



**European  
Outdoor  
Group™**

## **Solar Rooftop Scaling Programme: Vietnam**

Guidance for brands

# Contents

|                                      |   |
|--------------------------------------|---|
| Introduction .....                   | 3 |
| What is SOLROS .....                 | 3 |
| Eligibility.....                     | 3 |
| Scope.....                           | 3 |
| Benefits for brands .....            | 3 |
| Benefits for factories .....         | 3 |
| The Programme .....                  | 4 |
| Step 1 - Install solar rooftop ..... | 4 |
| Brand participation .....            | 5 |
| Supplier engagement.....             | 5 |
| The process.....                     | 5 |
| Cost for brands .....                | 6 |
| Outputs for brands .....             | 6 |
| Typical Timeline .....               | 6 |
| Step 2 - Purchase I-RECs .....       | 7 |
| Frequently Asked Questions .....     | 8 |
| Join the Programme.....              | 9 |

# Introduction

To remain aligned with the Paris Agreement and limit global warming to 1.5°C, global emissions must be halved within the next four years. Achieving this requires immediate action to accelerate emission reductions across all sectors.

## What is SOLROS

SOLROS (Solar Rooftop Scaling Programme) is an initiative that enables brands and their partner factories in Vietnam to accelerate the adoption of rooftop solar and transition to renewable electricity. The programme is designed to be cost-effective, straightforward to implement, and capable of delivering immediate emission reductions, particularly in Vietnam's fossil fuel-dominated grid (approximately 70%).

## Eligibility

Outdoor industry brands with manufacturing supply chain factories in Vietnam. Both EOG members and non-members are welcome to join.

## Scope

In Vietnam, the current regulatory environment does not include feed-in tariffs, meaning that electricity generated from rooftop solar systems must be consumed on site rather than exported to the grid. As a result, participating factories can typically cover up to 50% of their electricity demand through rooftop solar installations. Once the rooftop system is installed, any remaining electricity demand can be addressed through the purchase of I-RECs, enabling factories to reach 100% renewable electricity coverage.

### Benefits for brands

- Lower carbon footprint without trade-offs.
- Opportunity to act as a catalyst for meaningful climate action.
- Reduced workload through collaborative implementation.

### Benefits for factories

- No upfront investment required (zero CAPEX).
- Reduced greenhouse gas emissions.
- Increased energy independence and resilience.
- Lower electricity costs over time.

# The Programme

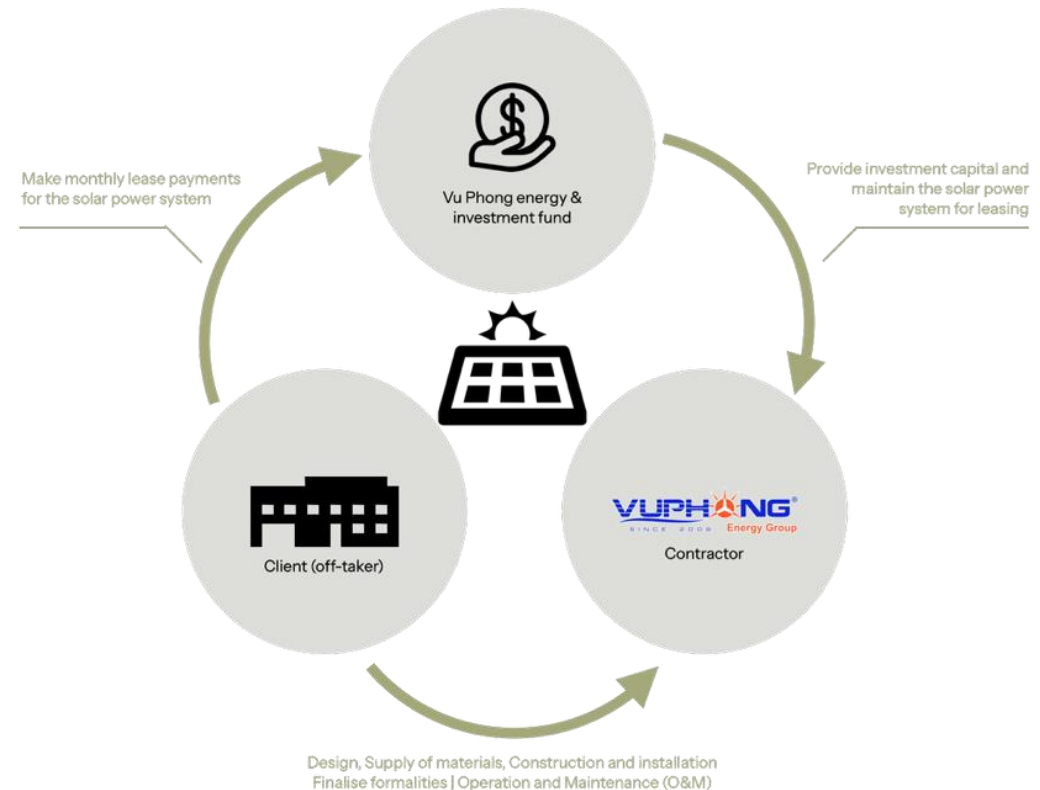
## Step 1 - Install solar rooftop

While Vu Phong Energy Group can offer self-investment options, the zero-CAPEX solar model, requiring no upfront investment from the factory, is the most commonly used approach.

Under this model:

- Vu Phong installs, finances, and operates the rooftop solar system.
- The factory leases the rooftop solar installation.
- Vu Phong establishes a Power Purchase Agreement (PPA) for the electricity supplied.
- The factory benefits from reduced electricity costs, typically 15–35% lower than the local Vietnam Electricity (EVN) tariff, depending on the province.

All electricity generated by the rooftop solar system is consumed directly by the factory to support production needs. At the end of the lease period, ownership of the system is transferred to the factory at no additional cost, with guaranteed system performance of over 80% efficiency at the time of transfer.



## Brand participation

Successful implementation relies on strong brand engagement and leadership. Participating brands are expected to actively promote the programme within their supply chains and support supplier participation throughout implementation. For the best chance of success, engagement should be led at a senior level within participating brands. The programme signatory should hold a senior role, and follow-up engagement should involve not only CSR/ESG teams but also Purchasing Directors or those responsible for strategic supplier relationships.

## Supplier engagement

Supplier participation is more likely where clear financial benefits exist. Delivering meaningful cost savings for factories is therefore a cornerstone of the programme. Strong brand advocacy will be essential to ensure the programme is prioritised by supplier partners, particularly as factory owners and senior managers typically set the direction and decision-making framework.

## The process

The programme is simple to join and requires minimal input (time, financial investment) from participating brands. Brands may choose to share a list of their suppliers in Vietnam, allowing the EOG to conduct an internal mapping process to identify opportunities for collaboration with other participating brands. Alternatively, brands may nominate individual supplier factories to participate on a standalone basis.

- |                |                                       |
|----------------|---------------------------------------|
| 1. Contact EOG | Express your interest in taking part. |
|----------------|---------------------------------------|

|                                       |                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Initial information from the brand | Interested brands share a list of nominated factories and/or a list of your suppliers in Vietnam, together with any sustainability targets and compliance requirements.                                                                                                                                                                                |
| 3. Collaboration opportunities        | EOG will try to identify brands who also share any nominated facilities, providing an opportunity for collaborative working and leveraging brand influence.                                                                                                                                                                                            |
| 4. Introduction to Vu Phong           | <ul style="list-style-type: none"> <li>For each nominated factory, EOG will contact Vu Phong and organise an introductory call with all individual/sharing brands.</li> <li>Brands will be copied into the subsequent communications through the process.</li> <li>Brands are expected to use their influence to drive the process forward.</li> </ul> |
| 5. Quick screening                    | Vu Phong performs an assessment for each factory, checking roof conditions, technical feasibility, legal/regulatory context, and grid-connection considerations in Vietnam.                                                                                                                                                                            |
| 6. Feasibility study                  | For sites that pass the initial screening, Vu Phong will prepare a full feasibility package including: <ul style="list-style-type: none"> <li>Proposed system size</li> <li>Estimated generation and savings</li> <li>Expected CO<sub>2</sub> reductions</li> <li>PPA/Leasing tariff</li> </ul>                                                        |
| 7. Brand review & confirmation        | Brands will have the opportunity to review the results and confirm which factories should move forward.                                                                                                                                                                                                                                                |
| 8. Oversight during implementation    | <ul style="list-style-type: none"> <li>Brands will only need to monitor progress — no operational work is required.</li> <li>All engineering, construction, and O&amp;M are handled by Vu Phong.</li> </ul>                                                                                                                                            |



## Cost for brands

Zero cost. All CAPEX, construction, operation, maintenance, and insurance are funded by Vu Phong and their investors.

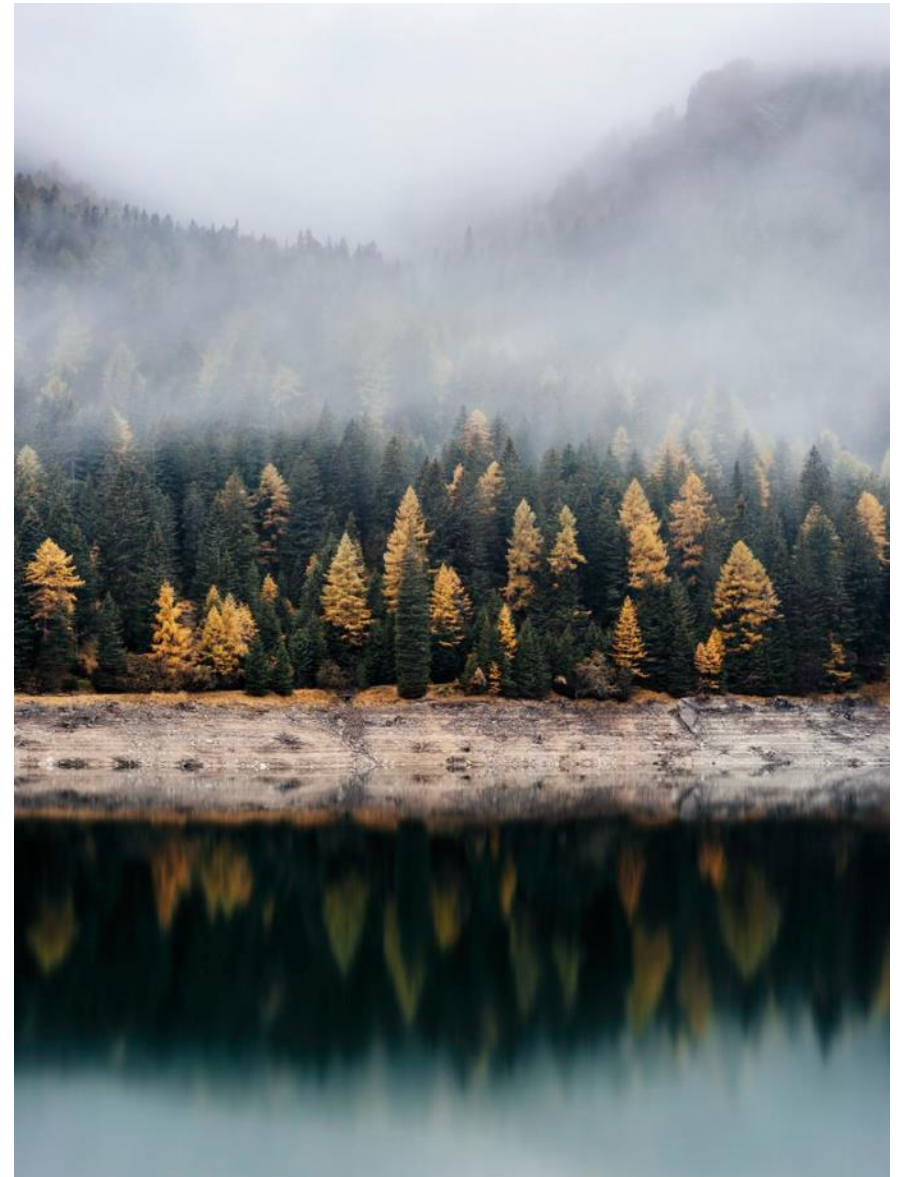
## Outputs for brands

- Portfolio screening summary.
- Feasibility study and savings model.
- Construction and commissioning updates.
- Performance reports.
- Annual renewable energy and CO<sub>2</sub> reduction reports.

## Typical Timeline

A standard Zero-Capex rooftop solar project usually takes 12–20 weeks, depending on data availability and factory readiness.

- Data collection & initial screening: ~1 week.
- Feasibility & commercial proposal: 1–2 weeks.
- Contracting: 2–4 weeks.
- Technical design & permitting: 3–6 weeks.
- Installation & commissioning: 6–12 weeks.



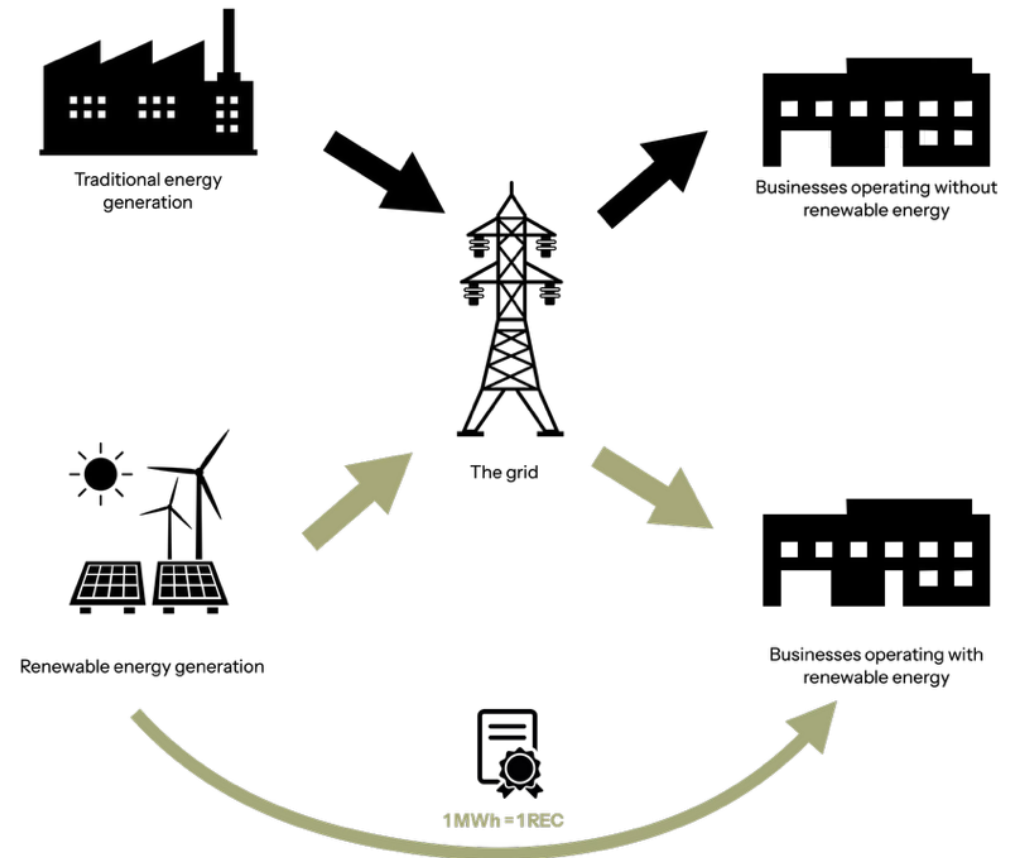
## Step 2 - Purchase I-RECs

Any electricity demand that has not been covered by the solar rooftop installation, can be addressed through the purchase of I-RECs.

The EOG has received indicative pricing of approximately US\$0.60 per MWh for I-RECs in Vietnam (2025). All certificates are verified and issued through the official I-REC Standard platform, an independent system that operates separately from the Vietnamese government.

If desired, additional ecolabel certification can be included, such as EKOenergy, which currently adds approximately €0.18 per MWh.

Important: Credibility is generally strengthened when I-RECs are purchased directly by the factory or factory group using the electricity, rather than purchased on their behalf. Implementing this step may therefore require leveraging strong supplier relationships.



## Frequently Asked Questions

### 1. Is there provision for changes in solar price vs. grid price over time?

The solar tariff is linked to the applicable EVN grid tariff at the time of consumption. Specifically:

- The unit price is calculated based on the EVN tariff (by time-of-use) with an agreed discount applied, ensuring that solar electricity remains lower than grid electricity.
- As EVN tariffs are adjusted over time, the solar price follows accordingly under the same discount mechanism.

This structure ensures long-term savings for the factory while also providing predictability for both parties.

### 2. Is there protection in case of supplier factory closure or similar events?

The agreements include several protections to address such scenarios:

- Insolvency / termination provisions: Agreement defines insolvency events (e.g. bankruptcy, inability to pay debts), which give the non-defaulting party the right to terminate the contract.
- Assignment / transfer rights (continuity of service): The supplier will assign or transfer the agreement to another qualified entity with prior notice. This allows the project to continue under a replacement operator if needed, without disrupting operations.
- Insurance coverage: The system and operations are covered by standard insurances (e.g. construction, asset, third-party liability), providing additional protection against operational risks.
- Site-related protections: The agreements also address cases where the factory is no longer operational or loses rights to the site, allowing appropriate contractual remedies.

Overall, while the contracts include standard termination rights in case of severe events, they are also structured to allow continuity of operation through transfer/assignment mechanisms, minimising disruption to the factory.

### 3. How does the Zero Capex model work?

Under the Zero Capex model:

- Vu Phong fully finances the solar system, including CAPEX, installation, operation & maintenance.
- The factory does not incur any upfront cost and only pays for the solar electricity it consumes at a discounted rate compared to grid electricity.

How this is financially viable:

- Vu Phong invests upfront and recovers their investment over the long term (typically 15–25 years) through the solar electricity sales.
- The model is structured to ensure a balanced return for their investment while still delivering meaningful savings for the factory.
- Their experience across 100+ MWp of deployed projects allows them to optimise design, performance, and cost efficiency, ensuring the model remains bankable.

PPA / Contract structure:

- The agreement is signed directly between Vu Phong and the factory
- EVN (Vietnam Electricity) remains the secondary electricity supplier as usual.

### 4. Electricity supply & system performance

- The solar electricity is consumed directly on-site (self-consumption model).



- There is no export to the grid under the current setup (unless specifically structured otherwise under regulatory frameworks).

Can solar meet 100% demand?

- In most cases, rooftop solar supplies a part of total demand, depending on roof area and load profile.
- For energy-intensive processes (e.g. autoclave), solar will partially offset consumption during daytime but not fully replace grid supply. However, in such cases, Vu Phong will consider investing in Battery Energy Storage System (BESS).
- The system is designed to maximise self-consumption and avoid excess generation.

## 5. Technology & system quality

- Vu Phong use Tier-1, bankable equipment rated by Bloomberg annually from globally recognized manufacturers (e.g., [JA Solar](#), [Trina Solar](#), [Jinko Solar](#), [LONGi](#) etc.)
- The system design prioritises long-term performance and reliability (25-30 years) rather than lowest upfront cost. For the panels, Vu Phong use those which provide performance warranty up to 30 years.
- Performance warranties, degradation rates, and O&M commitments are aligned with international standards and investor requirements.

## 6. Electricity cost & savings

Solar electricity is typically offered at a discount of ~10–35% vs. EVN tariff, depending on:

- Location (North / Central / South Vietnam)
- Load profile and self-consumption ratio

- Project size and technical conditions

This allows factories to achieve immediate cost savings from day 1, without investment risk.

## 7. I-RECs (Renewable Energy Certificates)

I-RECs can be structured in different ways depending on the brand's preference:

- Assigned to the factory/brand through the project
- Or procured separately from the market

Vu Phong can support both bundled and unbundled I-REC solutions, depending on ESG reporting requirements.

# Join the Programme

To join this programme, map your supply chain and/or nominate factories, please contact [verity.hardy@europeanoutdoorgroup.com](mailto:verity.hardy@europeanoutdoorgroup.com)



European Outdoor Group  
c/o Piller Treuhand AG  
Industriestrasse 47  
6300 Zug  
Switzerland

[verity.hardy@europeanoutdoorgroup.com](mailto:verity.hardy@europeanoutdoorgroup.com)  
[europeanoutdoorgroup.com](http://europeanoutdoorgroup.com)