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ASEAN RE Guidelines

From Policy to Implementation of RE Projects in ASEAN

Webinar – Launching of ASEAN RE Guidelines Web Platform

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- **ASEAN-RESP**
- **Rationale** for RE Guidelines
- **Importance** of Administrative Procedures
- **The RE Guidelines** in ASEAN



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ASEAN-RESP: Project Objectives

- To strengthen **effective regional cooperation** on renewable energy in the ASEAN
- To transfer knowledge and experiences on renewable energy within the ASEAN region through **efficient networking**
- To **advise on technical and policy issues** regarding the deployment of renewable energy in the ASEAN member states
- **Partners:** ASEAN Centre for Energy (ACE); GIZ

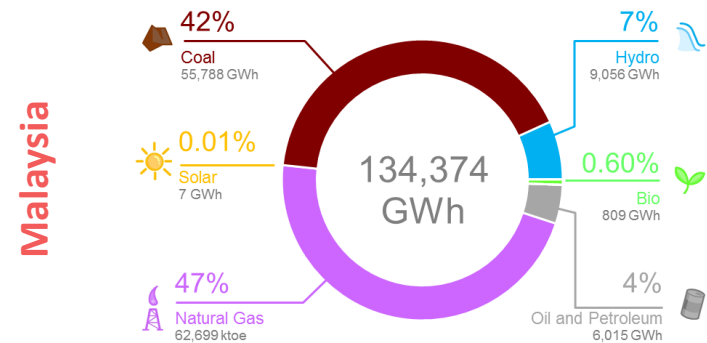
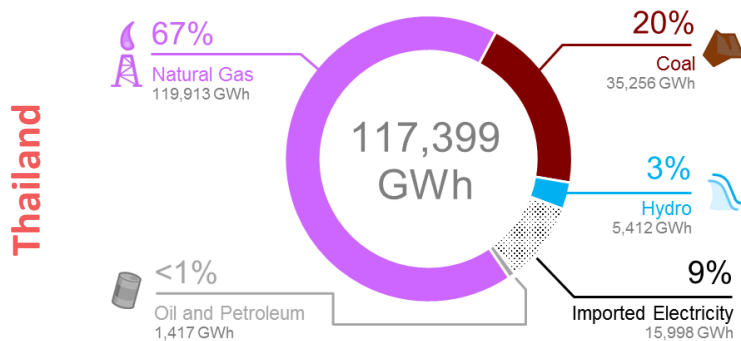
www.aseanrenewables.info

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Rationale: Demand vs. Dependency in ASEAN

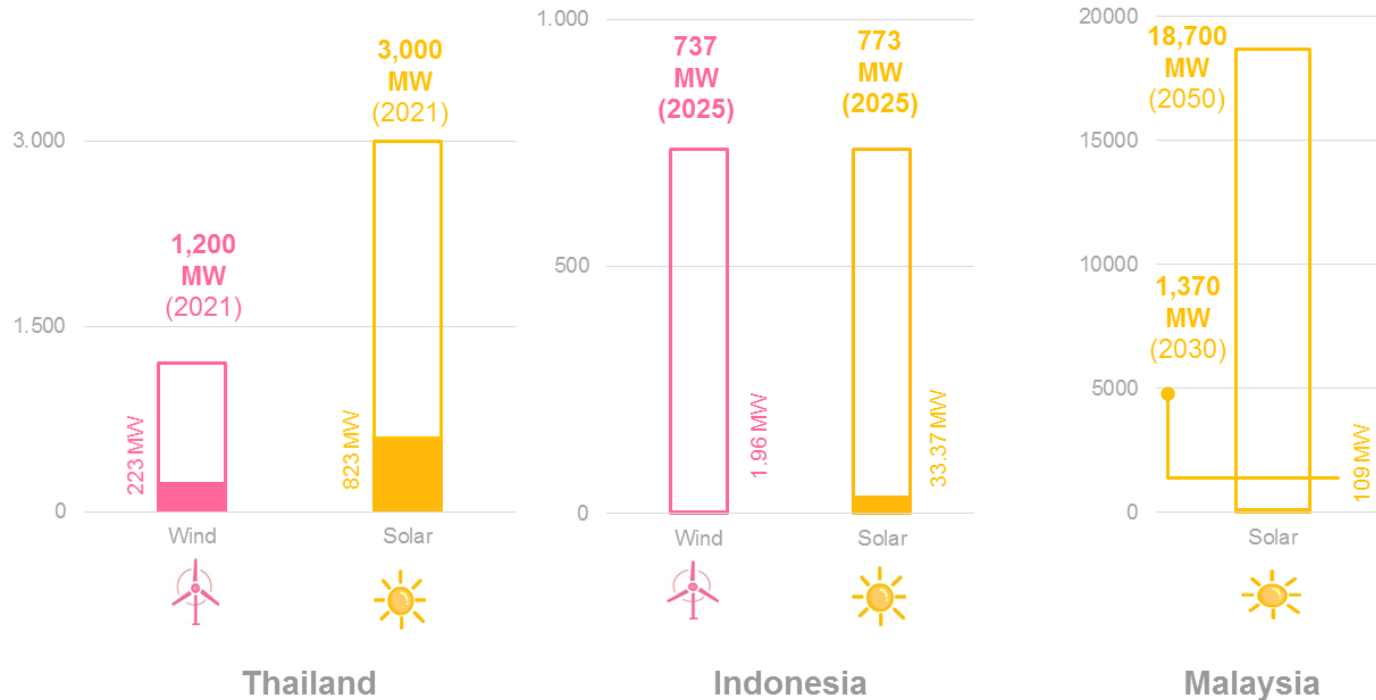
- Rapidly increasing demand for electricity in the region
 - Demand in South East Asia region is increasing by 4.2% annually
 - Indonesia: 9%
- High dependency on fossil fuels (import)





Rationale: Political targets are set

Target vs. installed capacity of PV and Wind Power





Rationale: Policies are in place (examples)

- **Indonesia:**

Guarantee price for grid-connected PV (tender); Netmetering (discussion); Roof-top PV (discussion); B2B (few)

- **Malaysia:**

FiT; Roof-top PV; Netmetering (discussion); B2B

- **Thailand:**

Roof-top PV; Community Scale PV; Netmetering (Discussion); FiT replacing the *Adder* scheme (Discussion).

- **Philippines:**

FiT, Netmetering, Roof-top PV, B2B.



Rationale: ASEAN – Policy vs. implementation

- Ambitious **RE targets** are in place
- **Political commitment** is given
- **RE support policies** are developed and implemented
- Regional **market integration** is advancing
- But: **Large scale** deployment not fully reached

→ Tariffs too low?

→ Support mechanisms wrong?

→ **Administrative procedures!**



Procedures: Administrative procedures as cost factor

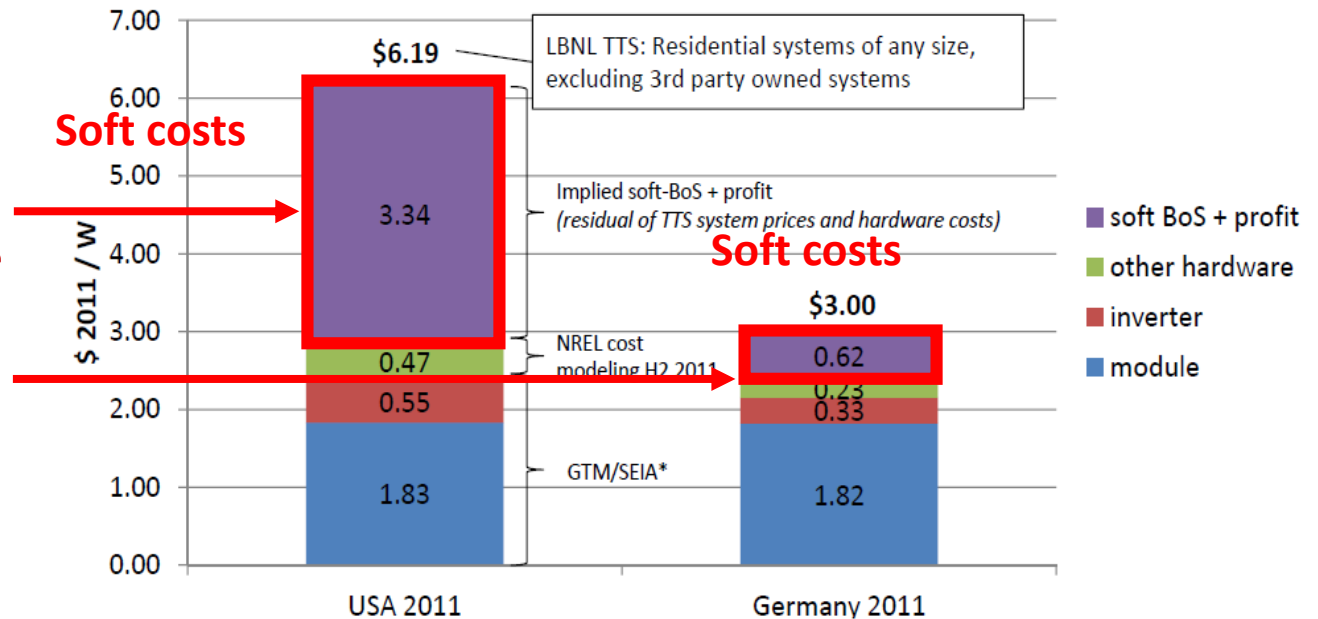
- Complex permitting procedures and regulation on grid access **hamper market development**
- Administrative barriers have a **financial impact** on system costs
- Administrative costs **affect soft costs components** such as capital costs and profit - risk premium!



Procedures: Impact of administration & regulation on RE

Share of soft costs in residential PV system costs

Total soft costs for residential PV in Germany, including margin, are just 19% of the implied soft costs for U.S. residential PV (\$0.62/W vs. \$3.34/W)



“Soft costs” determine system costs!

* Notes: US module and inverter prices are based on average factory gate prices for Q4 2010-Q3 2011 as reported by GTM/SEIA with an adder of 10% to account for supply chain costs. Inverter efficiency assumed to be 85%.



Procedures: Cost reduction through simple procedures

10% levelized cost saving potential

Legend Levelized cost saving potential:
 ■ = up to 10% and more
 ■ = up to 6%
 ■ = up to 4%
 . = up to 2%

Removing growth constraint:
 = Strong effect
 = Medium effect
 = Small effect

	Levelized cost saving potential					SUM	Removing growth constraint
	WACC+	CAPEX	OPEX	POWER	SUPPORT		
INCREASING POLICY STABILITY							
1 No retro-active policy changes for existing projects	■				■	>20%	■
2 No abrupt policy changes for upcoming projects		■			■	>10%	■
3 Simple & transparent permitting & grid access procedures		■			■	>10%	■
4 No budget/capacity caps & continual access to support		■			■	>10%	■
APPLYING POLICY STABILIZERS							
5 Support financed off-budget via consumer surcharge	.	.				3%	
6 (Temporary) government participation	■					5%	
7 Loan guarantees	■					5%	■
8 EU enforcement RE directive implementation & Member State support level coordination							

Simple & transparent permitting procedures can reduce CAPEX costs



Procedures: Common challenges in permitting procedures

- Many different **government levels** involved
- Central policy vs. **decentral approval**
- **Differing procedures** in different regions
- Involvement of **many authorities** for minor licences
- **Mismatch** between size of project and number of licenses (10 MW = 100 kW)
- Regulations in place but **not disseminated**
- Procedures **not 'bankable'**



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Procedures: In a nutshell



Making procedures **transparent** and **analyzing** the administrative procedures and regulation is **key to further RE development!**



Guidelines: ASEAN RE Guideline products

Webportal: Online, links, downloads, easily adjustable (www.re-guidelines.info)

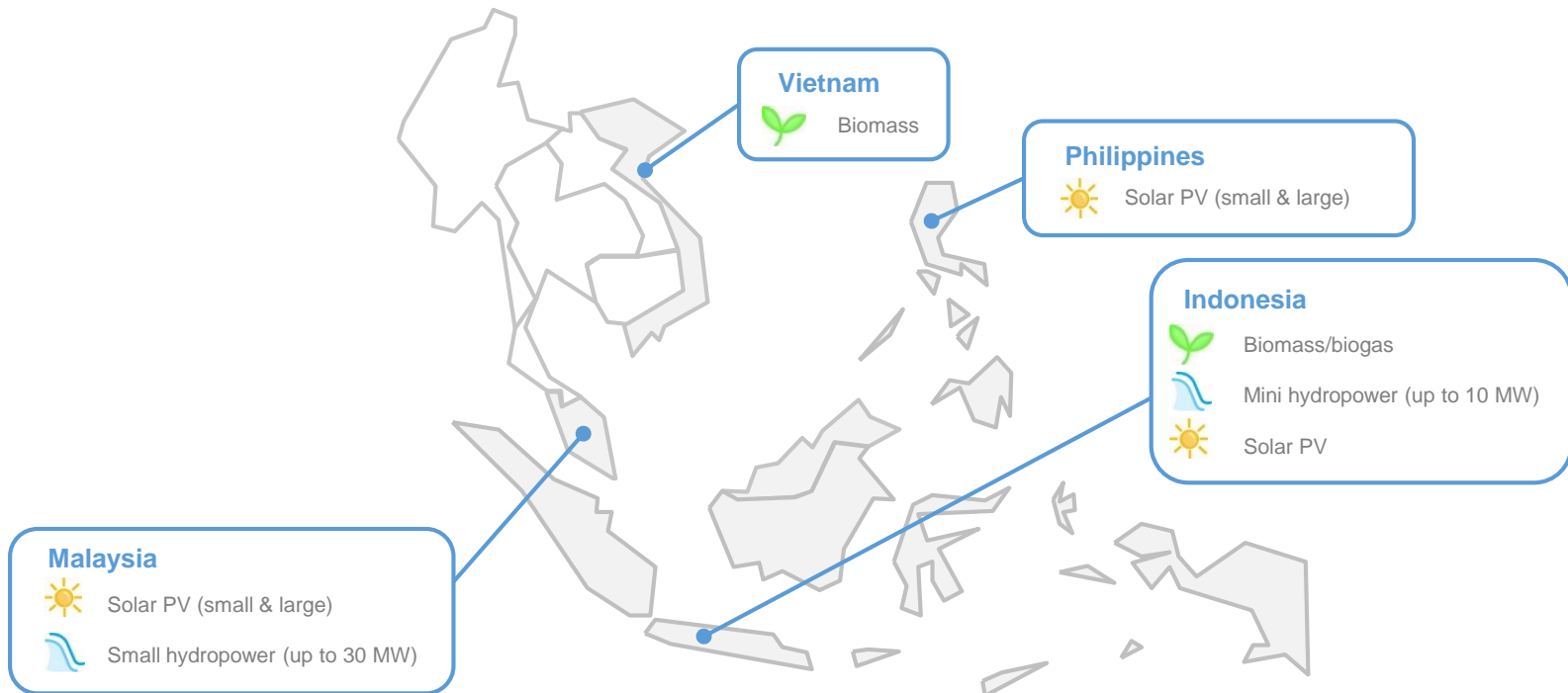
The screenshot displays the ASEAN RE Guidelines webportal. The top navigation bar includes 'HOME', 'ABOUT RE GUIDELINES', 'HOW IT WORKS', and 'CONTACT US', along with a search bar. A sidebar on the left lists ASEAN member states with corresponding colored dots. The main content area features a map of Southeast Asia with a callout for Indonesia, which includes a small map of the country and the text: 'Wey Andonem unamto Indonewal YOL O, Terry Richardson hehewica toudsted street art.' Below this, the portal shows a detailed view for 'Indonesia Biomass / Biogas'. It includes a map of Indonesia, a brief description: 'Indonesia is the world largest archipelagic nation consisting of around 17,000 islands. It is the largest economic in the ASEAN region. Indonesia was an important oil exporter; it was a member of Organization of Petroleum Export Countries (OPEC) from 1962 to 2009. However, the domestic petroleum production has been declining and eventually it could not catch up with the rising demands. Indonesia became a net oil importer nation in 2002 and suspended its OPEC membership.', and a 'Read more' link. At the bottom, there are buttons for 'Download E-Guidebook [English Language]' and 'Download E-Guidebook [Local Language]'. A progress bar at the very bottom shows the stages: 'START', 'Site Selection CH1', 'Administrative Authorization CH2', and 'Power Purchase Agreement CH3'.

Three e-guidebook covers are displayed. The top two covers are for 'Renewable Energy Guideline on Large Solar Photovoltaic Project Development in the Philippines' and 'Renewable Energy Guideline on Small Solar Photovoltaic Project Development in the Philippines', both featuring images of solar panels. The bottom cover is for 'Renewable Energy Guidelines on Biomass and Biogas Power Project Development in Indonesia', featuring an image of palm trees. Each cover includes the GIZ logo and the text 'E-Guidebook, 1st Edition, May 2014'.

E-Guidebooks: offline, printable, easily editable



Guidelines: RE Guidelines in ASEAN member states





Guidelines: The complete picture

The Guidelines...

- Offer an easy-to-understand guide on how to develop RE projects;
 - Cover entire development cycle: From site selection until operation and maintenance
 - Visualize through Gantt's Chart and Flow Chart
- List the documentation required for each step;
- Introduce relevant authorities/legal framework;
- Map associated challenges in each step of RE project development;
- Offer advice on how to overcome the challenges;
- Lay the basis for regional benchmarking and policy advise.



Guidelines: Target group and beneficiaries

Project Developers/Investors

- Access to **clear information** on the administrative procedures (relevant authorities, permits...) and become more confident in RE investment;
- Highlight the associated **challenges** in RE project development

Policymakers/authorities

- Appropriate **tool** to communicate up-to-date information to project developers;
- Be aware of the **challenges** faced by the developers;
- Regional benchmarking (peer learning)



Summary and Discussion

- **Transparency** of procedures first step – **streamlining** indispensable!
- EPC, banks, investors and administrations are getting first experience with PV power plants – use those **experiences**!
- Administrative procedures and related costs can **undermine** any well designed support scheme!
- Streamlining of administrative procedures is the most **cost-efficient measure** to bring down development costs!
- Roof top PV needs other procedures than a large MW power plant – make it **adequate**!
- Countries with streamlined administrative procedures will be in **advantage** in an integrated market!



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Thank you!

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