Wind resource map of Sri Lanka

Sri Lanka Wind Development Status

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Spatial distribution of annual average Wind Speeds (m/s)

Overview

- Electricity generation statistics
- Wind resource and wind projects status in Sri Lanka
- Challenges of wind development
- New policy initiatives taken towards development of wind energy in Sri Lanka



Generation of Electricity in Sri Lanka



Present Status of Wind Energy Development in Sri Lanka

Item	Quantity	Item	Quantity
Total installed wind		Retail power tariff	10 USc/kWh
power	128.3 10100	Wholesale power tariff	
Total wind projects in	100+20 MW	Industry General Purpose	11 USc/kWh 19 USc/kWh
pipeline		Hotel	14 USc/kWh
Total realizable wind potential	900 -1,100 MW (on shore)	Country Renewable	950MW by 2020
potential		Energy larget	1,825 by 2025
Total estimated wind potential	On shore	Wind Energy Target	250MW by 2020
			600 MW by 2025
	Off shore	Total installed capacity	3,932 MW
	Being analysed	of generation	
Present Wind energy		Peak Load	2,450 MW
tariff	14 USC/KWN	Off Peak Load	1160 IVIW
Other incentives:			
		Net Generation	12,357 GWh
- Import tax	85% Waived	Electrification	
- Depreciation	10 years	ratio	98%





Wind Project Status in Sri Lanka



	Wind Projects	MW
	Commissioned	129
	Under Evaluation	100 + 20
•	Registered Projects	483

Wind Development in the Mountains















Challenges for Wind Development



- Geographical distribution of demand/consumers and wind resources
- Requirement for new and updated transmission network to absorb variable RE including wind
- Limited opportunity for local value addition
- Lack of power plants to cater the intermittency (Especially in drought seasons)
- Lack of dynamic modelling / advanced forecasting tools and technical knowhow
- Logistics (Transportation / Erection)

What can be done to accelerate wind development?

- Detailed wind resource mapping
- Wind resource development road map (Resource, land use, socio economic impacts, Transmission etc.)
- Grid impact study to understand enhancements and strengthen the generation and transmission facilities
- System operations for dispatching of wind with high priority

New developments in terms of policy, tariff and other enablers

New tariff will be announced soon

Development Strategy

- Blanket approval given up to 2 MW
- 2 to 5 MW Need prior approval from CEB before developing the project
- Above 5 MW Through competitive bidding
- I00 MW or above developed as a wind parks