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

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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.
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.)
I. Green and brown jobs

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


III. Green jobs and productivity

➢ More productive firms rely more on green occupations

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

**Minus**
- 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

**Minus**
- 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, CO2 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

**Minus**
- 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

<table>
<thead>
<tr>
<th>Figure 2.13</th>
<th>Projected difference in employment in 2030 relative to the baseline, by sector and region (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and forestry</td>
<td><img src="image" alt="Graph showing projected differences in employment by sector and region" /></td>
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<tr>
<td>Extractive industries</td>
<td></td>
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<tr>
<td>Manufacture of electronic and related products</td>
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<tr>
<td>Manufacture of chemicals, metallic, non-metallic and related products</td>
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<tr>
<td>Other manufacturing</td>
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<tr>
<td>Energy and utilities</td>
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<tr>
<td>Construction</td>
<td></td>
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<tr>
<td>Distribution, retail, hotels and catering</td>
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<td>Transport and storage</td>
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<td>Information and communication</td>
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<td>Other services</td>
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<td>Education</td>
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<td>Health and social work</td>
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<td>Public administration and defence</td>
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<tr>
<td>Total</td>
<td></td>
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</tbody>
</table>

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

Renewables and gas compared to baseline

- Gas GDP (Value added)
- Renewables GDP (Value added)
- Gas GHG emissions
- Renewables GHG emissions
- Gas Labour
- Renewables Labour

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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?

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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