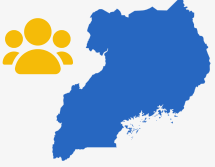


Solar PV Industry & TVET Training Landscape in Uganda

Population

About **47 million**



Energy Access and Solar PV Sector

Electricity Access



42% of the population has access to electricity

Energy Mix

Uganda's installed electricity capacity

1,346 MW

80% from hydropower

4,5% from solar PV

Government Target



Increase electricity generation capacity

41,738 MW

12% from solar PV by



TVET System Overview

Three TVET Streams

Formal TVET

Includes 3 levels

- Craftsman
- Technician
- Graduate Engineer

Dominated by private providers (80% of TVET institutions)



Non-formal TVET

Workplace and community-based training



Often led by NGOs



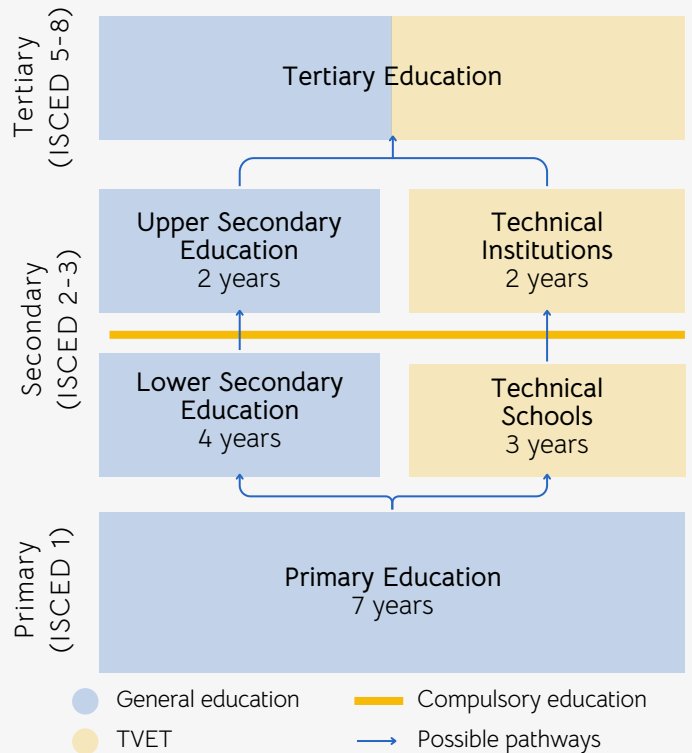
Informal TVET

Represents

+50% employment



Lacks structured solar training



Key Institutions for Solar TVET

Directorate of Industrial Training (DIT)

- Offers quality assurance
- Offers certification
- Promotes skills training, including solar technologies

Uganda Business and Technical Examinations Board (UBTEB)

- Certifies skills in technical disciplines, including solar technologies

Policy and Governance Frameworks:

"SKILLING UGANDA" STRATEGIC PLAN

(2011-2020) Focus on building partnerships, managing TVET, and aligning with industry needs.

Aims to reform TVET by enhancing quality, equity, and industry relevance, especially in solar energy training.

TVET POLICY 2019

SKILLS DEVELOPMENT FUND (SDF)

Provides financial support for TVET infrastructure, including solar training facilities.

Challenges for Solar TVET



Limited Solar Training Infrastructure

Few institutions offer solar-specific programs.



Negative Perception of TVET

TVET is often seen as a lower-tier education path, which impacts enrollment in solar training.



Funding and Market Risks

Lack of financial support and high upfront costs for solar installations.

Best Practices in Solar Training

Universities and Research Institutes

Few specialized postgraduate programs, like those at Uganda Christian University, focus on solar energy. Makerere University's Centre provides research, training, and consulting in the renewable energy sector, especially solar energy

Formal TVET Programs

Nakawa Vocational Training Institute, a leader in solar training, offers an updated curriculum, skilled trainers, and new infrastructure. Don Bosco Vocational Training Centre in Palabek provides electrical installations training for South Sudanese refugees, with programs lasting 6 to 18 months.

Non-formal Initiatives

The Uganda Solar Energy Association gathers all the solar companies in the country and offers capacity building and in-company trainings.