Gender Equality in the Energy Sector

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International Energy Agency (IEA)

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ABOUT THE IEA

International Energy Agency

The IEA is an autonomous inter-governmental organisation within the OECD framework

The IEA works with governments and industry to shape a secure and sustainable future for all
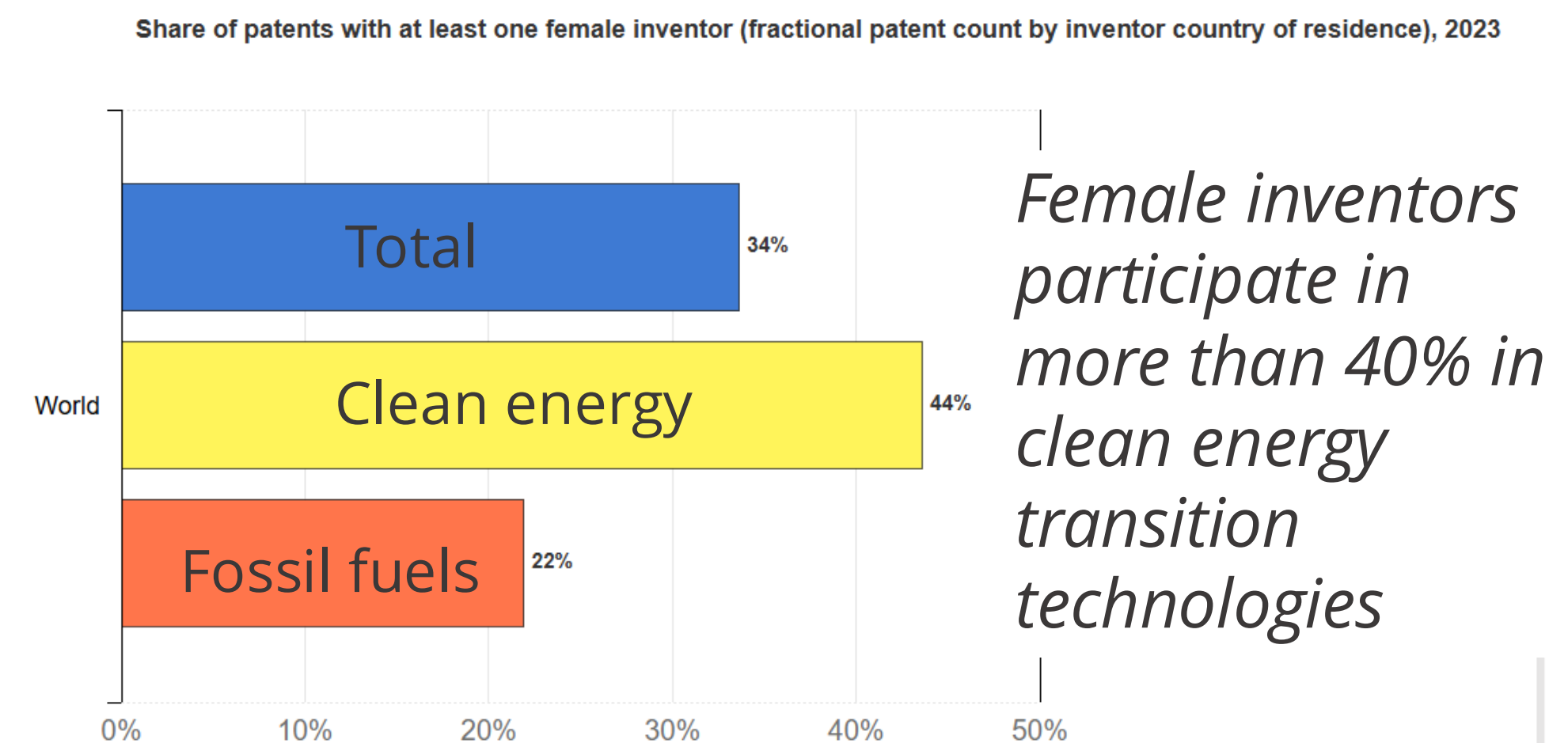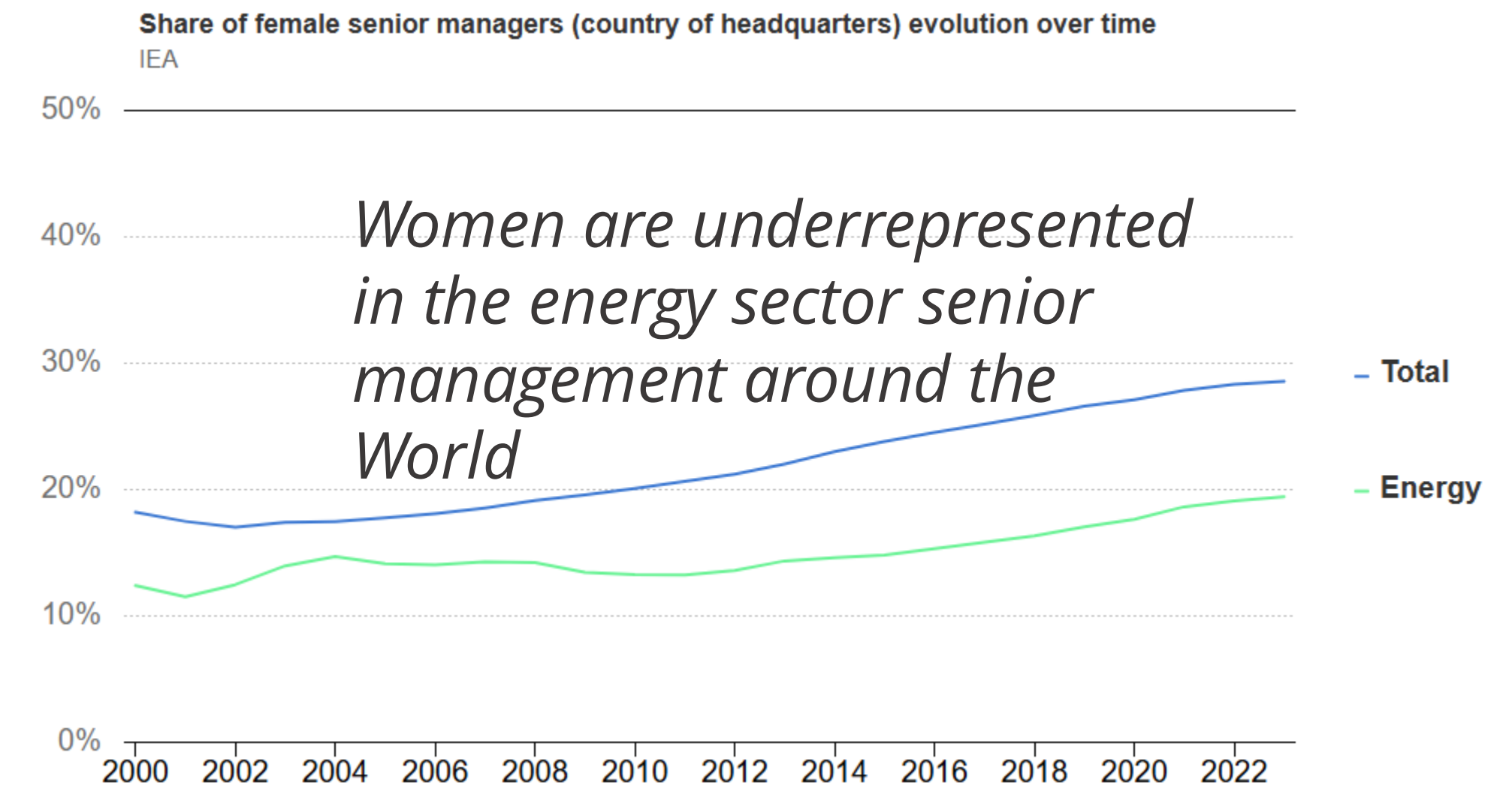
Member countries have given a strong mandate to IEA to gather data on gender aspects of the energy workforce

The IEA puts People and Inclusivity at the centre of all energy transition

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ABOUT THE GENDER AND ENERGY EXPLORER

- IEA's commitment is to collect **knowledge and data** related to **gender and energy** to assist governments in their ambitions to improve gender-diversity in the energy sector

- In 2022 the IEA launched the Gender and Energy Data Explorer, hosted in IEA's website

- The explorer covers the topics: Employment, Senior Management, Entrepreneurship, Innovation, Skills

- Indicators are updated annually

Share of female senior managers (country of headquarters) evolution over time
IEA

Women are underrepresented in the energy sector senior management around the World

Share of patents with at least one female inventor (fractional patent count by inventor country of residence), 2023

Female inventors participate in more than 40% in clean energy transition technologies

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WHAT WAS THE CHALLENGE?

Enriching the Data and Energy explorer

Employment from Labor Force surveys, OECD

Senior Management from Orbis database

Entrepreneur-ship indicators from Crunchbase

Innovation from the European Patent Office

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Skills Genome describing LinkedIn members experience in the energy workforce, uniquely available through the DDP

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WHAT WAS THE CHALLENGE?

- **Understanding** better the Gender **Gap** in the Energy sector
- **Gender disaggregated data** in the energy sector are very challenging to get
- Gender differences in skills provides insights into the energy sector disparities and allows to **better inform policy makers and industry**
- While skills are shaped by education and career choices, they also reflect how **men and women perceive themselves** in the workforce and want to be seen by their professional networks
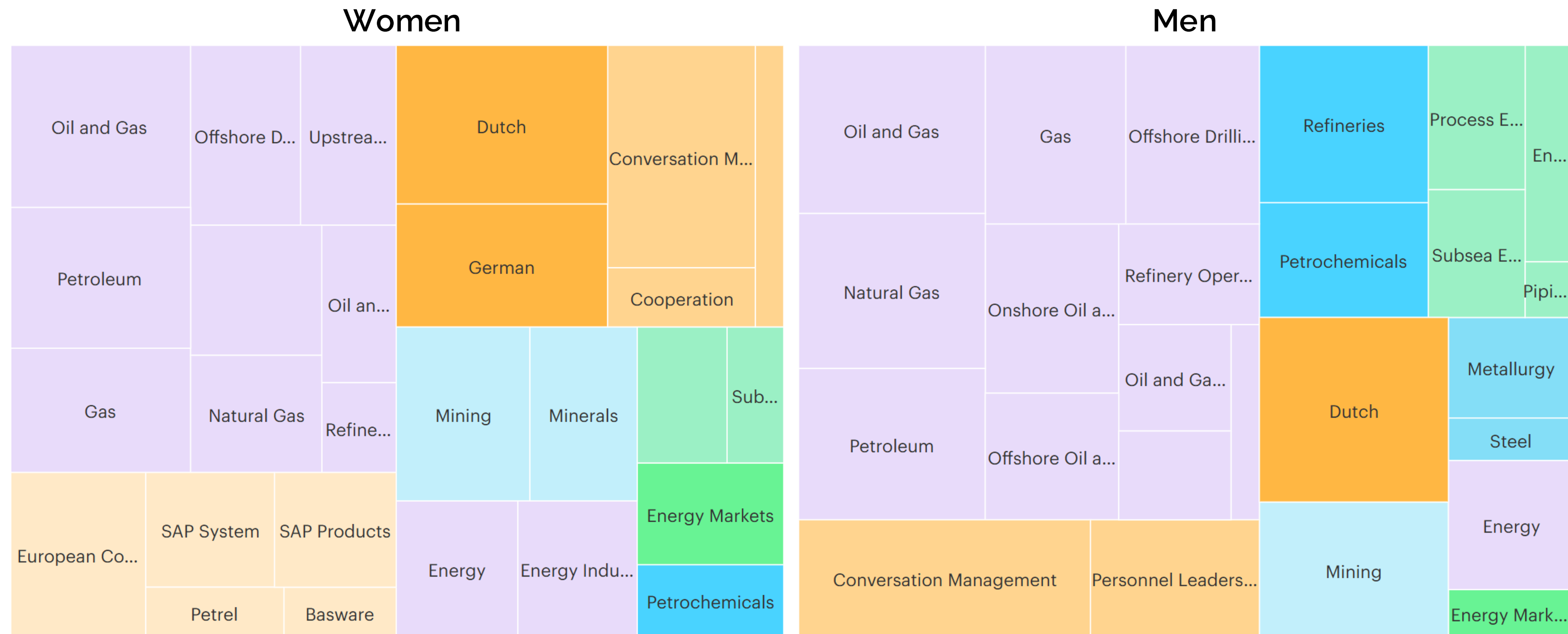
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WHAT WAS THE SOLUTION?

•The LinkedIn Skills Genome dataset (disaggregated by gender and country) provides insight into how men and women **signal their skills and strengths** in the energy workforce

•It reflects the **skills individuals choose to highlight** when positioning themselves for career opportunities

•These insights help industry and policymakers understand where **targeted upskilling or reskilling** efforts may be needed
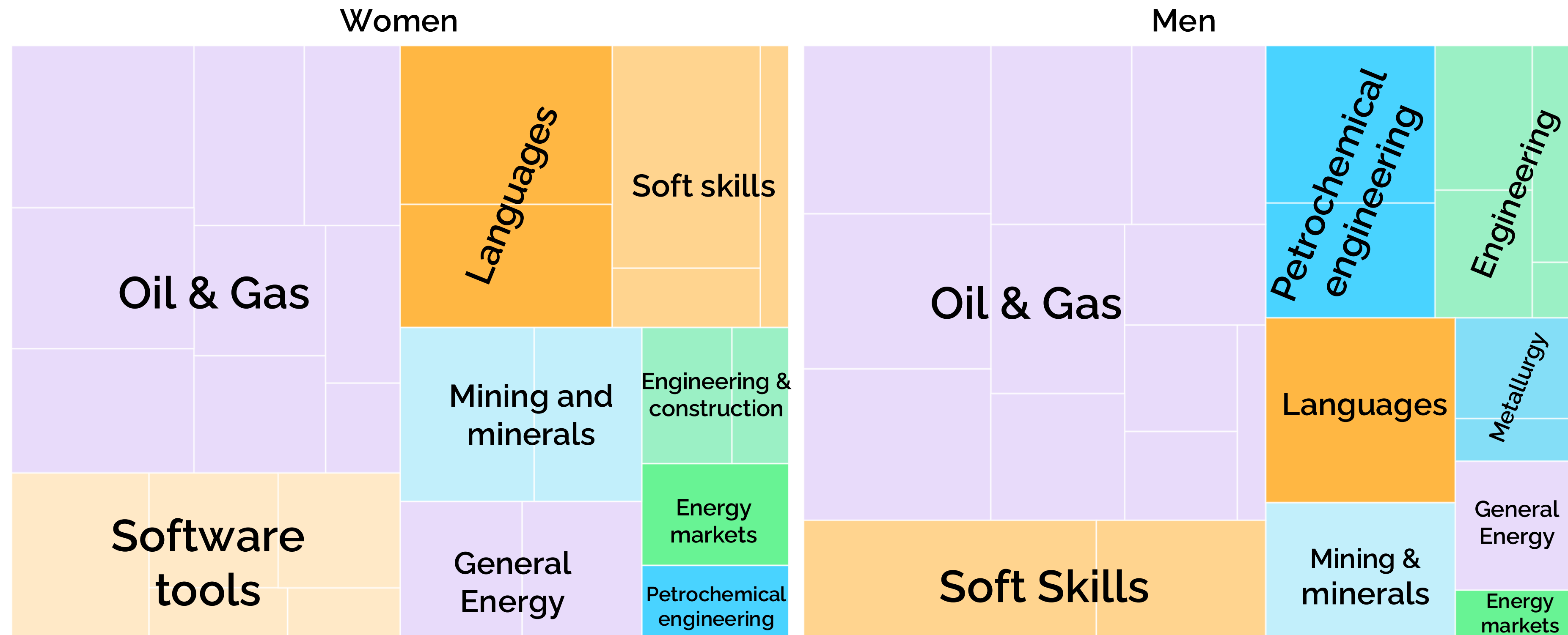
Most prominent skills in Europe in Oil & Gas

Women report to a greater extent non energy technical skills

Women

Men

Oil and Gas · Offshore D... · Upstrea... · Dutch · Conversation M... · German · Oil an... · Cooperation · Petroleum · Mining · Minerals · Sub... · Gas · Natural Gas · Refine... · Energy Markets · European Co... · SAP System · SAP Products · Energy · Energy Indu... · Petrochemicals · Petrel · Basware

Oil and Gas · Gas · Offshore Drilli... · Refineries · Process E... · En... · Natural Gas · Onshore Oil a... · Refinery Oper... · Petrochemicals · Subsea E... · Pipi... · Oil and Ga... · Dutch · Metallurgy · Petroleum · Offshore Oil a... · Steel · Conversation Management · Personnel Leaders... · Mining · Energy · Energy Mark...

- ● Chemical & petrochemical engineering ○ General energy ○ Energy markets ○ Engineering & construction
- ● Metals & metallurgy ● Mining & minerals ○ Nuclear ○ Oil & Gas ● Languages ○ Soft skills ○ Software tools

Most prominent skills in Europe in Oil & Gas

Women report to a greater extent non energy technical skills

Women

- Oil & Gas
- Software tools
- Languages
- Soft skills
- Mining and minerals
- Engineering & construction
- General Energy
- Energy markets
- Petrochemical engineering

Men

- Oil & Gas
- Petrochemical engineering
- Engineering
- Languages
- Metallurgy
- Soft Skills
- Mining & minerals
- General Energy
- Energy markets

Most prominent skills in Europe in Utilities

Women working in Utilities report mostly soft skills
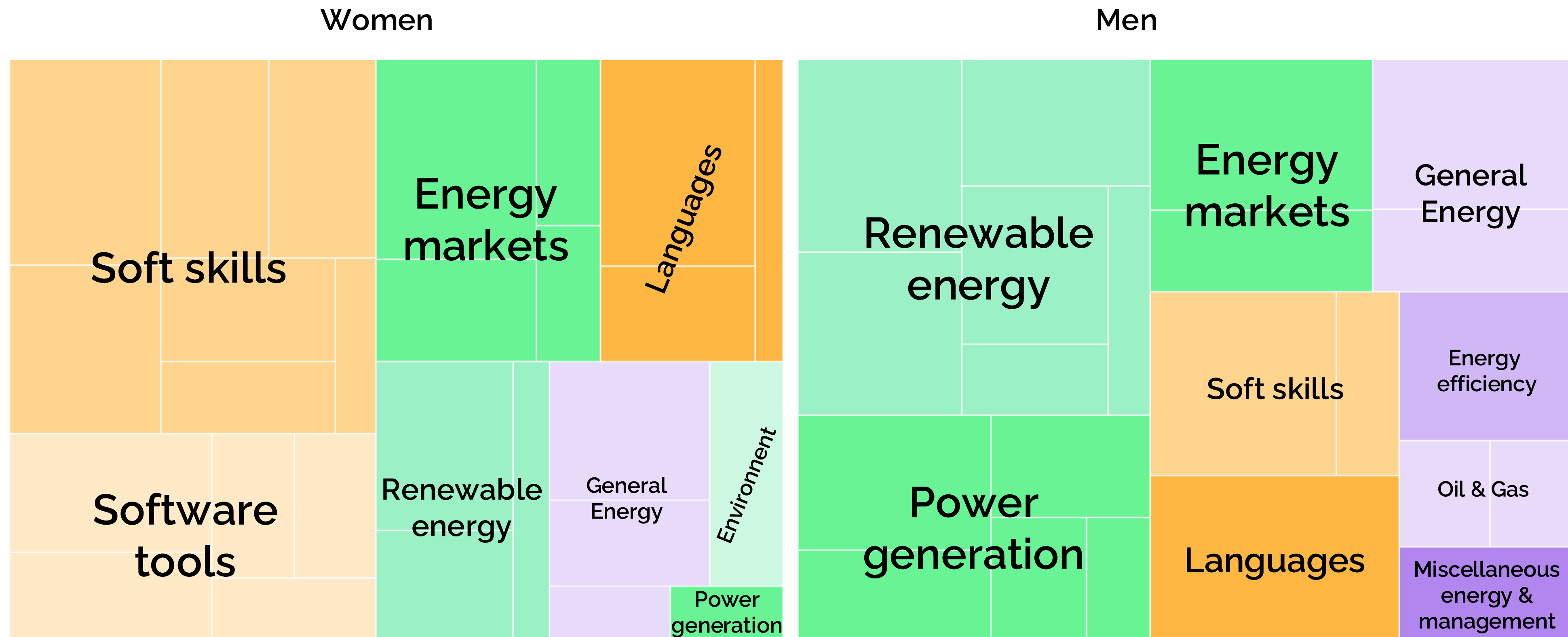
Most prominent skills in the US in Utilities

Women and men working in Utilities report mostly power technical skills

Women

Men

Power Generation
Electric Utilities Management
Power Plants
NERC
Smart Grid
Energy
Nuclear
Natural Gas
Utility Industry

Smart Grid
Energy
Natural Gas
NERC
Power Generation
Nuclear
Electric Power
Nuclear Engineering
Utility Industry
Power Plants

○ Electrical engineering   ○ General energy   ○ Miscellaneous energy engineering & management
○ Nuclear   ○ Oil & Gas   ○ Power generation   ○ Smart grids   ○ Software tools
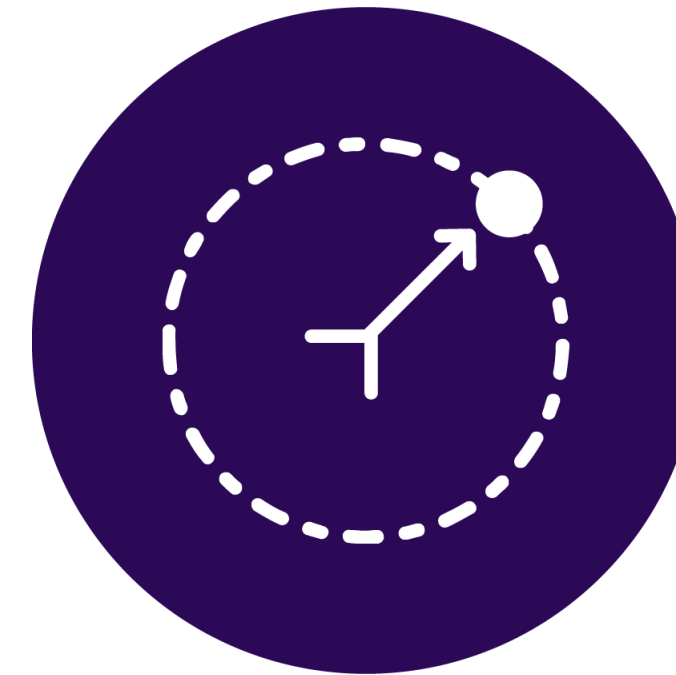
WHAT IS THE IMPACT?

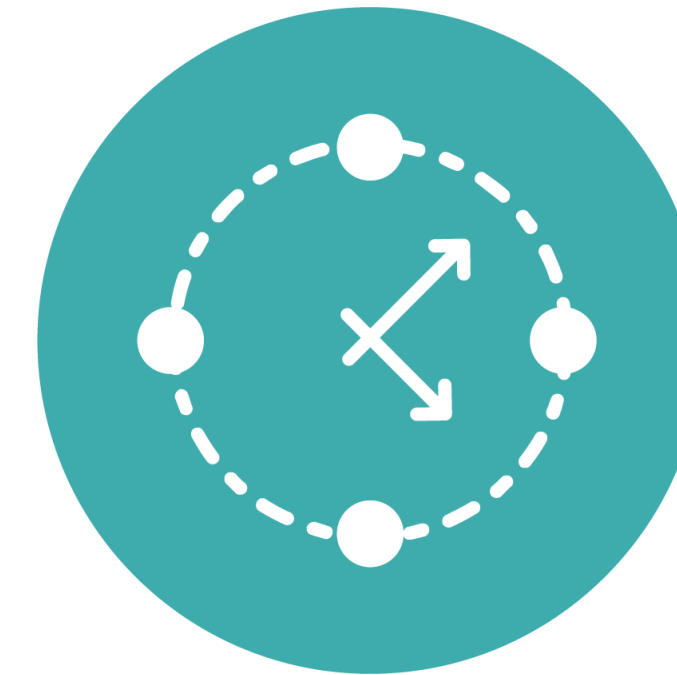**Open Data** derivative data is available online for all

Visibility from energy sector experts 22K views per year

This dataset will be used in **reports and analysis** to support the work of people-centered transitions in the IEA

First of a kind Indicator that reports on self assessment of skills & strengths

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THANK YOU

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