



Vietnam wind sector New momentum with new feed-in-tariff

Simon Bittner – Country Manager Project Development Programme



Content

- □ Vietnam's target for wind power and regulation framework
- Project pipeline and development status
- Opportunities and recommendations







Vietnam's targets and regulatory framework



Source: GIZ

Decision 37 (2011)

- FIT: 7.8 USct/ kWh
- 6 projects ≈ 200 MW in operation by 2018

Decision 39 (2018)

- FIT for onshore projects: 8.5 USct/kWh
- FIT for nearshore projects: 9.8 USct/kWh

Incentives for wind power projects:

- Import tax exemption
- CIT: exempted the first 4 years, 50% reduction the next 9 years







Installed capacity of wind power in Vietnam

WIND PROJECTS DATA



Challenges:

Source: GIZ

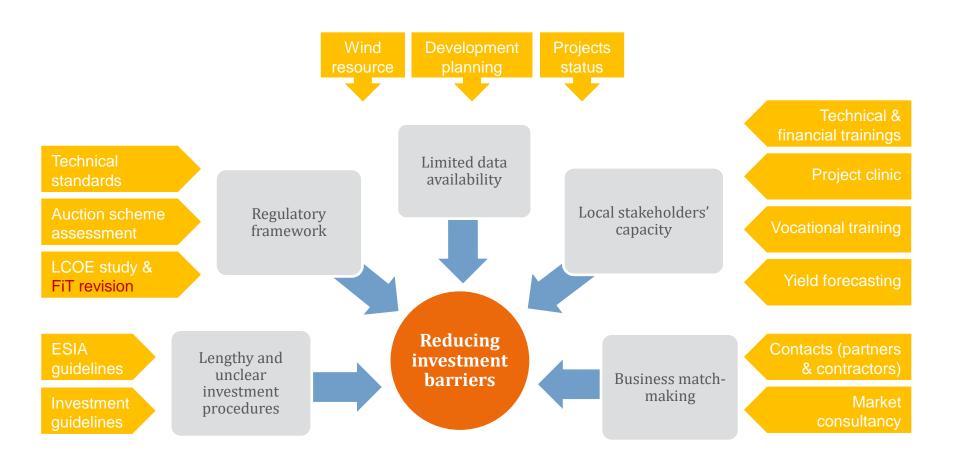
- Ineffective policy (low FIT)
- Financing
- Local capacity (developers, banks)
- Bankability (SPPA)







Germany supports Vietnam to reduce barriers

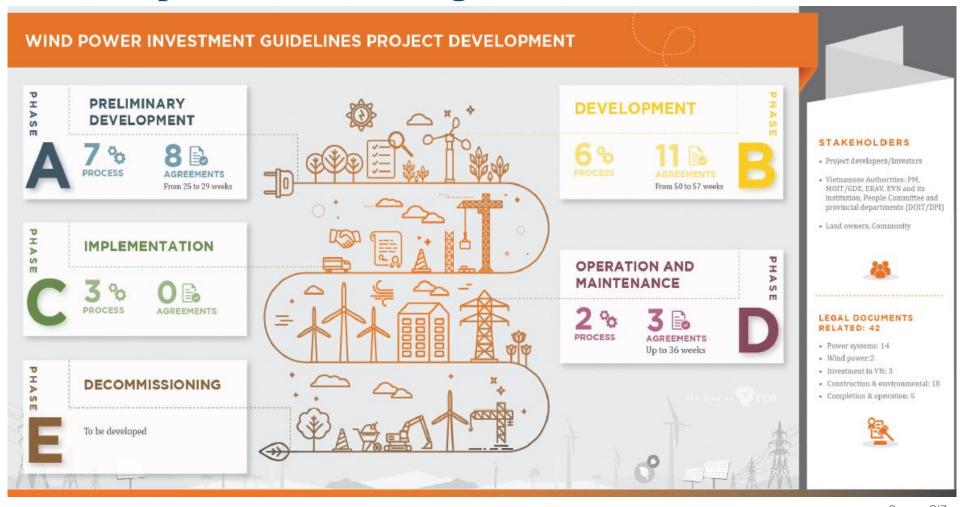








Wind power investment guidelines



→ Enhance transparency: Phases? Legal requirements? What to submit? Which department? When? Processing time?







Facilitator

Source: GIZ

LCOE study for new FIT proposal



Phu Lac wind farm 24 MW, Binh Thuan province, FiT = 7.8 USct/kWh

Source: CTV Wind



Bac Lieu wind farm 1&2, 99.2 MW, Bac Lieu province, FiT = 9.8 USct/kWh

Source: GIZ





Facilitator



Performance data

- Tuy Phong REVN (30MW)
- Phu Lac (24 MW)
- Cong Ly (99.2 MW)

LCOE assessment

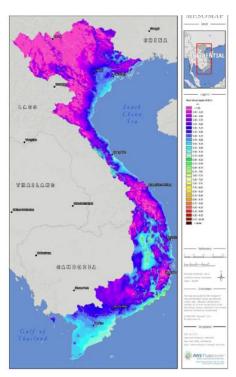
- Financial parameters:
- Investment cost
- O&M costs
- Energy production

Proposed revised FiT

Prime Minister Decision

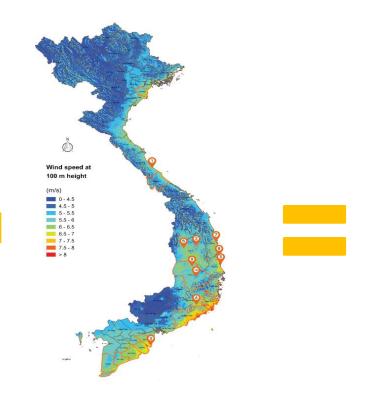
8.5 USct/kWh 9.8 USct/kWh

GIZ wind measurement campaign 2012-2017



Vietnam wind speed map at 80m height, 2011

Source: AWS TruePower LLC, 2011



Improved reliability of Vietnamese wind atlas

GIZ wind measurement campaign

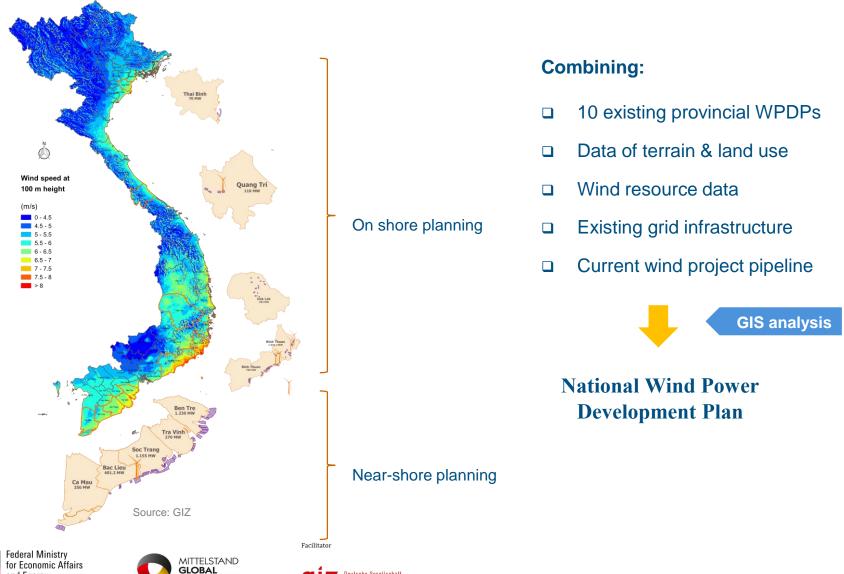
Source: GIZ

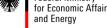






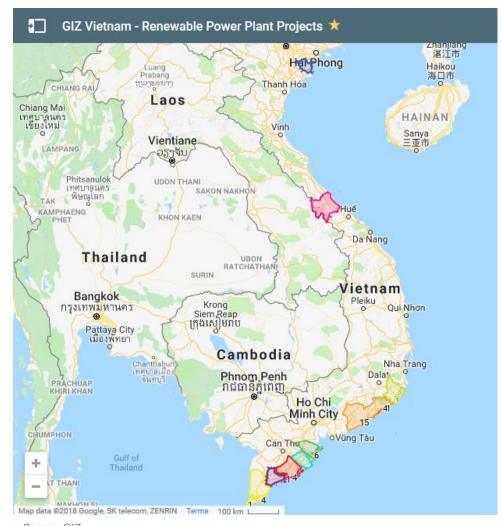
National wind power development plan







Online map



Source: GIZ





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Geographic data:

- Existing provincial WPDPs
- Current wind project pipeline

Enhancing local capacity



Source: GIZ



Topics:

- □ Project development
- Financing due diligence
- □ FS & procurement
- Vocational training the trainers
- □ Project development clinic (help desk)

Regular trainings in 2016 - 2018









Take away and outlook

Opportunities:

- Vietnam wind sector is regaining the momentum
- □ Significantly increased public awareness/ acceptance
- Enhanced knowledge/ capacity of local stakeholders

Recommendations:

- Project development with local partners
- □ Grid connection is the new concern → look for advanced projects
- □ "Hot-spot": Central Vietnam → consider other locations
 - → Through BMWi, PDP supports advising GER companies on market entry and local partners – please get in touch!









Project Development Programme

Federal Ministry for Economic Affairs and Energy (BMWi)

PDP Team Berlin



PDP-colleagues in GIZcountry offices











Services by PDP

Project
Development

Business
Development

Market
Development



Analyses of countries, sectors and key accounts

Identification of commercially viable and scalable projects

Evaluation of economic, political and technical risks

Lead of project opportunities forwarded to German SME









Evaluation and compilation of market information

AHK-business trips

Delegation trips to Germany

"made in Germany"









Political consultancy

Collaboration with business associations

Participation in conferences and trade fairs

Capacity development (technical and project development trainings)







Kind Invitation! AHK Wind Business trip to Vietnam 5-9 Nov 2018



- Market overview
- Framework conditions
- Local stakeholders

- Company introduction
- Specialized audiences:
 120 150
- Direct networking

- Individually arranged B2B meetings at company's local base
- AHK accompaniment





Source: AHK Images Archive Sep. 2016











Thank you!

Project Development Programme Simon Bittner – Country Manager simon.bittner@giz.de