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# Global Status Report 2014

## Regional Perspective Asia-Pacific

*A Focus on the ASEAN Community*

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- The ASEAN Region
- RE Development in the ASEAN
- Future Outlook



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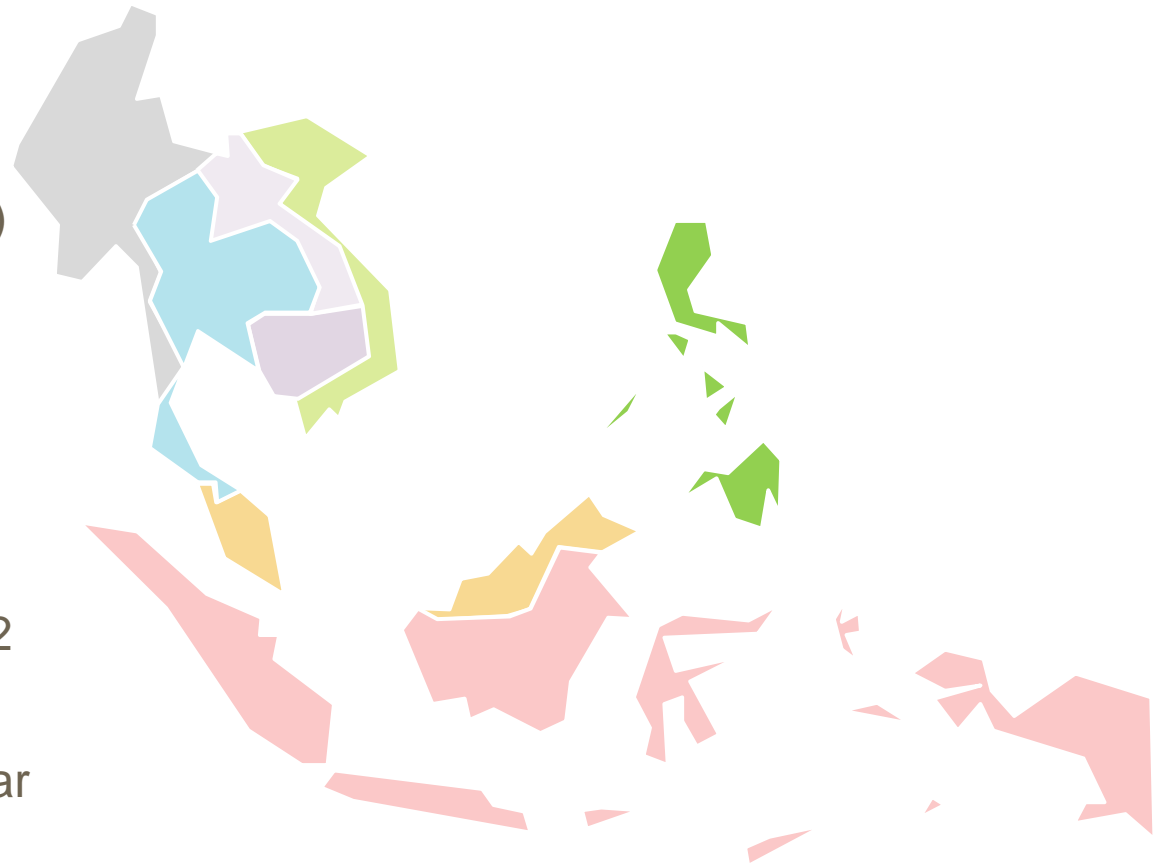


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## ASEAN Region: Overview

- 10 member states
- ~625 million population
- USD 2,400 billion GDP (2013)
- 5.1% GDP Growth (2013)
  
- Primary energy demand: 549 MTOE (2011)
- Electricity generation: 132,412 GWh (2011)
- Electricity demand: +4,2%/year





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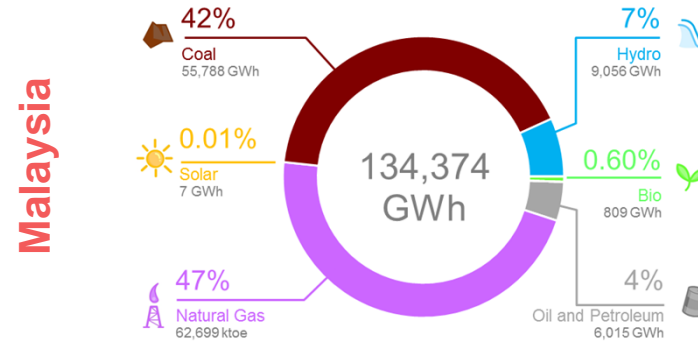
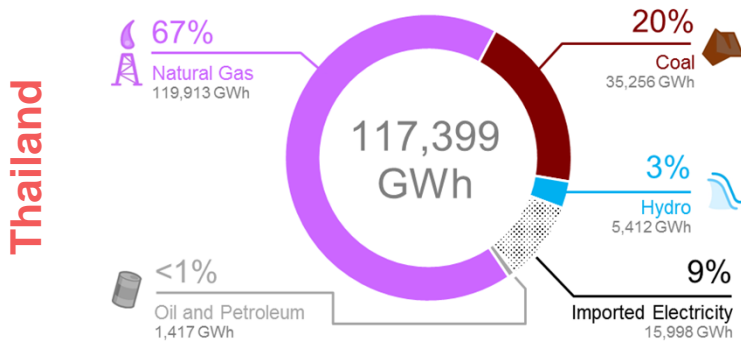
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## RE Development: Common Drivers

- Increasing demand
- Security of energy supply
- Energy subsidies



Electricity generation by source; [www.aseanrenewables.info](http://www.aseanrenewables.info)



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## RE Development: Common Drivers

- Energy access

Country	Electrification Rate
Cambodia	31%
Myanmar	49%
Laos	78%
Indonesia	80.4%
Philippines	81.7%
Vietnam	98%
Malaysia	99%
Thailand	99.3%
Brunei Darussalam	99.7%
Singapore	100%



Around **100 mln people** without access to electricity

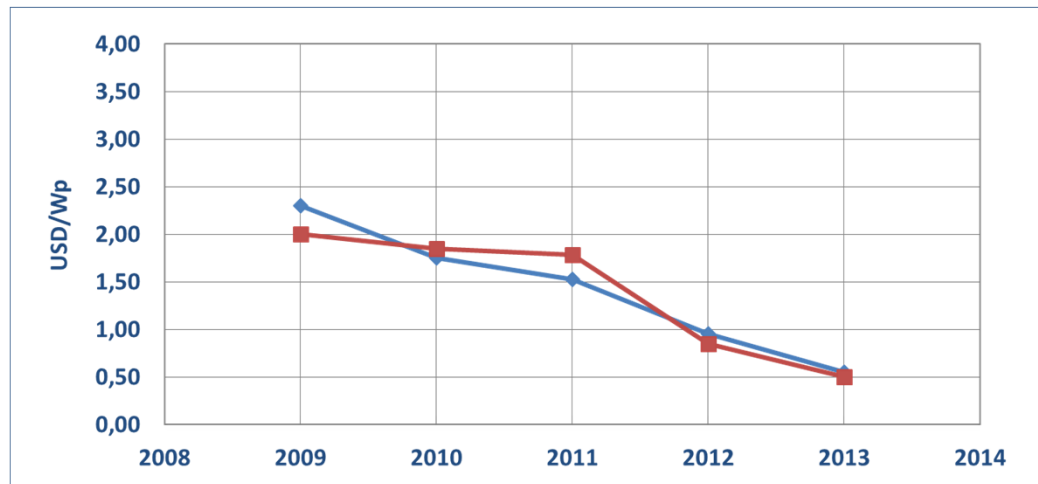
Source: [www.aseanrenewables.info](http://www.aseanrenewables.info)



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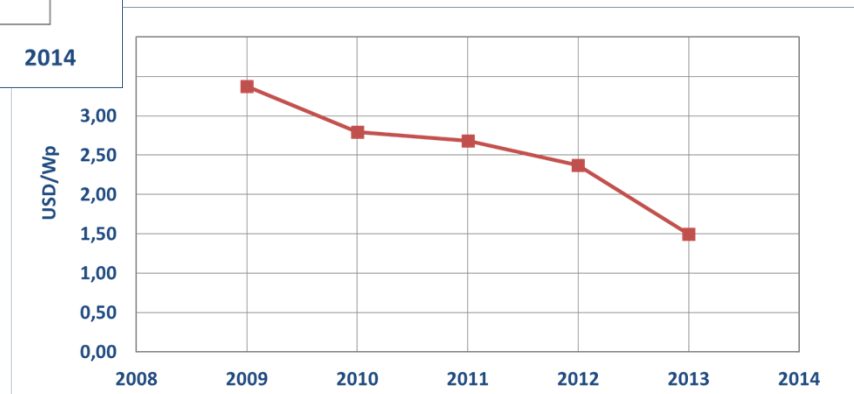
## RE Development: Common Drivers

- Decreasing development costs (PV)



EPC Price Trend  
in Thailand

PV Module Price  
Trend in Thailand



Source: Mott MacDonald 2014.





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## RE Development: Targets

- Collective RE Target for the ASEAN: 15% RE Share in total installed capacity (power generation) by 2015
- 8 of 10 ASEAN member state have set concrete RE Targets
- RE Targets of each ASEAN Member State have different focuses

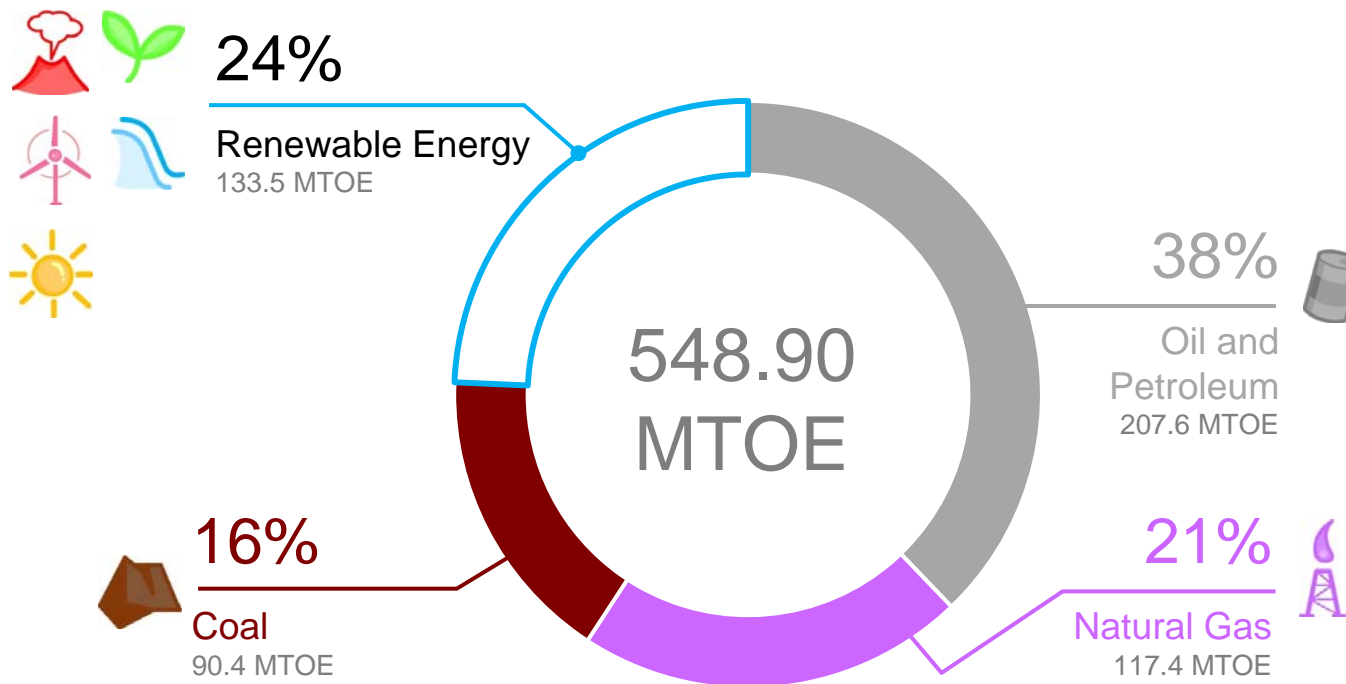
Member states	Target
Indonesia	17% share of RE in national energy mix by 2025 Including 2% liquefied coal
Thailand	20% share of RE in national energy mix by 2021 (Power + Thermal + Fuel)
The Philippines	15 GW installed capacity in 2030
Myanmar	15-20% share of RE in power generation by 2020



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## RE Development: Achievements

- Primary energy mix in ASEAN (2011, latest collective available data)

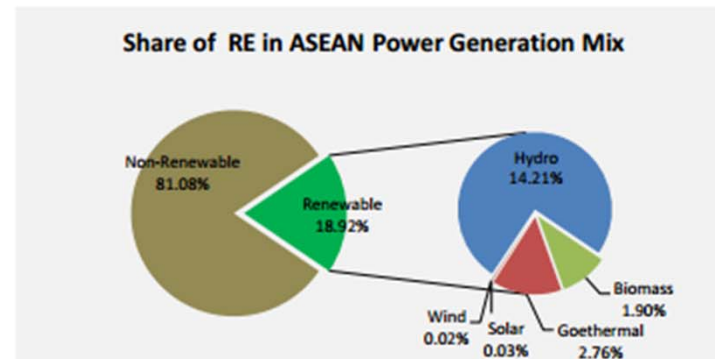
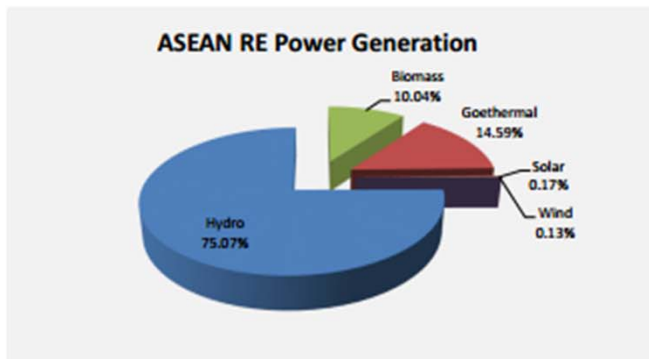
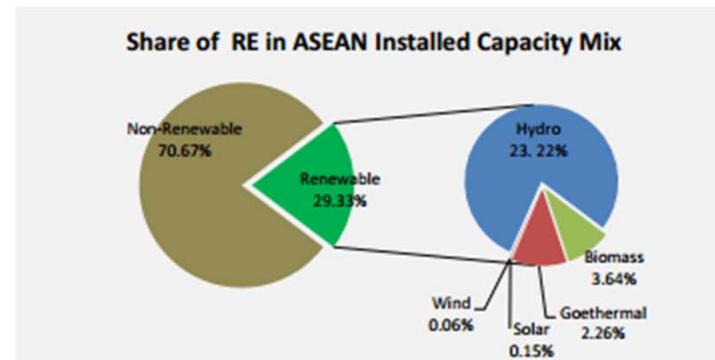
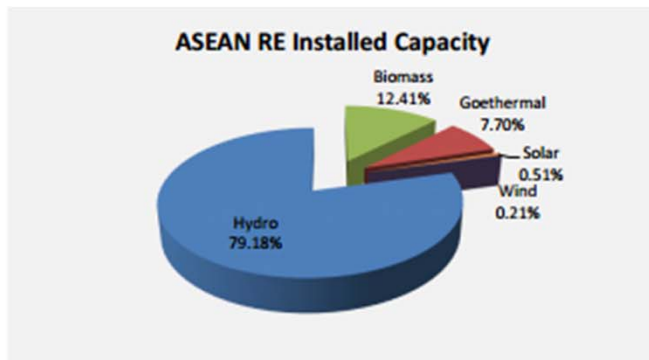


Source: ACE 2013.



# RE Development: Achievements

- RE in the ASEAN Power sector (2011)



Data from 2011; ACE 2013.



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## RE Development: Summary

- Ambitious targets set in place, but not fully met on country level
- RE markets very diverse, leading to different challenges (*adjustment of grid codes vs. basic electricity supply*)
- Considerable development on the regulation/policy side in some ASEAN countries (ID, MY, PH, TH, VN)

### BUT

- Still relatively unstable investment environment for large scale deployment of RE (exemption: TH)



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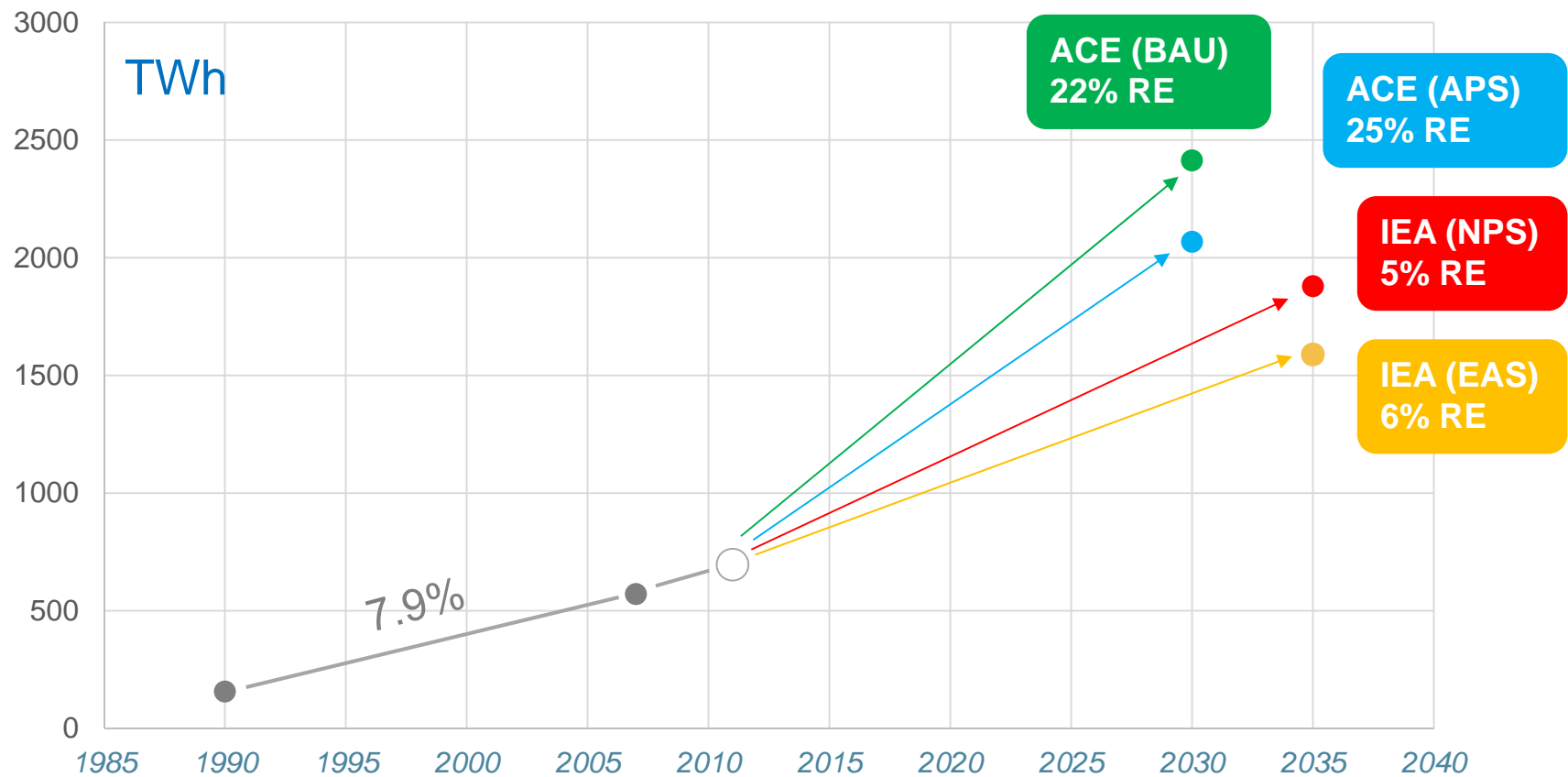
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## Outlook: Need for Power!



Source: ACE: 3<sup>rd</sup> ASEAN Energy Outlook, IEA: Southeast Asia Energy Outlook 2013



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## Outlook: Remaining Challenges

- “Teething trouble” which accompanies new developments
- Frequent changes/adjustments of RE support schemes
- Intransparent and complicated administrative procedures and case-by-case decision making
- Lack of data and data inconsistency
- No regional market (common technical norms and standards);
- Private investment from local investors still relatively scarce



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## Outlook: Remaining Challenges - 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
- Regulations in place but not disseminated
- Procedures not 'bankable'



**Need for Guidance**





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## ASEAN Perspective: Remaining Challenges - Transparency

“Where are *elegible locations* for the power plant?”

“*How much time* does the issuing of the environmental permit take?”

“What are the *costs* to obtain a temporary production license?”

“It took me almost *3 years* to obtain *several hundred licenses* and permits!”

“There is a regulation for the local government, but *nobody knows* about it”

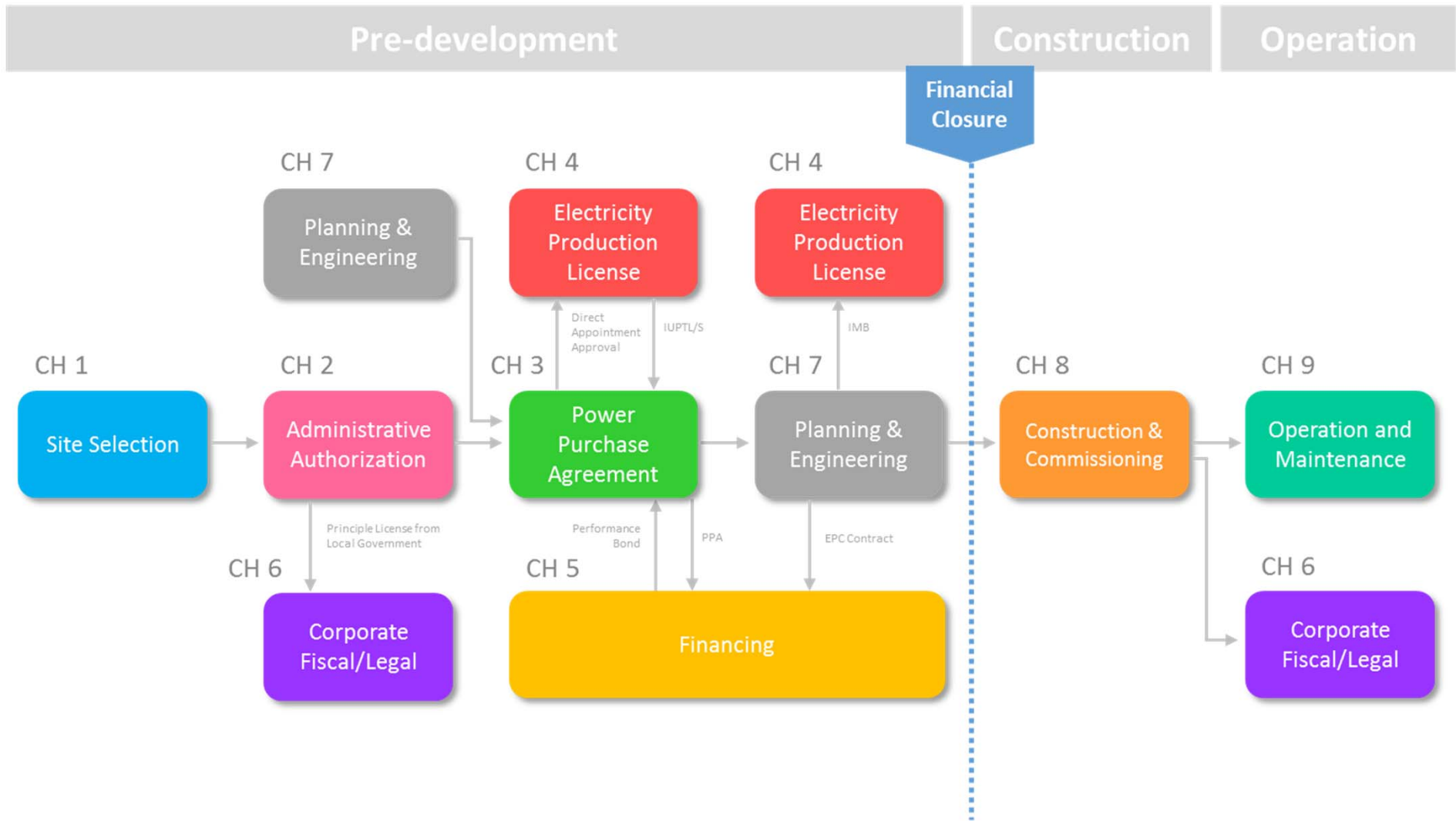


Need for Transparency

# Guideline for Biomass/Biogas Project Development in Indonesia

Overall Procedure (Flow Chart View)

Description >



TOC



Overall

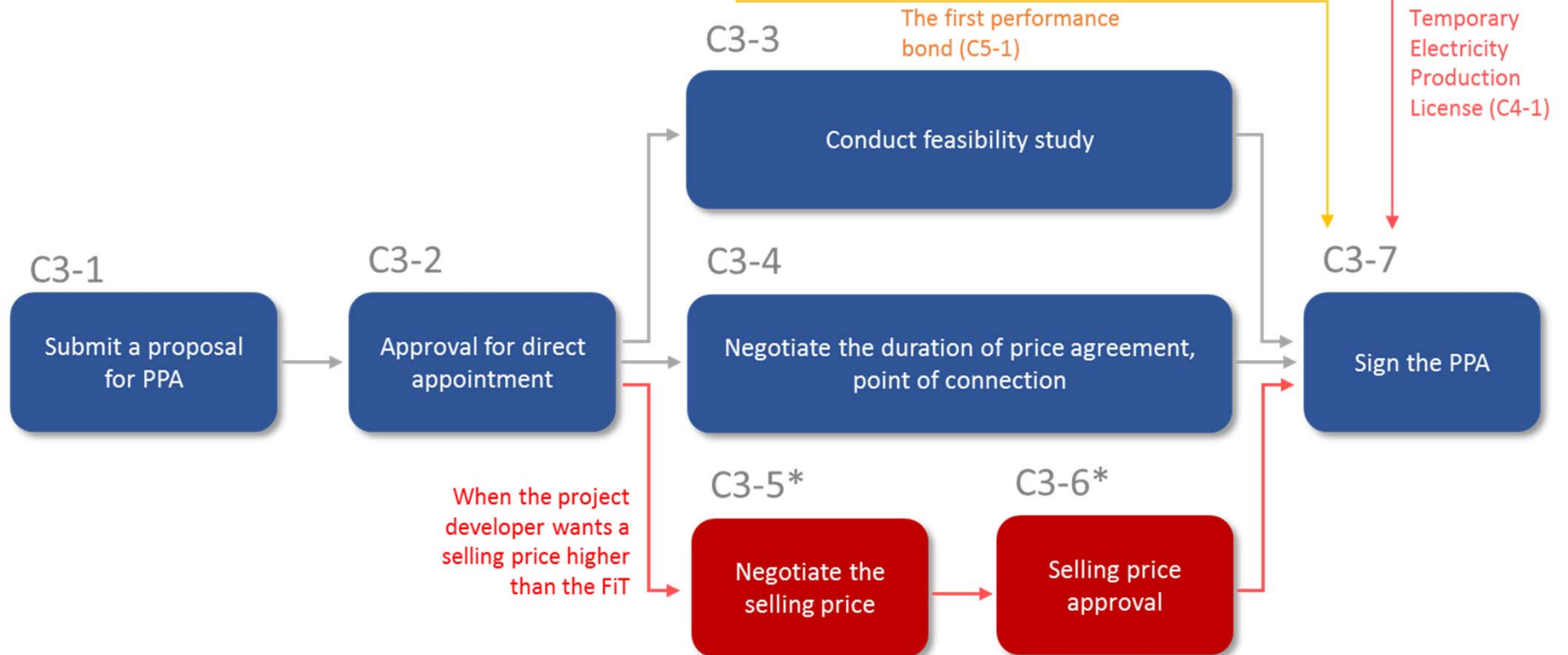


Overall

< Return



# Power Purchase Agreement





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## Further Information: ASEAN RE Guidelines



E-Guidebook, 1<sup>st</sup> Edition, May 2014



E-Guidebook, 1<sup>st</sup> Edition, May 2014

[www.re-guidelines.info](http://www.re-guidelines.info)

The screenshot shows the website's navigation menu with 'HOME', 'ABOUT RE GUIDELINES', 'HOW IT WORKS', and 'CONTACT US'. A map of Southeast Asia highlights Indonesia in red. A callout box for Indonesia includes the text: 'Indonesia - The largest archipelagic nation, member of G-20 nations, decentralized structure'. Below this, the 'SECTOR ENERGY' section lists 'BIOMASS / BIOGAS' and 'MINI HYDROPOWER'. The main content area features a 'Welcome to RE Guidelines Website' section with introductory text and a 'Subscribe to our Newsletter' form with fields for 'Full Name', 'Email address', and 'Organization', and a 'Submit' button.



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## Further Information: ASEAN RE Webportal

RE Country Profiles

[www.aseanrenewables.info](http://www.aseanrenewables.info)





# Thank You!

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