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Beyond China: How Shifting Solar Trade Policy Could Create a New Manufacturing Opportunity for Oman

For much of the past decade, the economics of solar manufacturing have been shaped by one overriding force: scale and cost. China’s extraordinary expansion across the solar photovoltaic value chain has driven down manufacturing costs and helped accelerate global solar deployment. But it has also made it increasingly difficult to establish competitive manufacturing capacity elsewhere—particularly in upstream segments such as polysilicon.

The U.S. trade measures announced in August 2026 suggest that this model may be entering a new phase.On 6 August 2026, the United States announced Section 232 measures scheduled to take effect on 4 December 2026. They set minimum import prices of **US$21/kg** for polysilicon, **US$100/kg** for ingots and wafers, **US$0.22/W** for cells and **US$0.38/W** for modules, alongside an additional **15%** duty on downstream derivatives, subject to specified exceptions.

At first sight, this appears primarily to be another measure designed to protect U.S. manufacturing. Its wider significance, however, may extend well beyond the United States.

> **It could contribute to a fundamental change in the geography and economics of global solar manufacturing.**

From the Lowest Price to Strategic Supply

The polysilicon market has experienced significant overcapacity and intense price competition. For prospective producers outside China, this creates a difficult investment equation. Even locations offering competitive electricity, infrastructure and financing must ultimately compete against the prices generated by China's enormous manufacturing ecosystem.

The announced U.S. approach could change this equation within one of the world's major solar markets. The minimum-price mechanism combines importer certification with duties where declared entry values fall below the relevant floor; it does not establish a worldwide commodity price.Nor does it guarantee foreign producers US$21/kg or make new projects commercially viable. Its intended effect is to protect U.S. production, so benefits for overseas suppliers remain conditional.Where the measures constrain price differences, other factors may gain importance:Where was the material produced? Can its origin be verified? Is the supply chain compliant? How reliable is the supplier? How diversified is the source? What is its environmental footprint?

Polysilicon therefore begins to look less like an ordinary commodity and increasingly like a strategic industrial material.

This distinction matters because polysilicon sits at the beginning of a much larger industrial chain:.

Silicon metal → Polysilicon → Ingots/Wafers → Cells → Modules

Control over the upstream material consequently influences the resilience of the entire solar manufacturing ecosystem.

A New Window for Manufacturing Outside China?

The implications extend beyond U.S. manufacturing.

If major economies increasingly use industrial policy, trade rules, traceability requirements and supply-chain security considerations to differentiate between sources of solar materials, the global industry may gradually move away from a single integrated market dominated primarily by lowest-cost production.

Instead, several partially differentiated supply chains could emerge.

China will almost certainly remain the world's dominant solar manufacturing centre because of its extraordinary scale, industrial clusters, technology capabilities and integrated supply chains. The important development is therefore not the replacement of China.

It is the potential emergence of commercially meaningful manufacturing capacity alongside China.

This creates opportunities for countries capable of combining competitive production economics with reliable infrastructure, access to low-cost energy, strong logistics, investment capacity and credible supply-chain traceability.

Oman provides an interesting example.

Oman: From Energy Exporter to Solar-Materials Producer

United Solar Polysilicon (USP) has developed a **100,000-tonne-per-year** polysilicon manufacturing facility in Sohar Free Zone, which began operations in 2026. At full capacity, according to the company, its production could support approximately **40 GW** of solar module manufacturing annually. This is nameplate capacity, not confirmed annual output; the company reported in June 2026 that ramp-up to full capacity was expected by year-end.

The significance of the project extends beyond its scale.

USP describes its Oman production as high-purity, traceable and compliant with U.S. Foreign Entity of Concern (FEOC) requirements. These are company representations, rather than a blanket assurance of eligibility for every customer or incentive programme; buyers need to verify the applicable requirements.

The company's response to the U.S. Section 232 measures illustrates this shift. Rather than viewing the new minimum import price solely as a trade barrier, USP argues that a common price floor can reduce the importance of extreme price competition and increase the value attached to scale, reliability and verified traceability.

This offers an important lesson for emerging solar-manufacturing economies.

Oman has already moved beyond being primarily a market for solar deployment. OPAZ figures reported in April 2026 put investment across five solar value-chain projects at approximately **RO 1.153 billion**, with **4,132** direct jobs and project-level Omanisation figures of **35%–70%**. These reported figures span projects and development stages; they should not be read as evidence that every plant is operating at full capacity or that all employment targets have been achieved.However, Oman's opportunity is unlikely to come from trying to replicate China's manufacturing ecosystem or competing exclusively for the world's lowest production cost. A potentially stronger proposition is to become a competitive, reliable and strategically diversified manufacturing platform serving multiple global markets.

Its industrial zones, port infrastructure, access to international markets and expanding renewable-energy resources could support such positioning.

The policy creates a particular tension for Oman: supplying polysilicon to U.S. manufacturers may become more attractive, while U.S. onshoring incentives encourage downstream investment inside the United States.An opportunity for upstream exports therefore does not automatically translate into an equally strong opportunity for Omani wafer, cell or module exports.

> **Each stage needs its own assessment of production costs, customers and market access before further capacity is supported.**

The Industrial-Policy Signal Is Bigger Than One U.S. Measure

The U.S. decision should also be viewed alongside developments elsewhere.

China itself has been taking steps to address destructive price competition and industrial overcapacity in the solar value chain. At the same time, other major markets are placing greater emphasis on domestic manufacturing, carbon footprints, local content, traceability and supply-chain resilience.

These developments come from different policy objectives, but collectively they point toward the same structural shift.

The global solar industry is moving from an era dominated overwhelmingly by cost optimisation toward one where cost, resilience, strategic security and industrial policy increasingly interact.

That does not make production economics less important. Polysilicon remains an energy-intensive, capital-intensive and highly competitive industry. Projects without strong fundamentals will not become viable simply because governments introduce trade protection.

But the definition of competitiveness itself is broadening.

The relevant question is increasingly not:

> *Who can produce polysilicon at the lowest possible spot-market price?*
>
> It is:
>
> **Who can provide competitive polysilicon at scale while meeting the requirements of increasingly diversified, traceable and secure global supply chains?**

The opportunity also carries material risks. Continued Chinese oversupply could depress prices outside protected markets, while a price recovery would change procurement incentives without removing China's cost and scale advantages. Technology improvements may reduce silicon use per watt or make existing downstream equipment less competitive. High electricity costs, slow production ramp-up and weak links to downstream customers could erode margins. Trade-policy changes and dependence on a small number of export markets could undermine the premium investors expect. Projects should therefore be tested against low prices, higher power costs, delayed utilisation and reduced trade protection, rather than financed on an assumed permanent policy advantage.

What Comes Next for Oman?

The emergence of large-scale polysilicon manufacturing in Oman raises a strategic question: can this upstream investment anchor a broader, commercially connected solar manufacturing ecosystem?

For Oman, the question is therefore no longer whether it can enter solar manufacturing. It already has.

The more important question is whether Oman can turn projects across the value chain into a durable position in global solar supply chains.

> Four industrial-policy priorities would help turn this opportunity into a durable manufacturing base.
> **First, secure competitive industrial energy.** Offer predictable electricity arrangements that reflect the full cost of reliable supply, including grid capacity and firming, while expanding access to renewable generation. Link any public support to measurable efficiency and investment milestones, with periodic review.
>
> **Second, connect projects into an industrial cluster.** Prioritise commercially viable links between silicon metal, polysilicon, wafers, cells and modules, supported by chemicals, industrial gases, maintenance, testing, logistics and recycling. Supplier-development and technical-training programmes should target actual procurement and skills gaps; success should be measured through local value added and sustained skilled employment.
>
> **Third, make traceability verifiable.** Develop auditable records of material origin, ownership and supply relationships, alongside product carbon-footprint reporting and environmental and labour safeguards. Independent verification should support customer due diligence; production in Oman should not itself be treated as proof of compliance with every importing market's rules.
>
> **Fourth, secure diversified offtake and market access.** Match capacity additions to credible customers and long-term purchase agreements across several destinations, assessing tariffs, product qualification and payment risk for each. Export-market access should be tested separately for polysilicon, wafers, cells and modules, because their commercial and regulatory conditions differ.

GCC cooperation can support this Oman-focused strategy through supplier links, testing, skills and regional demand. A detailed allocation of manufacturing roles across GCC countries would require a separate assessment.The announced U.S. measures illustrate a broader shift: where and how clean-energy technologies are manufactured increasingly matters alongside how much they cost.

For Oman, which has attracted projects across much of the solar manufacturing value chain, that shift could be strategically important.The next phase is not about entering the solar manufacturing race: It is about turning an early industrial foothold into a globally competitive solar manufacturing hub.

Oman’s Emerging Solar Manufacturing Base

KEY PLAYERS, CAPACITY AND ECONOMIC IMPACT.[1,2,3,4,5]

		Production capacity	Investment	Direct jobs	Status
	Green Ferro Alloy (FZC) Metal silicon	**25,000 t/yr** (phase 1); **50,000 t/yr** (phase 2)	**~RO 69m**	**~180**	**Under construction**
	United Solar Polysilicon (FZC) Polysilicon	**100,000 tonnes/year**	**~RO 520m**	**~2,000**	**Operational**
	Sahara Solar Energy SPC (FZC) Ingots & related solar manufacturing	**10 GW/year***	**~RO 78m**	**~280**	**Unconfirmed**
	Orion Solar (FZC) SPC Solar cells & integrated PV modules	**6 GW cells + 3 GW modules /yr**	**~RO 217m**	**808**	**In development**
	Jietai New Energy Technology (FZC) Solar cells	**5 GW/yr (phase 1);** **10 GW/yr planned in two phases**	**~RO 269m**	**~864**	**In development**

Total / Overall
Integrated solar manufacturing value chain

Multiple stages from silicon to modules

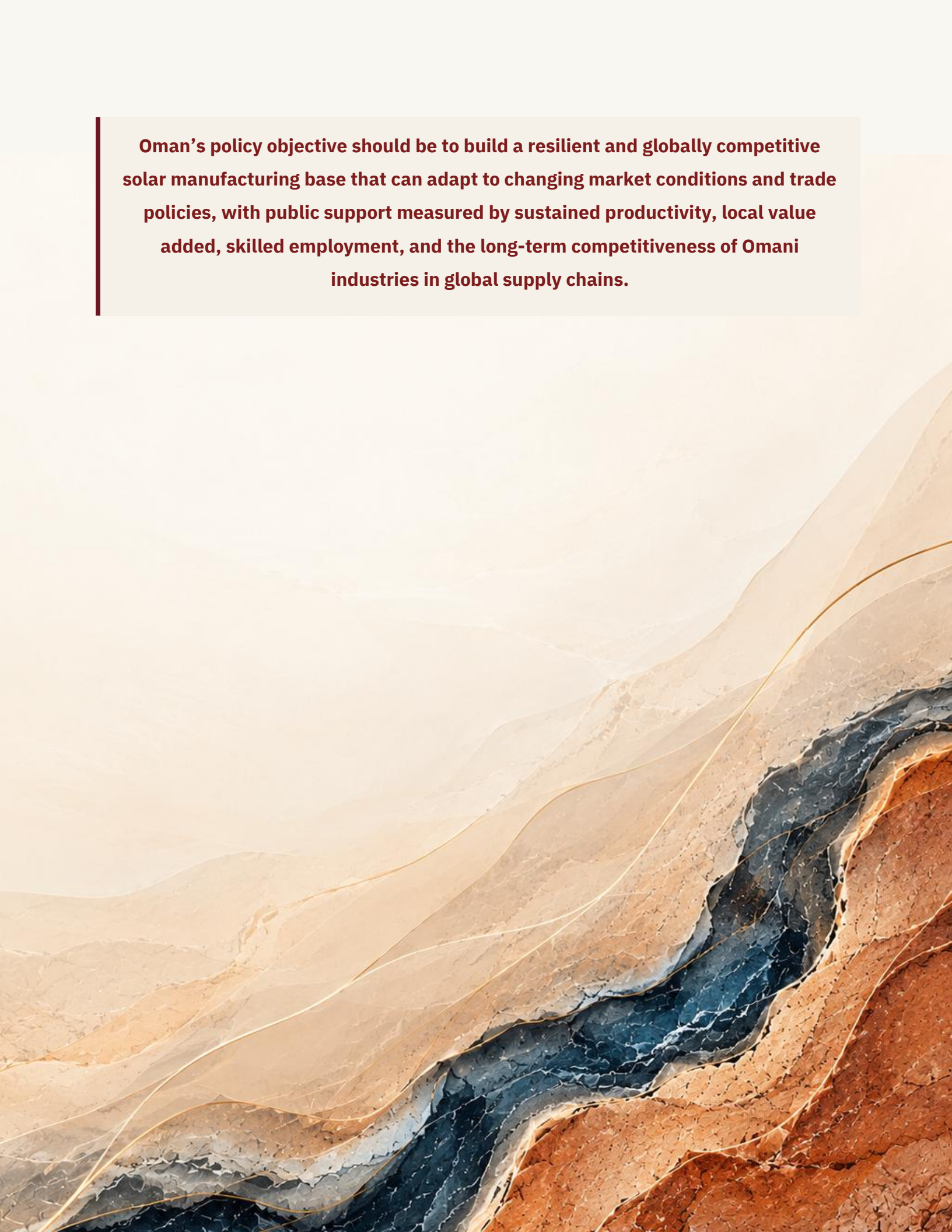
~RO 1.15bn
Total investment

~4,132
Total direct jobs

35–70%
Omanisation

[1] https://www.zawya.com/en/economy/gcc/oman-solar-chain-reaches-2.9bln-investments-350607
[2] https://omansustainabilityweek.com/news/pacts-signed-for-ro-217m-solar-cell-project-at-sohar-freezone
[3] https://www.omanobserver.om/ampArticle/1191164
[4] https://www.omanobserver.om/article/1161474/business/pact-for-5-gw-solar-panel-manufacturing-project-signed
[5] https://www.pvtime.org/5gw-drinda-to-set-solar-cell-factory-in-oman/

Oman’s policy objective should be to build a resilient and globally competitive solar manufacturing base that can adapt to changing market conditions and trade policies, with public support measured by sustained productivity, local value added, skilled employment, and the long-term competitiveness of Omani industries in global supply chains.



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