



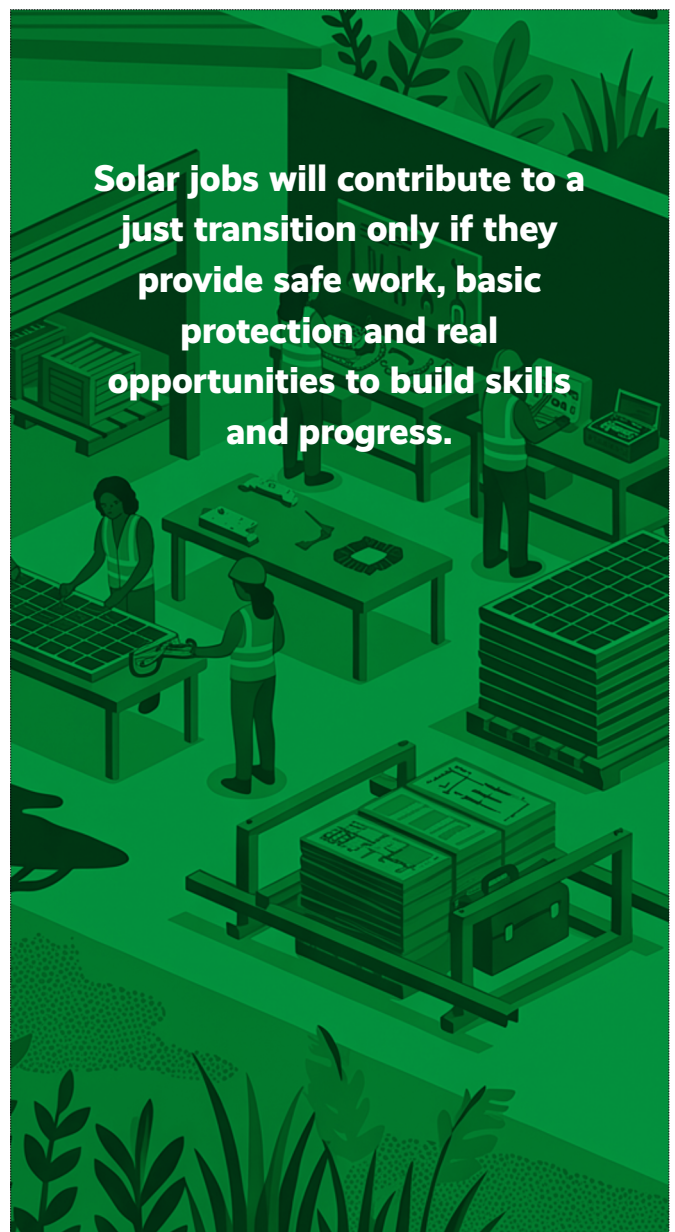
Institute For Economic Justice Renewable Energy Localisation Factsheet



BUILDING DECENT WORK INTO GHANA'S SOLAR TRANSITION

In Brief

- ✓ Ghana's solar industry is creating jobs, but job numbers alone tell us nothing about job security, safety, or opportunities to move into better-paid roles.
- ✓ Most domestic firms are small and work project by project. Stable technical and managerial teams often coexist with a more precarious installation workforce.
- ✓ Better jobs require both stronger labour protection and an industry able to sustain firms, skills, and employment between projects.
- ✓ Government should coordinate solar demand, supplier development, recognised skills pathways, and labour standards rather than pursue them separately.



This factsheet is based on research on Ghana's solar PV sector and the accompanying policy brief.

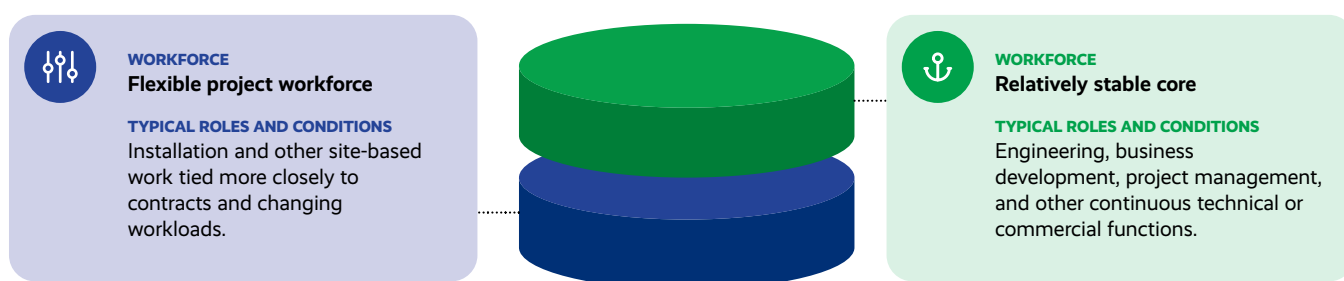
More jobs do not necessarily mean decent work

Ghana's growing solar market is creating jobs in downstream activities such as sales, distribution, system design, installation, maintenance, engineering, and project management. But numbers of jobs tell us nothing about their quality.

Decent work also requires productive employment, rights at work, social protection, safe working conditions, worker voice, and opportunities to build skills and sustainable livelihoods.

Job quality partly reflects the industry structure. Our 16-firm survey found that domestic firms are generally small and concentrated in downstream services, and project demand is uneven.

The industry has a two-tier workforce



What the firm survey shows

Just over half of the

16 FIRMS

adjusted staffing as workloads changed.

Firms commonly provide training as needed, with few having formal programmes. Some are reluctant to invest in training because trained workers may leave.

The question is whether workers can deepen their skills, gain recognised competencies, and progress into higher-value roles.

How industry structure affects job quality

All employed graduates, and about

40%

employed workers with vocational training.



Stop-start demand creates insecure work: Projects arrive irregularly. Firms retain small permanent teams and only hire additional workers when contracts are available. This creates job insecurity and limits continuous training and clear career paths.



Reliance on lower-value downstream activities limits career progression: it

reduces the range of technical, production, and supervisory jobs available.



Weak domestic supply chains restrict better jobs: Ghanaian firms can supply mounting structures, electrical cables, packaging, technical services, and other solar inputs, but remain weakly connected to solar deployment. Stronger linkages could create skilled jobs.

Labour standards cannot wait

Structural constraints may help explain, but do not justify, poor working conditions.



Safety: Solar installation involves hazards, particularly work at height and with electrical systems. Interviews identified uneven safety practices, including workers supplying their own protective equipment. This does not show how widespread the problem is, but indicates weak enforcement of safety standards.



Professional standards: Some installation occurs outside formal licensing and certification, while some technically trained workers lack practical experience. Stronger training, certification, and supervision are needed to protect workers, ensure reliable systems, and raise standards.



Worker voice: Organisation and representation remain weak, especially in small and project-based firms. Workers need channels to raise concerns, negotiate conditions, and take part in decisions affecting their work.

Who gains access to better jobs?

Women remain underrepresented:

88% OF SURVEYED FIRMS

said women were less than half of their workforce. They are particularly underrepresented in technical, engineering, supervisory, and managerial roles, which offer better opportunities for skills development, higher earnings, and career progression. Training, apprenticeships, and recruitment should open these roles to women.

Workers with specialised skills have better prospects: They are more likely to secure repeat contracts and supervisory roles; basic installation workers face more irregular employment and weaker progression prospects.

What needs to change?

Ghana already has policies covering renewable energy, enterprise development, localisation, skills, employment, and gender inclusion, but they are often pursued separately. The priority is therefore to connect solar deployment to enterprise development, skills, labour standards, and domestic value creation.

These four priorities show how these policies can be combined:

1

Create a predictable pipeline of solar demand: Public institutions should coordinate and publish

multi-year deployment plans. A steadier flow of projects would help firms retain workers, invest in training, and build stable technical teams.

2 Build domestic suppliers around the solar market: Identify products and services that Ghanaian firms can supply competitively. Ghana cannot simply reproduce a module-manufacturing industry currently dominated by a small number of large global firms, mainly Chinese. It must focus on activities in which local firms can realistically compete and build productive capabilities. Provide these firms with finance and technical support and help them obtain the testing and certification their products need to compete for public and large-scale solar projects.

3 Turn training into recognised career pathways: The Commission for Technical and Vocational Education and Training (CTVET), technical universities, and industry should develop portable, recognised competencies for installation, maintenance, system design, storage, and other technical functions. Shared apprenticeships and training can spread costs and reduce the risk that firms train workers for their competitors.

4 Raise labour standards alongside firm capability: Link public procurement and support to requirements on safety, contracts, social protection, non-discrimination, and training. Help smaller firms build the systems needed to comply, while acting against serious or repeated violations.

Who should lead implementation?

Priority action	Lead institution
Create a predictable pipeline of solar demand	Ministry of Energy and Green Transition
Build domestic suppliers around the solar market	Ministry of Trade, Agribusiness and Industry
Turn training into recognised career pathways	CTVET
Raise labour standards alongside firm capability	Ministry of Labour, Jobs and Employment

The choice facing Ghana

PATH 1

Ghana can create more solar jobs without improving their quality or building domestic capabilities.

PATH 2

It can use solar deployment to build stronger firms, better jobs, recognised skills, and effective worker protection.

A just solar transition must produce better jobs as well as more jobs.

Endnotes

1. Amuquandoh, P.A., Ofori, C.G., Bosu, D., Nkrumah, G.A., Osman, M.S., Frimpong, F.N.A. and Djangba, R.M. (2026) Ghana's photovoltaic industry: Localisation, decent work, and gender equity in a growing renewable energy market. Johannesburg: Institute for Economic Justice.
2. International Labour Organization (ILO) (2018) World Employment and Social Outlook 2018: Greening with Jobs. Geneva: ILO.
3. Amuquandoh, P.A. et al (2026)
4. Occupational Safety and Health Administration (OSHA) (n.d.) Green Job Hazards: Solar Energy. Washington, DC: U.S. Department of Labor.
5. International Energy Agency (IEA) (2022) Solar PV Global Supply Chains. Paris: IEA.

