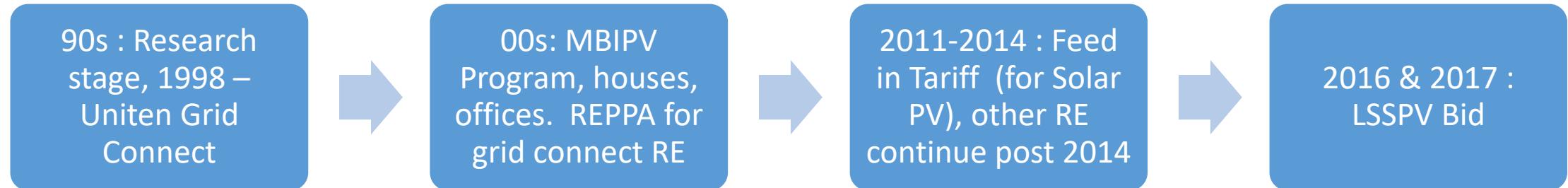


Solar Initiatives in Malaysia

Dato' Nor Azman Mufti
Chief Ventures Officer
Tenaga Nasional Berhad

Malaysia RE Historical Progression & Current Status



Feed-in-Tariff & Net Energy Metering (NEM)

Type of RE	Current Generation (MWh)	Current Installed Capacity (MW)
Biogas	87,288.89	58.64
Biomass	86,328.21	99.25
Small Hydro	33,214.25	30.30
Solar PV	184,622.61	375.99
Solar PV (NEM)	N/A	14.89 (Peninsular), 0.0345 (Sabah)
Total		579.1

LSS in Peninsular Malaysia and Sabah under ST

	Planned 2021-2026 (MW)	Awarded 2017-2020 (MW)	Currently in Operation (MW)
Peninsular Malaysia	1200	1140.38	-
Sabah	N/A	55.6	-

Future For Solar In Malaysia :
Rooftop, Water Surface,
Integration with Battery Energy Storage

TNB Initiatives



78MWp TNB Sepang Solar



45MWp TNB Bukit Selambau Solar



108 kWp Floating Solar Sg. Labu (Research Project)



Solar Hybrid : Offgrid



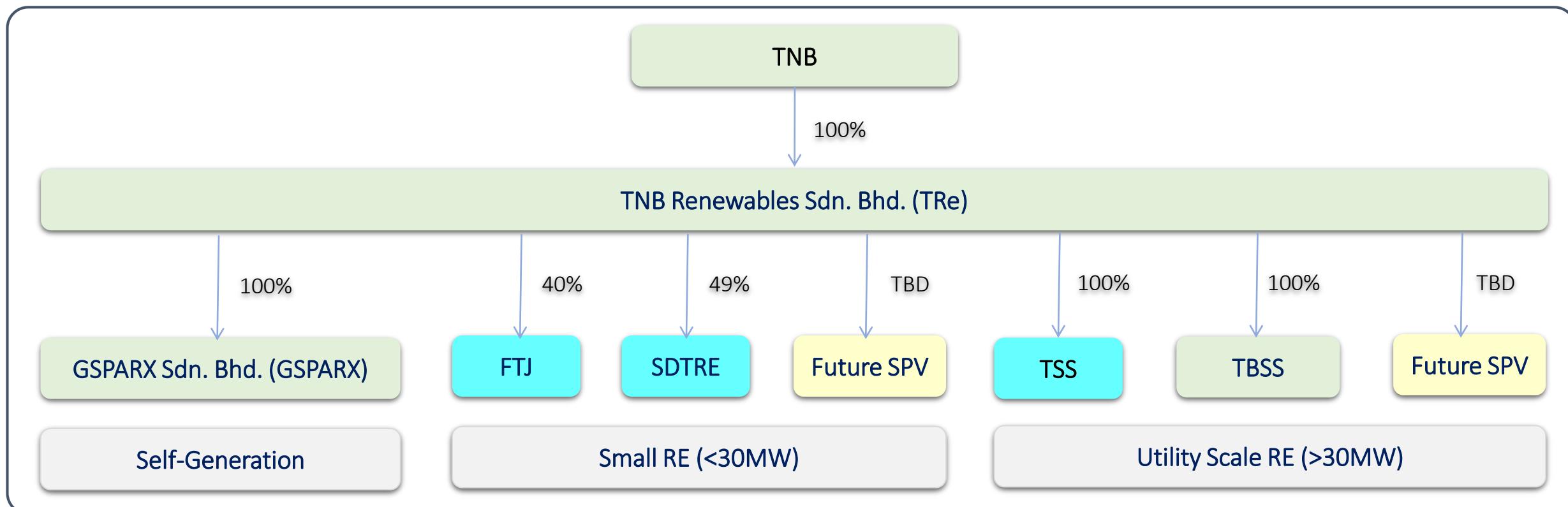
Retail Generation : Rooftop



Overseas Ventures

TNB Renewables Sdn. Bhd. (TRe)

TRe was incorporated on 22 January 2018 to be the investment holding company for RE related ventures and to consolidate all TNB's RE assets



Company in progress to complete the transfer process to TRe. The process is inclusive DD, fulfillment of CP and etc

Future Company (if necessary)

1. Continue to be active in Solar PV/ RE
 - Large scale
 - Floating
 - Rooftop
2. Increase collaboration/competency building
 - Internal
 - External – supply chain and installers
3. Strengthen relationship with Module and Inverter OEM
4. Emerging technology monitoring and readiness : Battery

Thank You