



Ministry of Industry and Trade
Electricity and Renewable Energy Authority

Study on RE Integration in the Southwest area (Phase 1 - covering 5 provinces of Ca Mau, Bac Lieu, Soc Trang, Ben Tre and Tra Vinh)



Hanoi, August, 2019

Implemented by **giz** Deutsches Institut für
Energieeffizienz
im internationalen
Zusammenarbeit (DZ) Berlin

Overview of RE sources in the Southwest region



- The Southwest area is a flat peninsula bordered by the sea to East, South and Southwest. Coastal wind speed is approx. 6-7m/s at height of 80 - 100m.
- According to recent wind survey data of international organizations, coastal Southwestern provinces (including Ben Tre, Tra Vinh, Soc Trang, Bac Lieu and Ca Mau) have a large potential for wind power development.
- Bac Lieu 1 and 2 Wind Power Plants (99.2MW) are operationalized, providing around 230 million kWh/year.
- Trung Nam Tra Vinh Solar Power Plant with capacity of 165Mwp has started operation in June 2019.
- The above 5 provinces have developed their Provincial Wind Power Plan towards 2020 and outlook to 2030

Status of approved/ additional RE projects in 5 provinces

No.	Name	Additionally incorporated in the Plan (*)		Being submitted for incorporation into the Plan (Jul 2019)		Being submitted for incorporation into the Plan (Jan 2019)	
		Nos. of project	Capacity (MW)	Nos. of project	Capacity (MW)	Nos. of project	Capacity (MW)
1	Ben Tre	6	180	12	1,255	9	360
2	Tra Vinh	8	483	10	1,950	6	660
3	Soc Trang	11	409	14	1,238	11	731
4	Bac Lieu	6	401	15	3,804	10	1,704
5	Ca Mau	5	550	6	1,200	5	900
	Total	36	2,023	57	9,447	41	4,355

Objectives of the Study

The first phase of the Study focuses on 5 Southwestern provinces (including Ca Mau, Bac Lieu, Soc Trang, Ben Tre and Tra Vinh), aiming at:

1. Evaluating the capability of evacuating power generated from approved RE projects in these 5 provinces (2,000 MW)
2. Evaluating the capability and options of power evacuation for RE projects being submitted for incorporation into the Plan in 5 provinces (capacity of 4,300 MW as of January 2019) based on the scenarios: (i) Update of progress of grid projects to be operated in 2021, (ii) Earlier start of transmission grid projects approved in PDP7 in the period 2021-2025 to put them into operation in 2021-2022.
3. Proposing solutions to evacuate RE capacity of 6,300 MW in 5 provinces.

EREA and GIZ have jointly organized a workshop on 30 August 2019 in Can Tho city to announce results and ask for consultation on the inception report of the first phase.

Main Outputs

1. To structure the power grids of 5 provinces to 2021 to ensure delivery of 2,000 MW of RE capacity approved to be incorporated into the Plan which requires improvement of the transmission capacity of the 110kV Bac Lieu - Vinh Trach Dong - Thanh Tri - Soc Trang line to split-phase 2xACSR185.
2. To limit RE capacity absorption of the whole region to 2021 of ca. 3,650MW (criterion N-0 for transmission grid) and of 3,000 MW (criterion N-1 for transmission grid).
3. To evacuate the RE capacity of 6,300 MW including 2,000MW approved and 4,300MW under submission for incorporation into the Plan which requires to accomplish 7 500kV grid projects, 12 220kV grid projects and 5 110kV grid projects with total investment cost of about 9,628 billion dong (of which additional grid projects proposed to be incorporated in the Plan accounts for 7,723 billion dong).

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Main Outputs

- The next phase of the Study will cover 22 Southern provinces of Viet Nam.
- Results of the Study phases will be taken into consideration and incorporated during the development of PDP8.

Thank you for your attention