



**WORKFORCE PLANNING IS
FUNDAMENTAL TO ENSURE
A JUST ENERGY TRANSITION**

**Energy Transition Masterclass
Session 9 – Recap on Key Message**

INDUSTRIAL TRANSFORMATIONS AND WORKFORCE PLANNING

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15 June 2022

ENERGY TRANSITION ROUNDTABLES
Energy Transition Masterclass



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Energy Transition refers to a shift in power generation from fossil fuels to renewable energy. This means existing coal-fired power plants and coal mines are being shut-down in some communities and new solar and wind plants are being developed in others.

Consequently, Energy Transition also means a shift in society's workforce. People working in coal mining or coal power plants are losing their jobs while new jobs are created in the renewable energy sector.

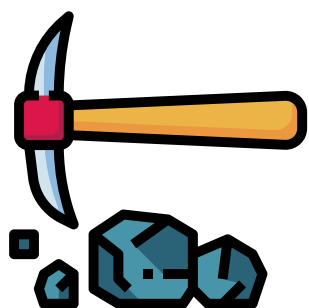




ISSUES WITH TRANSITIONING COAL WORKFORCE

Coal power station closure takes away coal jobs, which significantly affects the coal workers and their families in both economic and psychological ways. The impact of job losses spreads further to the whole local economy.

As seen in Australia, coal towns have been built up over generations. Workers are usually informally trained in a skill set that is difficult to translate to new industries.



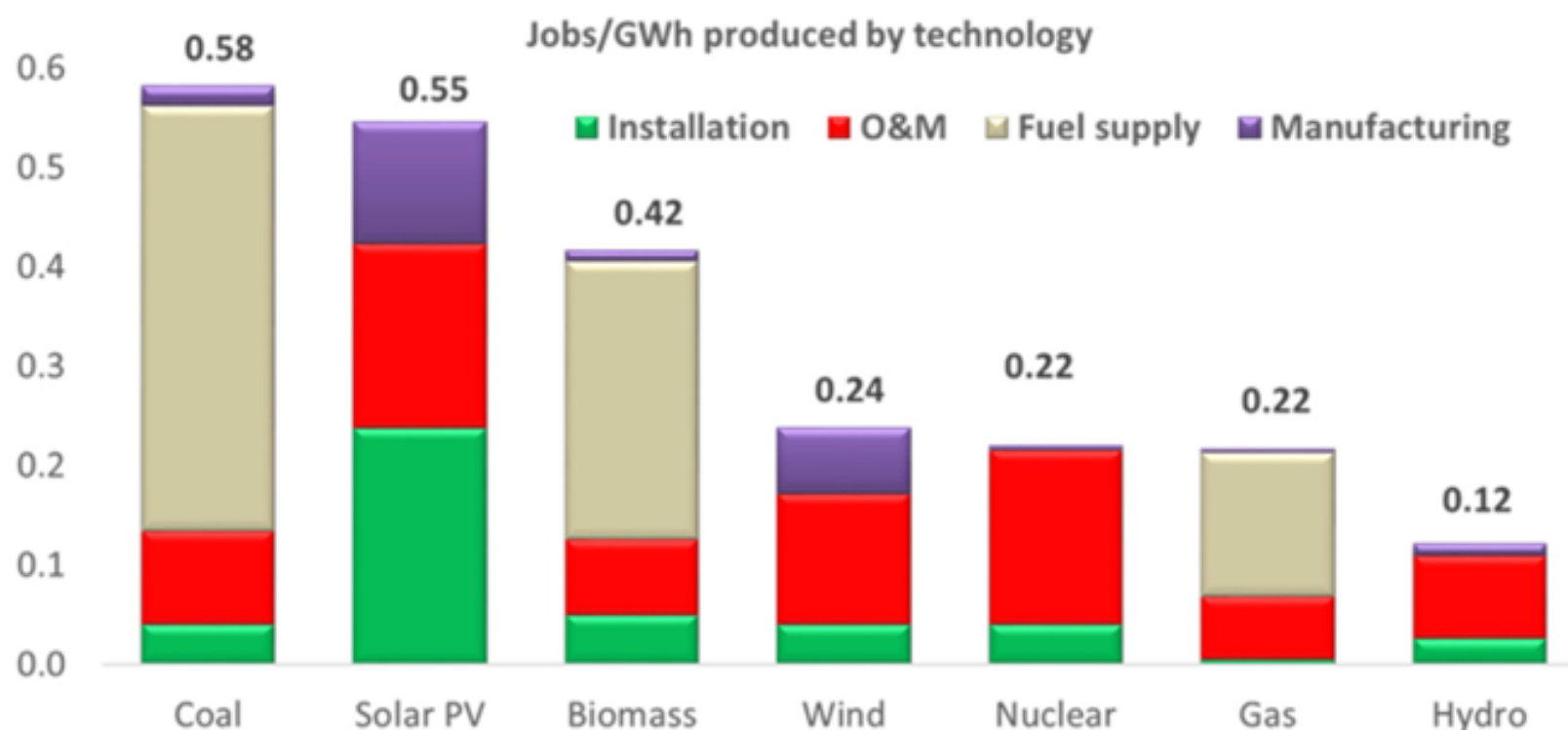
ISSUES WITH RENEWABLE ENERGY WORK

Job losses in the coal industry could be made up by new ones emerging in the renewables industry. Considering and improving quality of new created jobs is part of the workforce planning in the new sectors. This means to reduce the precarious conditions in minerals mining for producing solar panels and wind turbines, reduce the exposure to hazardous chemicals of manufacturing jobs, ensuring that the new jobs come with adequate incomes and good working condition.



Job intensity: Coal versus Renewables

- As observed in the EU's renewable energy transition, coal industry creates the highest number of jobs per GWh produced, however, about two-thirds of these jobs are upstream in coal mining and fuel supply.
- Solar PV creates a comparable number of jobs to coal with two-thirds of these in installation and O&M.
- Hydro creates the lowest number of jobs of any technology half as many as wind or gas.



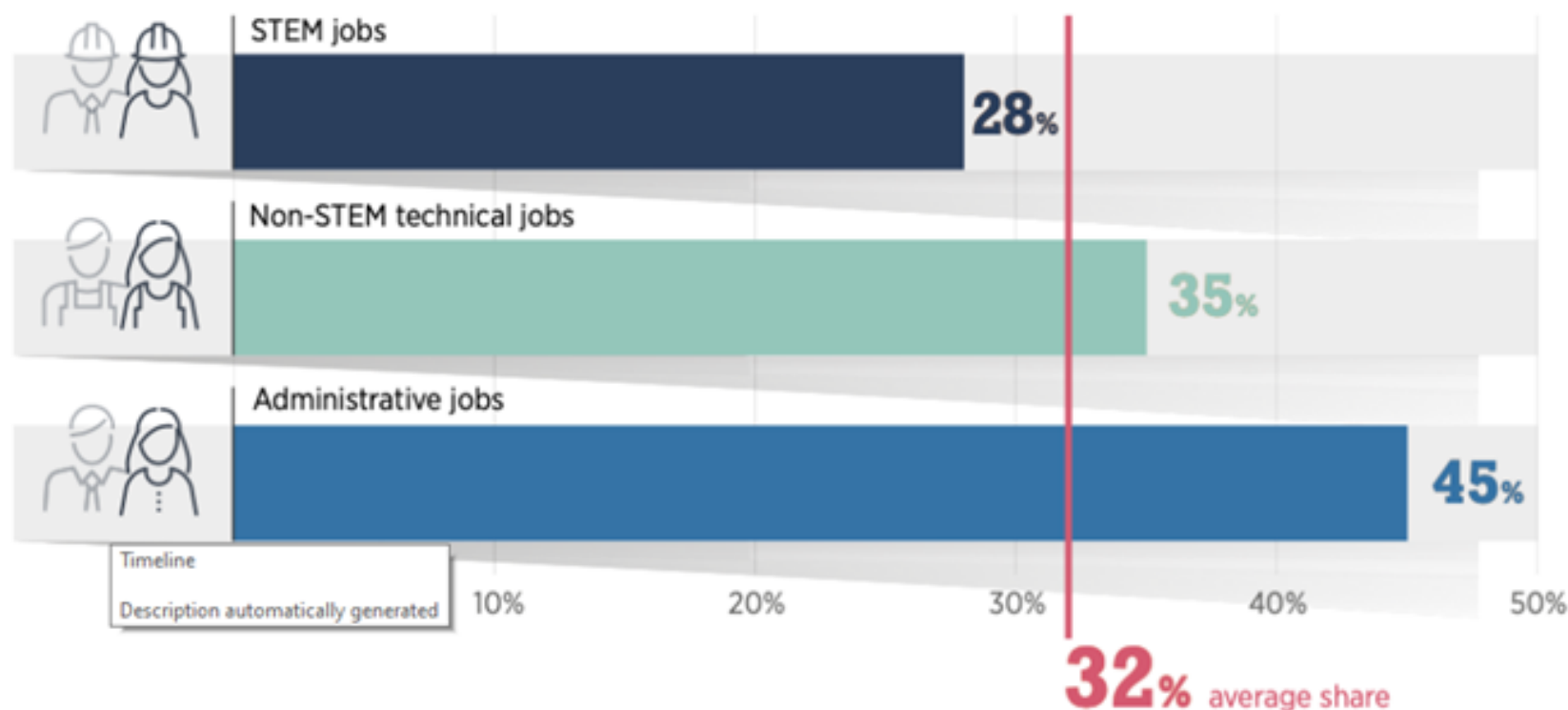
Jobs/GWh produced by technology.

Source: Fragkos, P., & Paroussos, L. (2018). Employment creation in EU related to renewables expansion. *Applied Energy*, 230, 935-945.

Gendered energy transition

The energy sector is historically overrepresented by men, but there could be more opportunities for women to participate in renewable energy.

An IRENA survey showed an average of 32% of women involving renewable energy in 2018. There was a fair gender balance in administrative jobs, whereas the higher-paid STEM (science, technology, engineering and mathematics) jobs were only 28% occupied by women.



Shares of women in STEM, non-STEM and administrative jobs in renewable energy.

Source: : IRENA (2019), Renewable Energy: A Gender Perspective. IRENA, Abu Dhabi. Note: The vertical line indicates the average share of women in renewable energy jobs among survey participants.

LESSONS FROM AUSTRALIA

1. THE CLOSURE OF THE HAZELWOOD POWER STATION

- In 2017, Hazelwood coal-fired power station was closed after 52 years of operation.
- Victorian state and federal governments initiated many tens-of-millions-dollar packages to support the local economic restructure through **re-training, active job-seeking assistance, building new infrastructure**, and providing **funding** for promoting economic growth, business investment and job creation in the wider Valley community.

KEY VICTORIAN GOVERNMENT'S INITIATIVES TO RESOLVE THE WORKFORCE AND LOCAL ECONOMIC ISSUES AFTER THE CLOSURE OF THE HAZELWOOD POWER STATION

1. \$22 million in support services for affected workers
2. \$20 million to fund the establishment of a new Latrobe Valley Authority (LVA)
3. Establishment of an Economic Growth Zone
4. \$5 million for energy efficiency upgrades
5. \$17 million to develop Morwell Hi-Tech Precinct
6. Redundancy scheme: \$20 million is allocated to encourage older workers from the remaining operational power stations to take redundancy packages.
7. New Energy Jobs & Investment Prospectus
8. Gippsland Line Upgrade
9. Worker Transfer Scheme
10. Public housing upgrade
11. GovHub complex

Source: Wiseman, John, Stephanie Campbell & Fergus Green (2017), Prospects for a “just transition” away from coal-fired power generation in Australia: Learning from the closure of the Hazelwood Power Station, Canberra: Crawford School, ANU

LESSONS FROM AUSTRALIA

2. NEW ENGLAND RENEWABLE ENERGY ZONE, NEW SOUTH WALES

New England Renewable Energy Zone (REZ) is one of the earliest Renewable Energy Zones developed in Australia. The construction of renewable projects in this REZ brought **uneven benefits** to the local community.

- Land-holders gain the most significant direct benefit from the projects.
- Demand for services in the surrounding areas increased as migrant and temporary workers moved into the town for installation work. This brought indirectly economic gain for the local retail, hospitality and accommodation sectors.
- However, few local people had the right capacity to work in the new industry. It means direct formal employment in renewable industry is significant but could not easily replace job losses in the coal industry.

Reference: Cass et al. (2022), Renewables & rural Australia. A study of community experiences in Renewable Energy Zones in NSW and the case for more equity and coordination of the clean energy transformation, Sydney Environment Institute and Australia Institute.

POLICY BEST PRACTICE RECOMMENDS

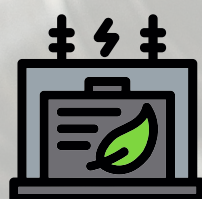
BROAD INDUSTRIAL STRATEGIES FOR A JUST ENERGY TRANSITION.



A just transition of the workforce in the fossil fuel industry.



Creation of decent work and quality jobs.



Economic diversification and transformation.



Gender equality.



NEXT SESSION

THE SOCIAL TRANSITION

Dr. Rebecca Colvin

10:00-12:00 HANOI-JAKARTA TIME

11:00-13:00 MANILA TIME

29 JUNE 2022

ETP Round Tables is a two-year capacity building and networking program of the ETP in Indonesia, the Philippines, and Vietnam. The program aims to build awareness and understanding of practical solutions and pathways that can support Indonesia, the Philippines, and Vietnam accelerate their transition to 100% zero-carbon energy.

Over a 24-week structured online training programme, the ETP Roundtables – **Energy Transition Masterclass** will provide a suite of tailored professional forums (training sessions) to enable the exchange of information, develop leadership among the region's energy transition stakeholders, and endow participants with the latest understanding and tools to accelerate energy transition for both policy and market contexts.

See more: <https://www.energytransitionpartnership.org/>

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