network (GAIN)

Plus

Economy-wide estimates of total number of direct and indirect green jobs

Provides detailed estimates by ISIC sector/industry and net change over time

Links GDP, CO_2 and Employment in an integrated data framework

Allows for consistent satellite account data on skills, gender, age, income distribution and other decent work and environmental indicators
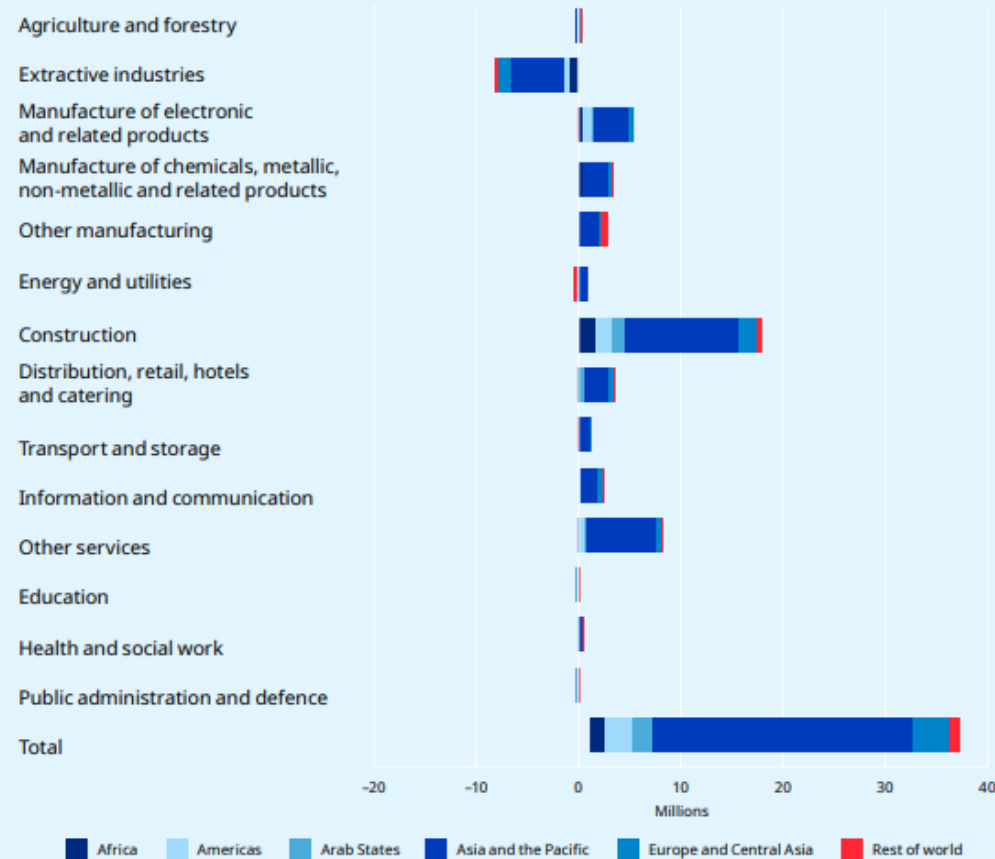
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Based on Environmental Goods and Service Sector (EGSS) classification (where 51% of an establishment's activity is green, with the remaining conventional activities and jobs also classified as green)
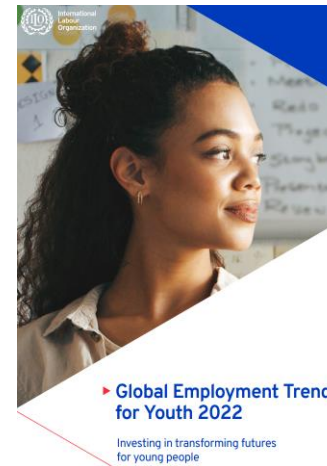
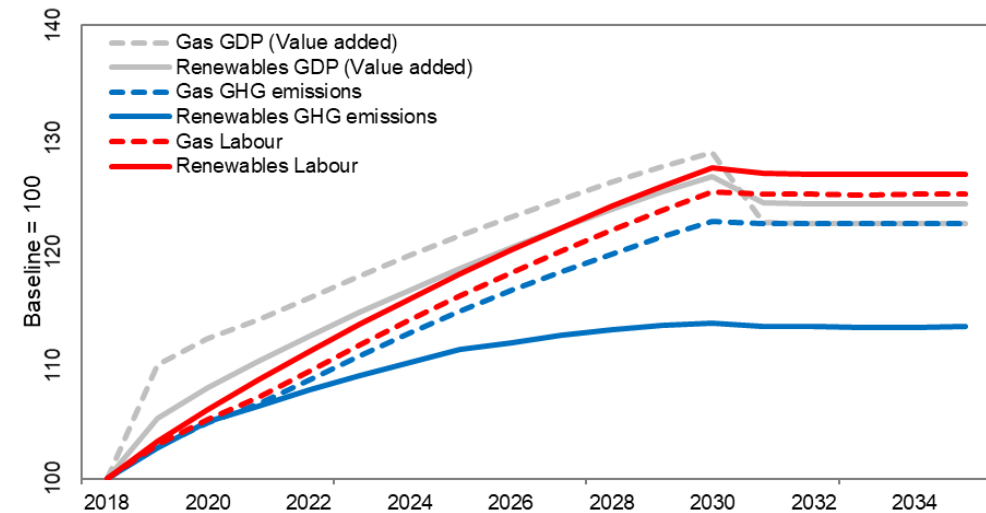# Application of Input-Output and forward-looking exercises

▶ Figure 2.13 Projected difference in employment in 2030 relative to the baseline, by sector and region (millions)

Source: ILO, based on the E3ME model of Cambridge Econometrics.

▶ Global Employment Trends for Youth 2022

Investing in transforming futures for young people

NIGERIA GREEN JOBS ASSESSMENT REPORT

Measuring the Socioeconomic Impacts of Climate Policies to Guide NDC Enhancement and a Just Transition

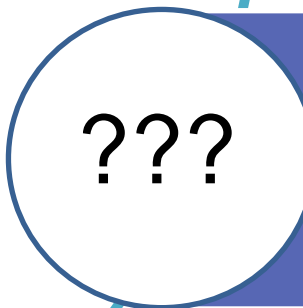**Renewables and gas compared to baseline**

Issues for discussion

Should the concept of green jobs be aligned with the 19th ICLS Guidelines, and should employment in the brown sector also be identified?

Do different policy issues/objectives require different data and methods?

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Are any key elements missing from the ILO-OECD's proposed methodology? Are there other methodologies that should be explored in addition to those identified?

Thank you!

▶ **Contacts**

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