



Re-imagining the Green Transition

Scaling Up Community of Practice Annual Convening

March 2024



LinkedIn data can foster more resilient, sustainable, and equitable labor markets

As part of our vision to create economic opportunity, [Data for Impact](#) leverages data to:



Amplify the impact of public investments in industrial and workforce development



Inform public policy decisions on economic development strategy



Enable cutting-edge research on efforts to improve labor markets and economies



LinkedIn's Economic Graph



LinkedIn deploys data to support green initiatives around the world



Innovate

- OECD sought to advise member countries on strategies for supporting green entrepreneurs
- LinkedIn collaborated with OECD to validate a measure for green entrepreneurship to serve as a baseline measure



Inform

- The International Monetary Fund sought green investment opportunities to spur a post- COVID economic recovery
- LinkedIn's data on green skill supply by country and industry helped inform IMF's green investment strategy



Integrate

- The International Energy Agency maintains a gender and energy data portal to monitor equity in the industry
- LinkedIn's data will help inform the portal's analysis of equity by country, sub-industry, and seniority



1 in 8

Only one in eight workers globally is considered green talent; seven in eight lack even one green skill.

2x

Demand for green skills is growing twice as quickly as the green talent supply globally, and the gap is growing

80%

Four out of five entrants into green jobs were already green talent, even as green skills demands grow

Most jobs requiring green skills are not traditional green jobs

Illustrative examples of green skills required in non-green jobs

Compliance Manager

- Remediation
- Environmental Compliance
- Impact Assessment
- Environment, Health, and Safety (EHS)

Fleet manager

- Waste Management
- Sustainability
- Environment, Health, and Safety (EHS)
- Solar Energy
- Electric Vehicles

Landscape Architect

- Sustainability
- Green Infrastructure
- Land-use planning
- Sustainable Design

There are inequalities in the green transition that are holding us back

The green transition offers us an opportunity to ensure not only a sustainable future for the planet but an equitable and resilient one for workers

Gender Gap: There are 62 women for every 100 men considered green talent and this gap hasn't improved

Education gap: The share of green talent is growing fastest among those holding a bachelor's degree or higher

Income Gap: Higher-income countries are greening at a faster rate than lower income

Age Gap: The share of green talent is growing fastest among the younger generations.





Appendix: *Identifying Green Skills*

Skills Genome

Analyzing skills from LinkedIn's Economic Graph

- **Goal**
- Identify the most characteristic skills for specific entities (e.g. occupations, industries, etc.)

Challenge

Generic skills (such as Microsoft Office) often occupy the top spots in the skills vector for many occupations

Solution

TF-IDF downweights skills that are common across other occupations. The method is a combination of skill popularity and uniqueness

Data Analyst Skills in Country X:

Popular Vs. Popular AND Unique (Skills Genome)

Popular	Popular AND Unique
Data Analysis	SQL
SQL	Tableau
Python	Python
Tableau	Data Analysis
Microsoft Excel	Hive
Microsoft Office	R
R	Machine Learning
Microsoft PowerPoint	Data Mining
Microsoft Word	Post-GRE SQL
Hive	Data Visualization

1. Develop a preliminary list of skills related to green activities

Official sources, expert interviews, and member inputs informed a preliminary green skills list



Green Activities

Activities related to green jobs, goods, or services as defined by the US Bureau of Labor Statistics and O*NET:

Pollution Prevention

Waste Prevention

Renewable Energy Generation

Energy Management

Environmental Remediation

Ecosystem Management

Sustainability Education

Sustainability Research

Environmental Auditing

Environmental Policy

Sustainable Procurement

Environmental Finance



Preliminary Green Skills

Drawing on expert interviews, initial analytical inputs, and the richness of the Economic Graph, the team identified ~2,800 skills likely related to green projects

2. Further refine the preliminary list

Machine learning and more criteria produced three skills categories (and a discarded category)

Green Skills

- Skills directly related to the 12 categories of green activities
- Skills deemed essential for renewable energy generation
- Ecosystem-related skills used for monitoring environmental degradation, environmental health, or pollution prevention

Ambivalent Skills

- Skills with a 'green' version, such as those used for renewables and non-renewables
- Arguably 'green' activities (e.g. nuclear, dams)
- Health and safety skills also used for non-green activities
- Skills related to activities that may require green skills in some cases (e.g. HVAC)

Adjacent Skills

- Skills with non-green objectives that may also be used for green activities
- Generic natural resources and biodiversity terms (e.g. trees)
- Generic scientific studies (e.g. zoology)
- Skills loosely associated with green activities (e.g. mold)

3. Use green skills intensity to help identify types of green-related jobs

Green-related jobs break down into those that are green, greening, greening potential or not green



Green Jobs

- Green: one that cannot be performed without extensive knowledge of green skills e.g., *solar consultant*
- Greening or Greening Potential: one that could be performed without green skills but typically requires some level of green skills e.g., *logistics manager*
- Not Green: one which doesn't require green skills e.g., *nurse*

Green Data

See [2023 Green Global Green Skills Report](#)

Green Dimension	Definition
Green skills	Skills that enable the environmental sustainability of economic activities
Green jobs	Jobs that cannot be performed without extensive knowledge of green skills
Greening jobs	Jobs that can be performed without green skills, but typically require some green skills
Greening potential jobs	Jobs that be performed without green skills, but occasionally require some level of green skills
Non-green jobs	Jobs that do not require green skills to be performed
Green talent	A LinkedIn member who has explicitly added green skills to their profile and/or are working in a green or greening job

Sample Green Data Analysis

Chart 17: Growth in % share of hiring by year (data indexed to 2016 levels) — Green Jobs

