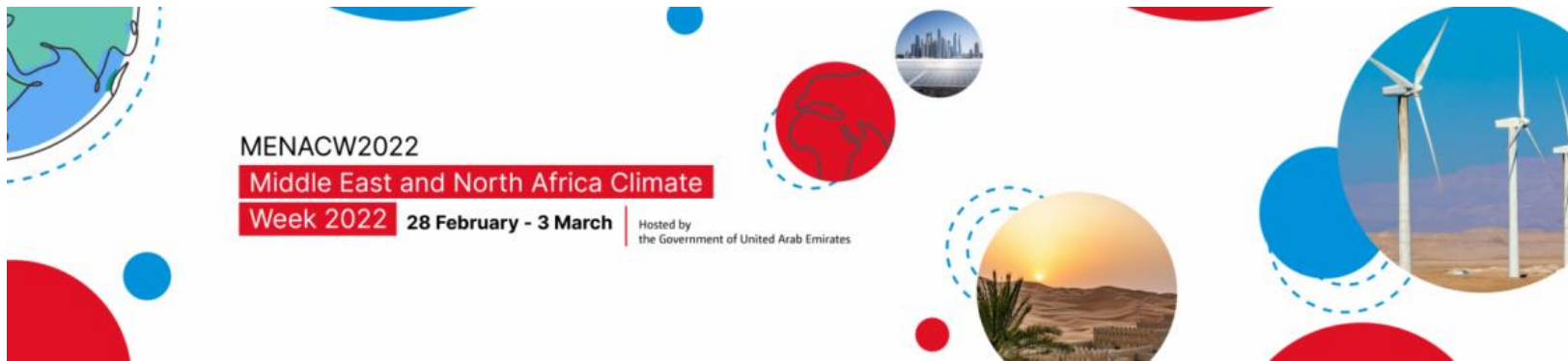


Climate Policy Perspectives and Energy Transition in Middle East and North Africa (MENA) Region

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IRENA, Knowledge Policy and Finance Centre



Factors influencing RE employment creation

Technical advances and falling costs

- ▶ Rising competitiveness
 - ▶ Lower costs allow more deployment per dollar spent

Deployment: New and cumulative capacity

- ▶ Jobs in project development; manufacturing; sales; construction & installation
 - ▶ Jobs in operations and maintenance

Supply chain structures

- ▶ Commodity, technology dependencies
 - ▶ Trade patterns and geographic footprints
 - ▶ Localisation efforts

Changes in labour intensities

- ▶ Automation; use of artificial intelligence
 - ▶ Economies of scale
 - ▶ Learning effects

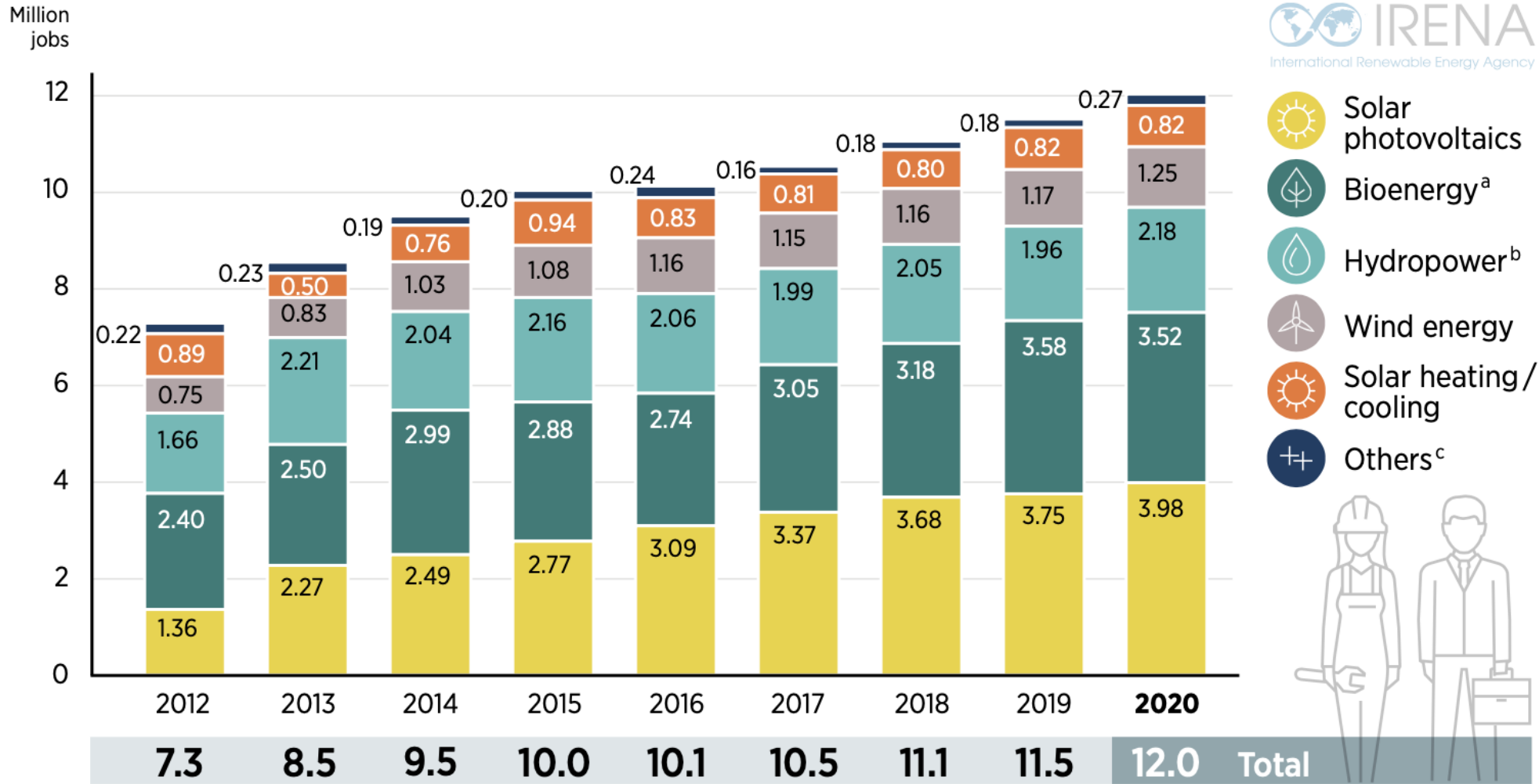
Renewable energy policy ambition

- ▶ Deployment and integrating policies
 - ▶ Industrial policies; trade policies; skill-training; labour market; gender policies

COVID-19 impacts & recovery

- ▶ Impacts along supply chain, and by end-use
 - ▶ Stimulus and job retention
 - ▶ Remote work arrangements

Growth of renewable energy jobs, 2012-20



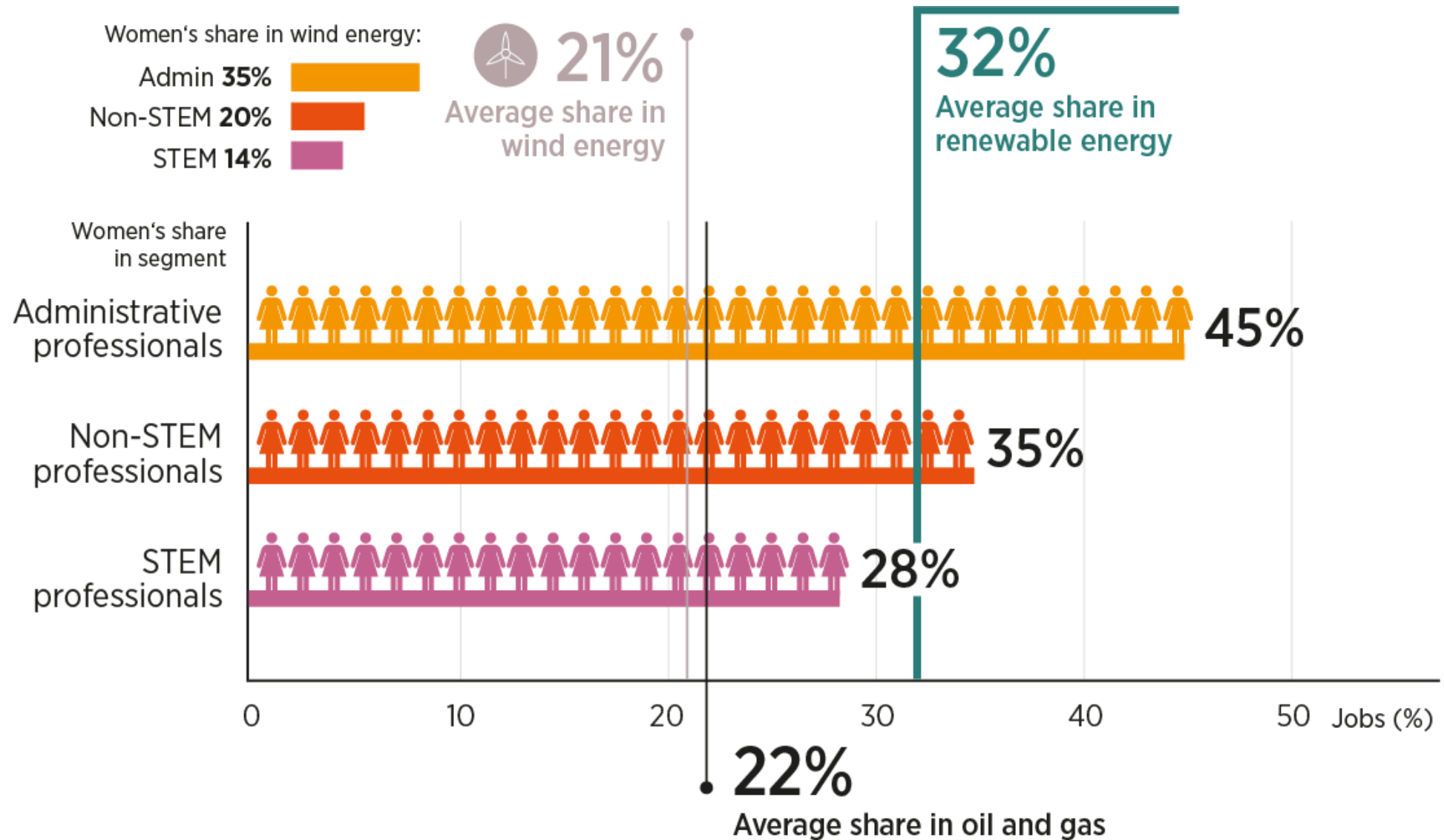
^a Includes liquid biofuels, solid biomass and biogas.

^b Direct jobs only.

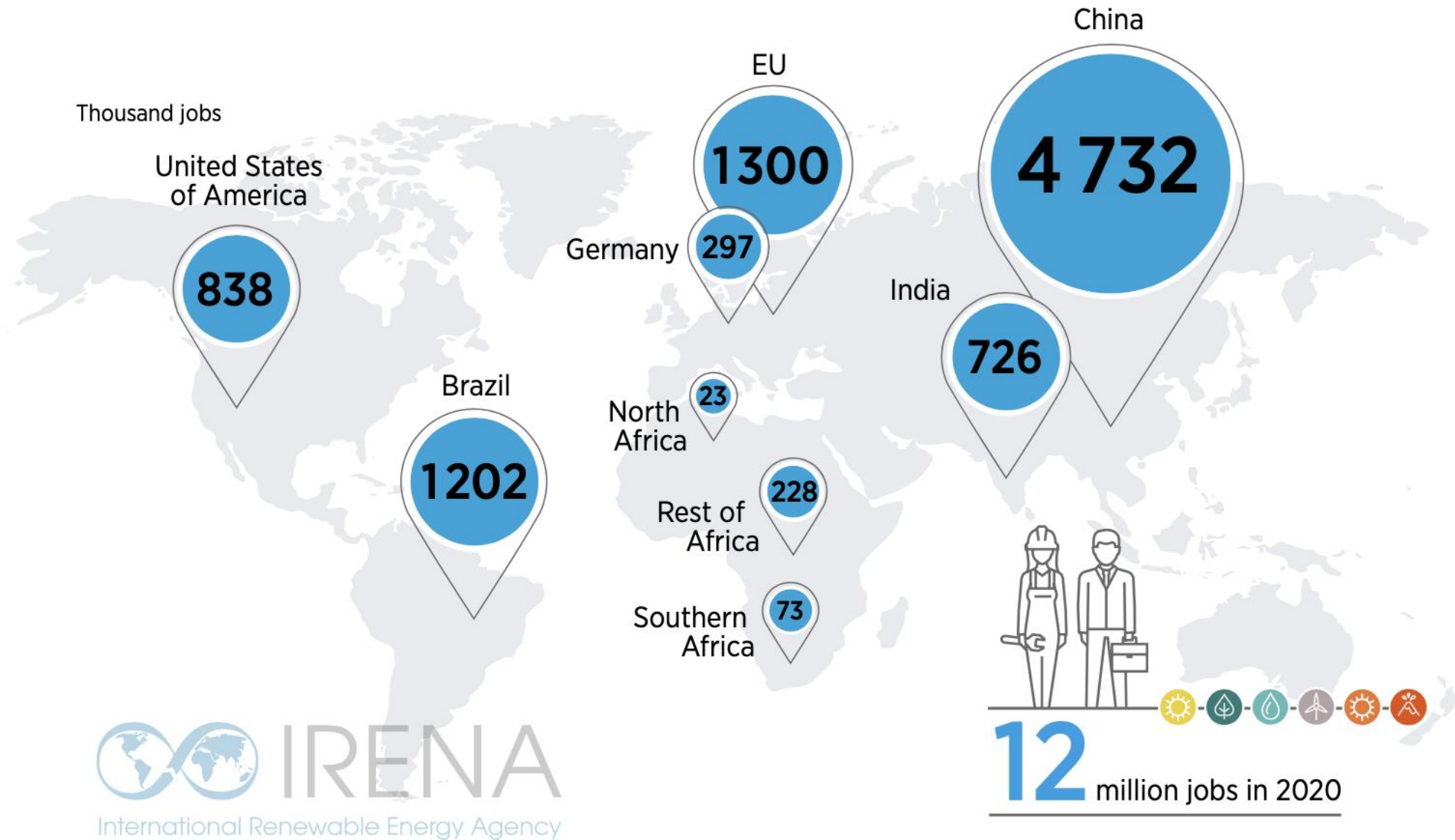
^c "Others" includes geothermal energy, concentrated solar power, heat pumps (ground based), municipal and industrial waste, and ocean energy.

Source: IRENA jobs database.

Jobs in Renewable Energy - Women's Share



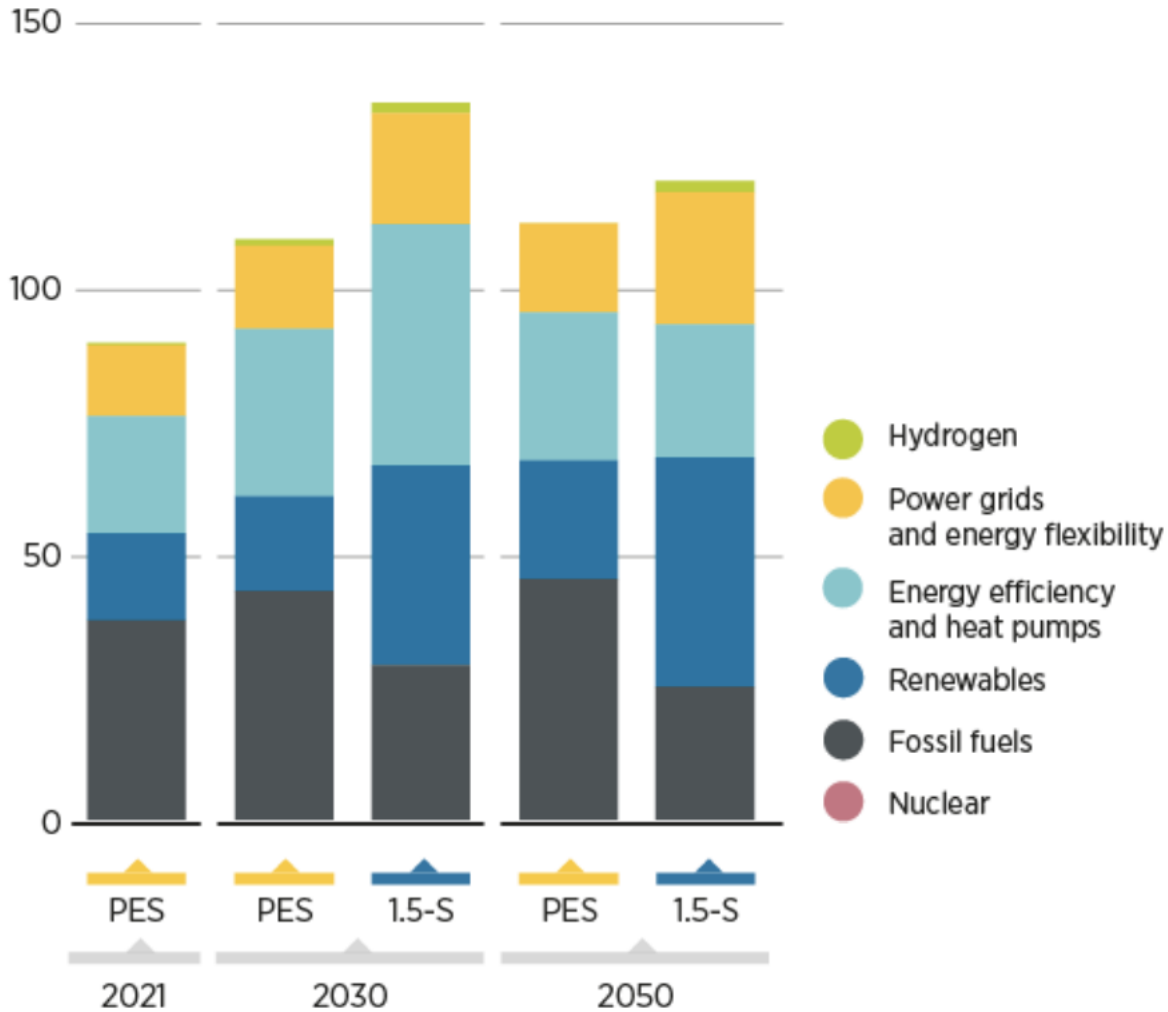
Renewable energy jobs in 2020, by region/country, and Top 10 countries



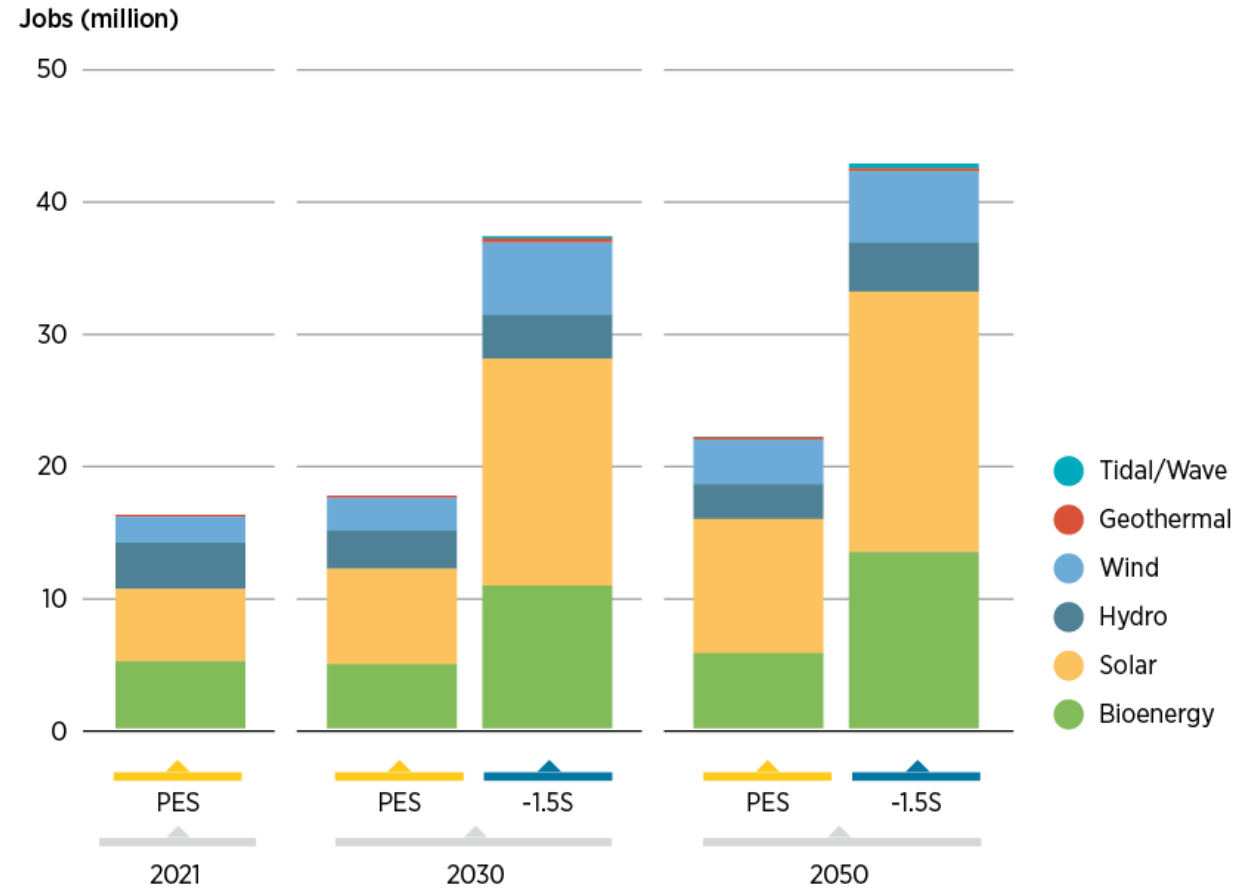
Source: IRENA jobs database.

Energy sector and Renewable energy jobs to 2050

Jobs (million)



Jobs in renewable energy, by technology, in the 1.5°C Scenario and PES (million)



The energy transition policy agenda



Overcome Structural Barriers:

Supply chain strengths and limits

Fossil fuel structures

Commodity, technology, trade dependence

Address Labour Market Misalignments:

Spatial misalignments

Sectoral misalignments

Temporal misalignments

Occupational misalignments

Ensure Decent Jobs:

Wages

Workplace conditions

Rights at work

Collective bargaining

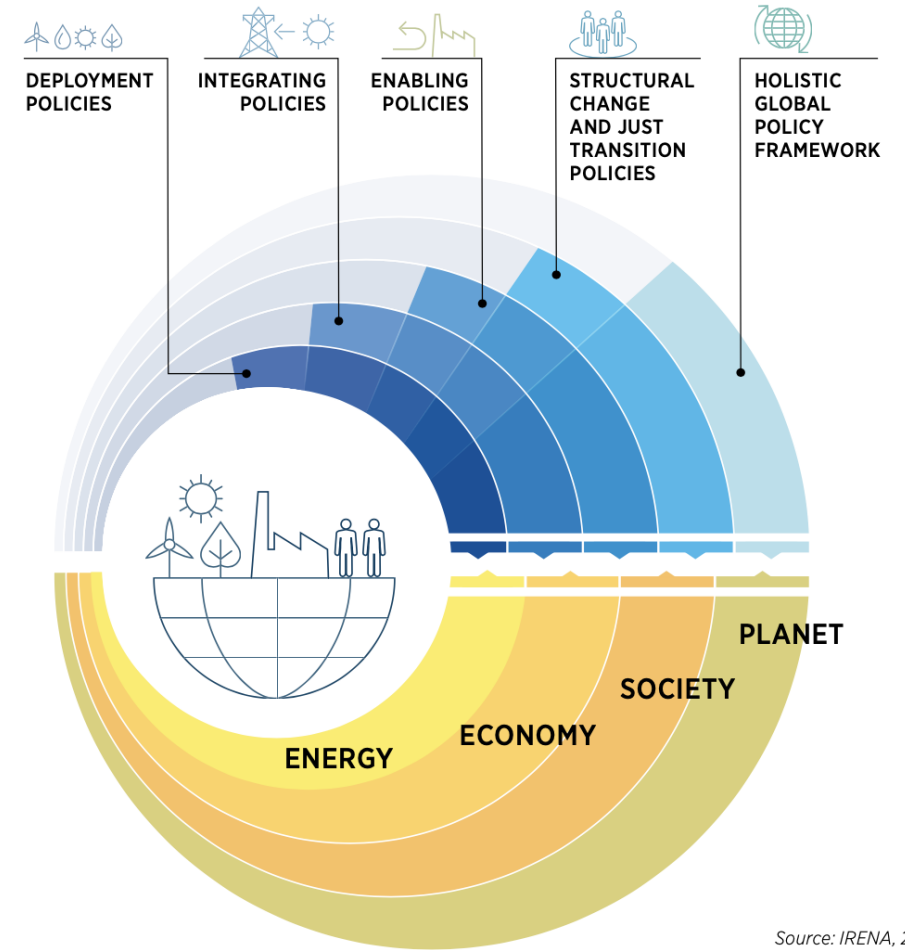
Support Workforce Diversity:

Gender

Youth

Minorities

Marginalised groups



Source: IRENA, 2021c.