



Global Energy Alliance
for people and planet

GEAPP's Support for BESS in Vietnam & Proposed next activities

Presenter:

Ms. Nguyen Thi Thanh Minh – GEAPP's Country Manager

December 2nd, 2025



Content

1

Vietnam's BESS overview

2

GEAPP's BESS Support Activities

1

GEAPP's Proposed Next BESS Support Activities



Vietnam's BESS market has significant potential, but challenges must be addressed to unlock deployment



Utility scale (grid-connected) BESS

- Vietnam's national power development plan (PDP8) identifies BESS as a **key enabler** to integrate variable renewables while supporting the grid's reliability.

Rapid RE growth:

21.5GW wind and solar by the end of 2024, one-quarter of the total installed capacity



- RE curtailment
- Grid congestion
- Reduced system reliability

No grid connected BESS



- No pricing mechanism
- Incomplete regulatory framework for BESS

- Revised PDP8 2025 sets an ambitious BESS target of **10,000 – 16,300 MW** by 2030

B-hind-the-meter C&I BESS

- The industrial sector is Vietnam's largest power consumer (**60%**) and carbon emitter.
- Faces growing global **pressure to decarbonize** to stay competitive in global supply chains (e.g., CBAM, ESG requirements).
- Align with the **Government's directions** on green, low-carbon, and energy-efficient industrial growth under National Green Growth Strategy 2021–2030 and Industrial Development Strategy to 2035.
- Adapting to the two-component electricity price mechanism.

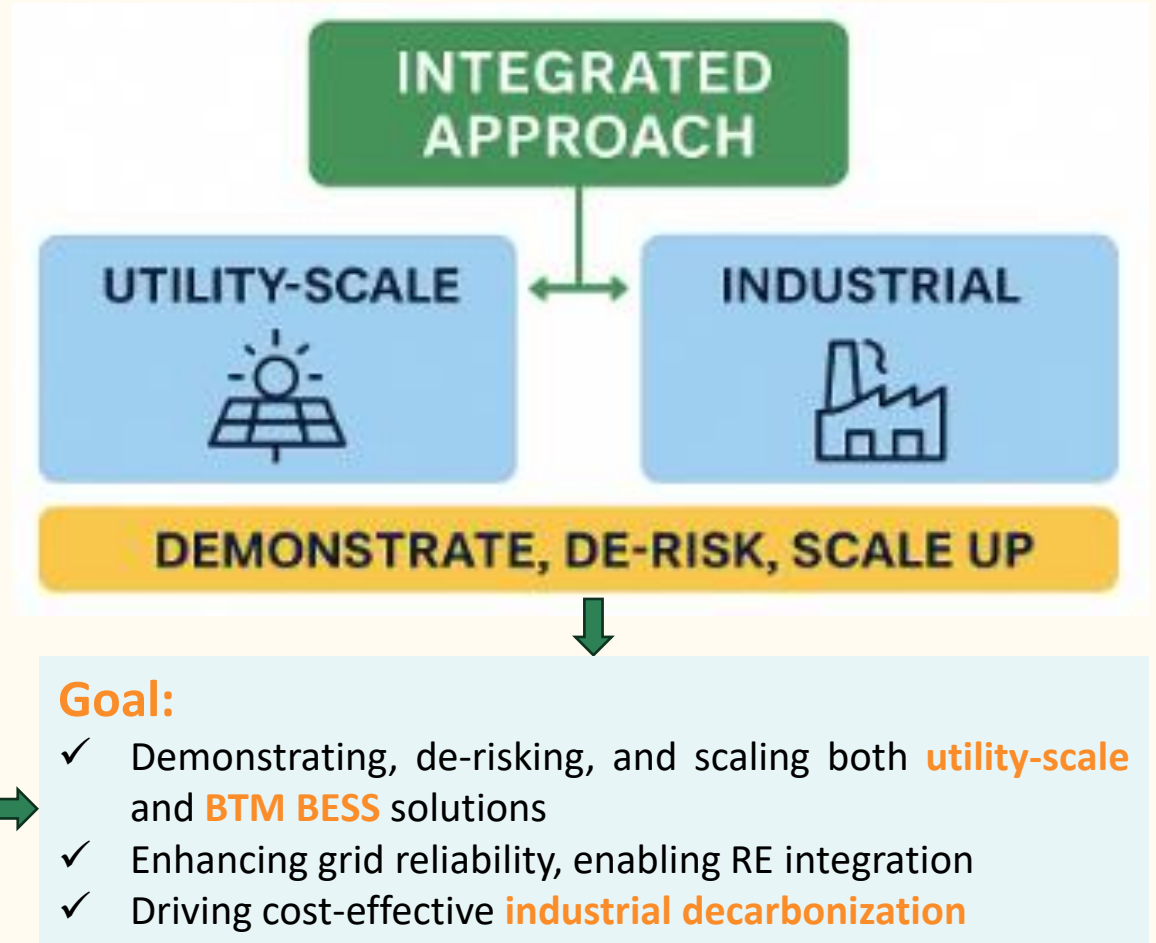
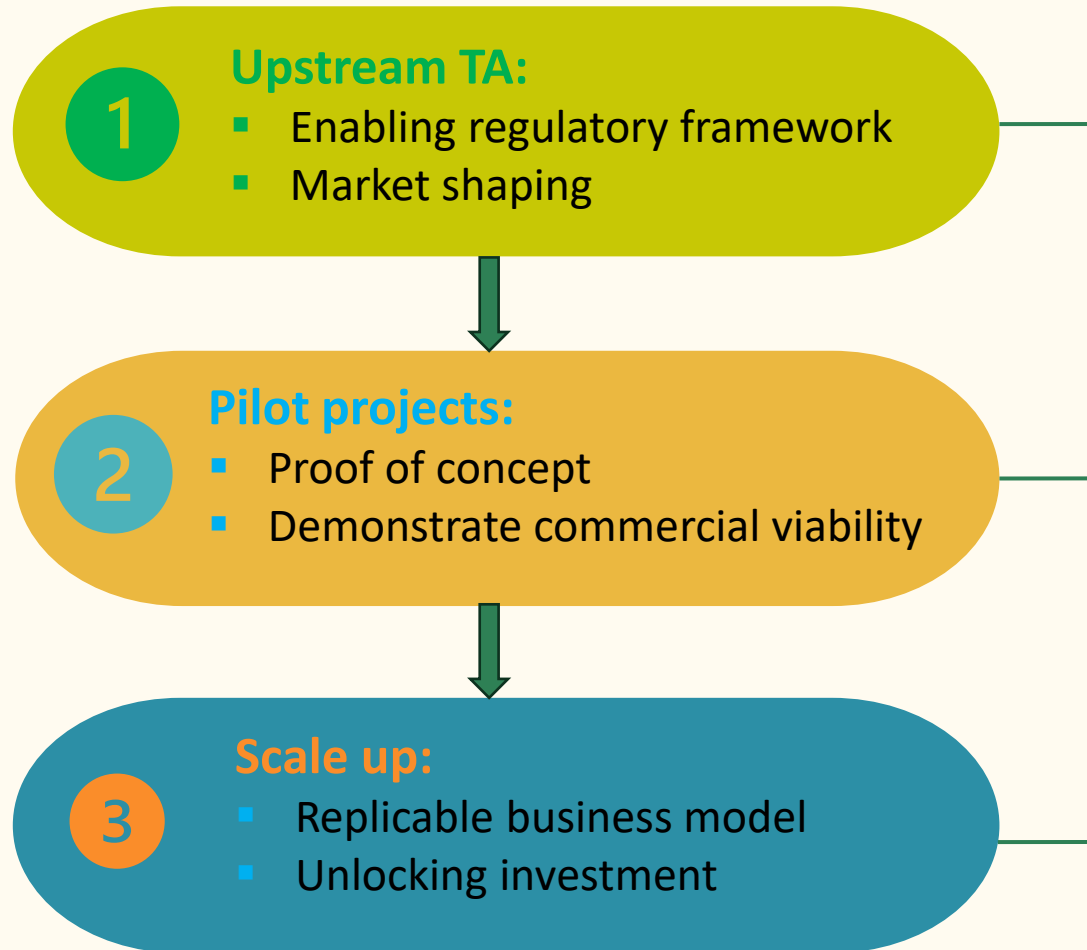
BTM BESS at IPs are facing **challenges**:

- High upfront investment requirements
- Lack of financing mechanism
- Unclear revenue models or tariff structures

GEAPP's end-to-end approach to catalyze BESS deployment in Vietnam through both utility-scale and commercial applications




GEAPP's comprehensive interventions:







GEAPP's BESS Support Activities (1/3)

Project	Status	Support Activities
1. Support VEPG TWG3's BESS Task Force	On-going	<ul style="list-style-type: none">Logic support for BESS TF quarterly meetings
	Completed	<ul style="list-style-type: none">Study on technical capabilities/specifications of various types of BESS and mechanisms for providing ancillary services by BESS in Vietnam
	Completed	<ul style="list-style-type: none">Study on mechanism for BESS in ancillary services in the electricity market
2. Support MOIT's Institute of Energy 	Completed	<ul style="list-style-type: none">Support PDP VIII Revised study on the appropriate ratio of BESS in the RE plants in Vietnam power system by 2030
	Completed	<ul style="list-style-type: none">The Roadmap for Grid-scale BESS Development in Vietnam
	On-going	<ul style="list-style-type: none">Proposing suitable pricing mechanism for grid scale BESS in Vietnam's power system to ensure the financial target of the investor throughout the project's life cycle

GEAPP's BESS Support Activities (2/3)



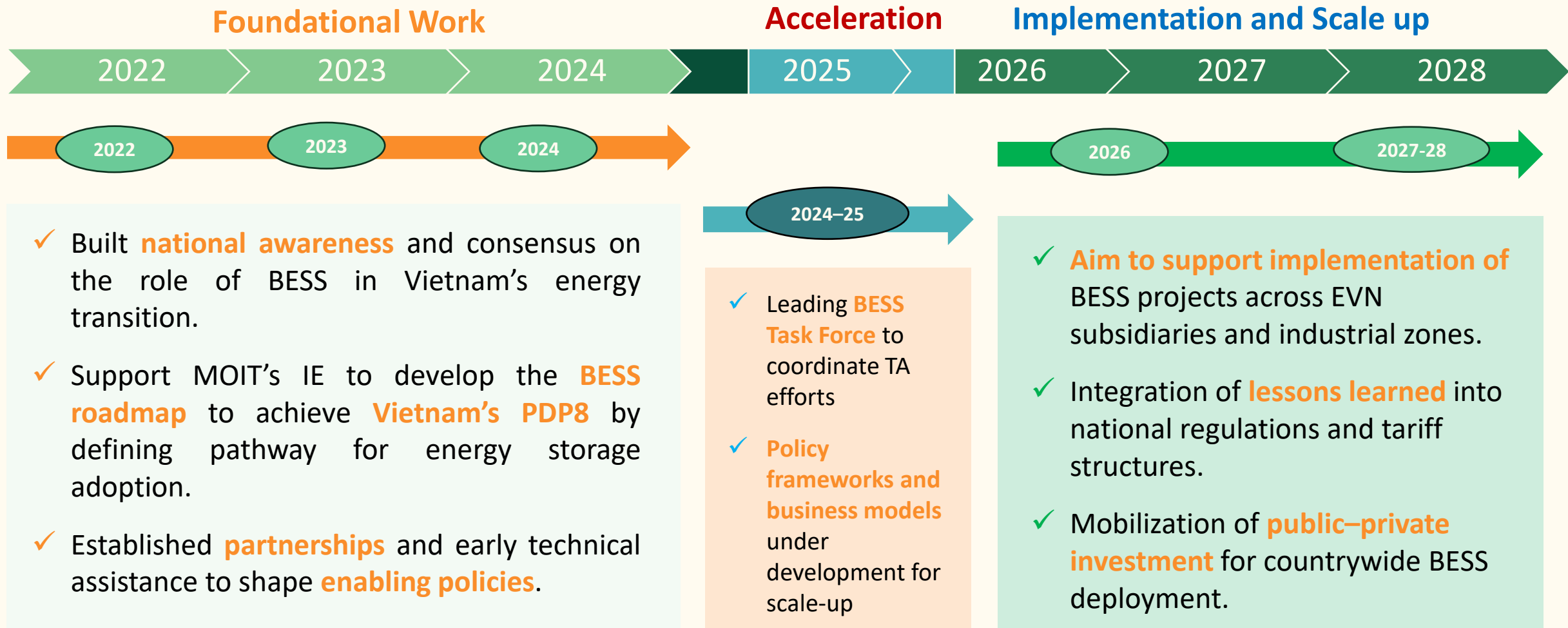
Project	Status	Support Activities
<p>3. Cooperating & Supporting Southern Power Corporation (EVNSPC)</p> 	<p>Completed</p>	<ul style="list-style-type: none"> Study Sustainable Power Supply Solutions for Phu Quy Island through the Integration of Renewable Energy and BESS
<p>4. Supporting HCMC High Voltage Power Grid Company (HHVPGC) (a subsidiary of EVNHCMC) in the feasibility study of 5MW/10MWh pilot grid-connected BESS project</p> 	<p>Completed</p>	<ul style="list-style-type: none"> Technical FS review: Support in evaluating BESS specifications, system configurations, and operational requirements
	<p>Completed</p>	<ul style="list-style-type: none"> Commercial FS review: Assess key technical and financial assumptions, evaluating the feasibility of the financial modeling, reviewing projected financial efficiency metrics, and conducting scenario analyses with recommendations on optimal scenarios for HHVPGC consideration.
	<p>On-going</p>	<ul style="list-style-type: none"> Assessment of environmental and safety impacts and carbon-reduction benefits, aligned with EVNHCMC's ESG roadmap and regulatory expectations
	<p>On-going</p>	<ul style="list-style-type: none"> Development of expansion pathways, market-aligned operating models, and future BESS deployment scenarios to enable broader grid integration and strategic energy-transition planning

GEAPP's Support Activities (3/3)



Project	Status	Support Activities
5. Supporting feasibility study and design of BESS pilot project in Industrial Park	Completed	<ul style="list-style-type: none">▪ Site visit and data collection: Support the collection of information and data from IP owner, consumer and RTS investor.▪ Technical and engineering design: Support study and analysis of size, capacity, duration, simulation and optimization of charging and discharging process.▪ Financial and business model analysis for the pilot BESS project: Support cost and benefit analysis, impact of BESS on electricity costs and production and business efficiency (through load shifting, optimizing energy production from RTS...), revenue streams, equipment costs, etc.

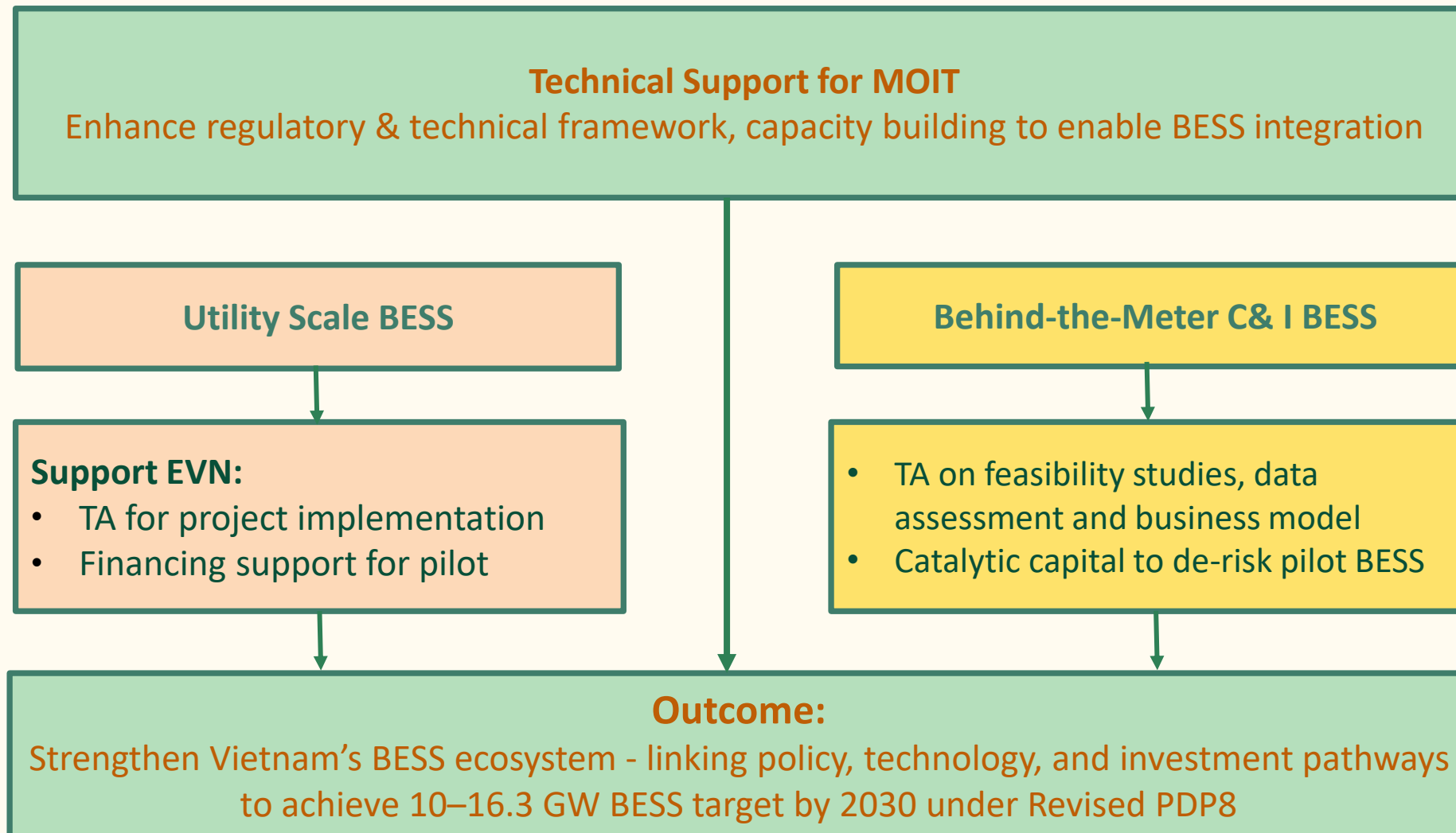
GEAPP's BESS Support: Building Foundations and Enabling Deployment



GEAPP's journey in supporting BESS development in Vietnam demonstrates how **early technical assistance can translate into real investment and on-the-ground implementation — creating a model that can be scaled and replicated across the region.**



GEAPP'S Proposed Next BESS Support Activities



**Thank you
for listening!**

