

Pathways & Initiatives

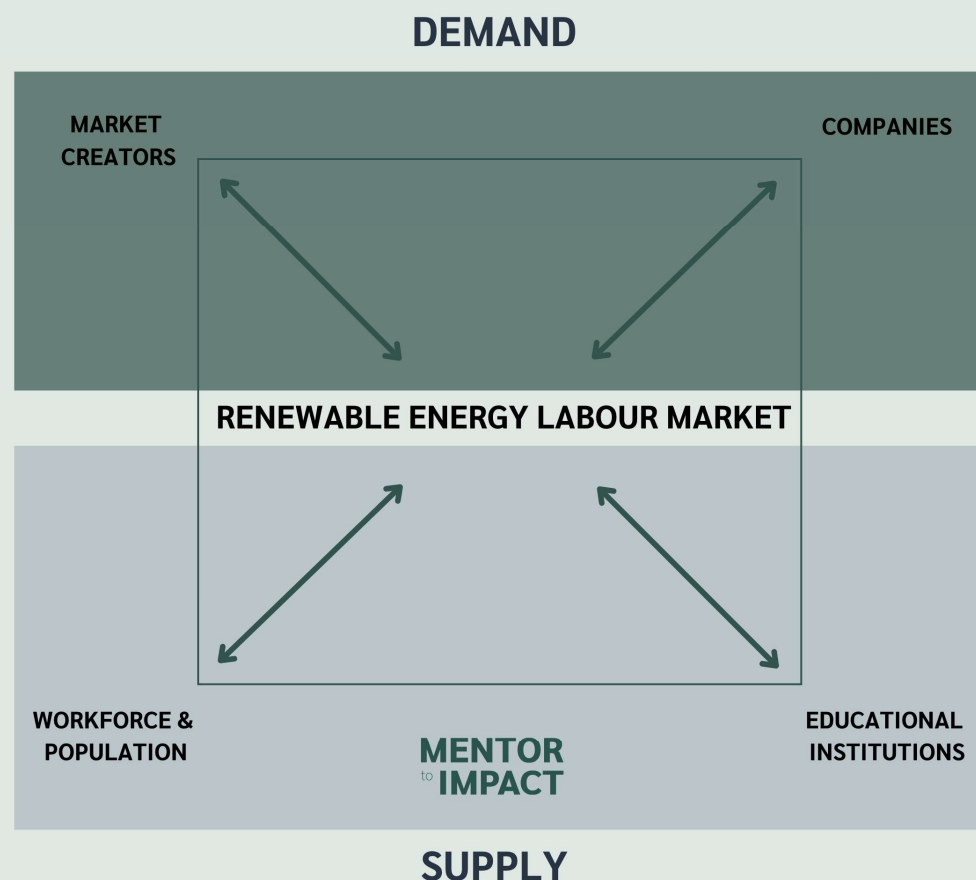
Bottleneck 5: Shortage of Trainers and VET Institutions that Focus on Renewable Energy

Every country and region has its unique characteristics. Nevertheless, general tendencies, synergies, and opportunities can be identified across cultures, nations, and political or legislative systems. The pathways outlined in this document represent broad strategic approaches, which should be adapted to the specific national context.

The role of each stakeholder in the Quadrature of Competencies has been mapped through an extensive exploration of the challenges in ensuring a qualified workforce for the green energy transition, as well as hearings with experts.

How can governments support training of trainers and the development of VET institutions focusing on renewable energy systems?

What is the role of organisations in securing qualified trainers and VET institutions for the renewable energy market?



What is the role of industry and companies in supporting the training of trainers and continuous development of VET institutions?

What is the role of educational institutions in ensuring qualified trainers and VET institutions to support the renewable energy market?

The most important actions for each of the stakeholders to secure qualified trainers and VET institutions focusing on renewable energy systems.

Market Creators

- Create **coordination nationally** for training programs across VET institutions.
- Promoting and/or financing **dialogue between training institutions and companies** to share knowledge and develop curricula and training programs for teachers.
- **Identifying opportunities** for teachers to visit companies and update their skills.
- **Prioritising green energy education**, including the vocational level.

Industry

- **Promote openness, transparency and dialogue** on skills demand and own training efforts.
- Providing both **internal and external training** opportunities.
- Prioritising percentage of revenue or surplus on **skills development initiatives**.
- Promote **collaboration** between VETs, industrial partners and external training providers.

Workforce & Population (organisations)

- Promoting **STEM** competencies.
- Lobbying for **collective funds and incentivising training**, where it is needed.
- Promoting **training as an alternative to retirement**.
- Creating a narrative where teachers become “**green heroes**”.

Educational Institutions

- Secure **ongoing training and development** of trainers and teachers.
- Providing a consensus-based **curriculum on new skills** that supports the renewable energy market.
- **Upgrading the competencies of current trainers**, e.g. through close collaboration with industry.

*Strategic pathway: **Increase supply of trainers within the renewable energy sector***

It is necessary to strategically increase the number of trainers for the green energy transition, both in the Global North and the Global South.

Strategic initiatives

- **Green Trainers Alliance:** Convene relevant actors (companies, existing projects, educational institutions and authorities) in networks aimed at knowledge sharing and potentially assisting in securing further funding.
- **Training of Teachers at VET Schools:** Secure training of teachers at existing VET schools through close cooperation with companies.
- **Building Centres of Excellence:** Establish centres of excellence at technical universities or VET schools in cooperation with authorities and companies.
- **Shared Platform for Trainers:** Create a platform for trainers with materials and funding opportunities.
- **Programs to transition seniors working in the green energy industry to trainer positions:** Develop programs to guide and incentivise workers approaching retirement to become trainers or instructors.

For more strategic elements, see the Synergy Model on p 71 of the “*Workforce and Population for the Green Transition*” report (2025)