









Commercial and Industrial Rooftop Solar (CIRTS)

Context

Energy Sector in Viet Nam

Viet Nam's fast-growing economy has rapidly increased energy demand throughout the country over the past decades. Between 1990 and 2021, electricity production in Viet Nam increased 30-fold, from 8.6 TWh to 256.7 TWh – with dramatic further demand growth estimated until 2050.



Annual electricity production in Viet Nam

Source: EVN NLDC 2021 and Draft PDP VIII updated in November 2022



National installed capacity in 2021 Source: EVN NLDC 2021

Through 2021, Viet Nam's overall installed power capacity was 78,200 MW. Conventional sources are dominant, including coal (32% installed capacity), hydro (22%) and natural gas (10%). However, the share of wind, solar and small hydro together has risen to 32%. Rooftop solar energy alone now makes up to 10% of the national installed capacity.

According to the Draft of the National Power Development Plan VIII updated in November 2022, Viet Nam aims to increase its renewable energy share in power production substantially.

Rooftop Solar Energy Sector in Viet Nam

As a tropical country with high rates of solar insolation, Viet Nam has great potential for solar energy, especially rooftop solar (RTS) power that is often dispersed and mostly consumed at the point of generation. Energy consumption from rooftop solar has been encouraged by the Vietnamese Government and can contribute to reducing the load on the grid, facilitating investment in grid infrastructure and maximizing efficient land use.

To promote the development of solar energy, the Ministry of Industry and Trade promulgated the Decision No. 2023/QD-BCT dated 5 July 2019, approving the Rooftop Solar PV Promotion Program, between 2019 and 2025. The Prime Minister signed Decision No. 13/2020/QD-TTg dated 6 April 2020, stipulating a new feed-in tariff (FIT) for solar PV projects, including rooftop solar, at 8.38 US cents/kWh, which was in effect until 31 December 2020.

Objective

The Commercial and Industrial Rooftop Solar (CIRTS) Project aims to improve the conditions for a sustainable development of the market. IIts priorities are the adaptation of the relevant regulatory and technical regulations, the development of key stakeholder capacities, and the improvement of EVN's information base.

Project name	Commercial and Industrial Rooftop Solar (CIRTS)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Viet Nam
Lead executing agency	Viet Nam's Ministry of Industry and Trade (MOIT)/ Electricity and Renewable Energy Authority (EREA)
Duration	February 2021 – January 2025
Contact person	Sven Ernedal <u>sven.ernedal@giz.de</u>



Rooftop solar at a factory in Southern Viet Nam. Photo: © GIZ

Approach

The CIRTS project is organised in three main Action Areas.

1. Legal and Regulatory Framework

This action area will provide landscape analysis for technical rules and standards for RTS grid integration, based upon which recommendations are made to adapt international best practices to the Vietnamese context. In addition, the project will facilitate a technical working group to clarify the need for further updates of rules, standards and regulations.

2. Capacity Development

The project will strengthen the operational capacity of the Viet Nam Electricity (EVN) for technical and administrative adaptation of power supply activities to an expansion of commercial and industrial RTS. At the same time, improvements in knowledge access will be made for key stakeholders for RTS systems and services for the implementation of quality and safety aspects of commercial and industrial RTS.

3. Technology Cooperation

The project will work with EVN to identify potential commercial and industrial RTS and develop scenarios to optimize the resources. While introducing international experience associated with the providers' RTS business models, the project will also recommend necessary adjustments to EVN's business plan to ensure its sustainable business operation. Innovations will also be mobilized through activities such as hackathons and competitions.



Rooftop solar at a factory in Southern Viet Nam. Photo: © GIZ

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Commercial and Industrial Rooftop Solar (CIRTS) Project GIZ Energy Support Programme Unit 041, 4th Floor, Coco Building 14 Thuy Khue Str., Tay Ho District Hanoi, Viet Nam T + 84 24 39 41 2 F + 84 24 39 41 20 E office.energy@gi I <u>www.giz.de/viet-nam</u> www.gizenergy.org.vn December 2022

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