

### **UTILITY GREEN TARIFF: UGT**

Provision of green electricity services by Thailand's electricity utilities.





### What is Green Electricity? ———

Electrical energy with "Renewable Energy Certificate (REC)," certifying the origin and genuine generation of the electricity. On such certificate, the name of the power plant, the plant location, the amount of electricity generated, the generation period, and the type of renewable energy used for the generation, are stated.

### What is UGT?

Electricity pricing scheme for the provision of green electricity offered by the electricity service providers, which are state-owned public utilities, to the electricity users as alternatives to the normal provision, according to the provision guideline and tariff setting criteria set by the ERC.





#### Who are the Service Providers?

The Electricity Generating Authority of Thailand (EGAT), the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA), are UGT providers.

They supply green electricity from state-owned renewable energy projects and from privately-owned renewable energy projects where the rights to RECs belong to the utilities which are parties to their Power Purchase Agreements (PPAs). This way, the ownership of RECs can be transferred to the end-users who subscribe to a particular UGT program through the Electricity Supply Agreement (ESA) they have with the utilities for making credible claims.

### Which certification standard of RECs does UGT use?

I-REC(E) of the Internation Tracking Standard Foundation (I-Track)





#### How many types of UGT are there?

Currently, there are 2 UGT Programs as resolved by the National Energy Policy Council (NEPC):

**1.UGT1 – RE sources** (RE power projects) are not specified by end users in the Electricity Supply Agreements (ESAs). For this program, REC is charged on top ofthe normal electricity price, and the ESA term is 1 year.





**2.UGT2 – RE sources** (RE power projects) are specified by end users in the ESAs. (Re-designing the electricity tariff structure with embeded REC to disconnect the tariff from fossil fuel prices and link the tariff to the costs of electricity purchased from the group of renewable electricity projects (portfolio) that the customer specified in the ESAs, the term of which is 10 years, with options to opt out.

Key Features - UGT1 vs. UGT2		
	UGT1	UGT2
1. Use I-REC Traking Standard	<b>Ø</b>	•
2. Electricity Price and REC are bundled in one bill	<b>Ø</b>	•
3. Public utility service	<b>Ø</b>	•
4. Convenient-no hassle of power purchase agreement (PPA) management	<b>Ø</b>	•
5. End Users receive redeemed REC (no price arbitrage)	<b>Ø</b>	•
6. Electricity Supply Agreement contains names of specified RE power plants	X	•
7. Energy Price varies ased on production cost of specified RE power plants	X	•
8. REC and electricity are bundled from the same specified sources	X	•
9. Help increase new RE power plants in the power system	X	•
10. Price Stability (de-coupled from fossil fuel prices; REC price embedded)	X	<b>Ø</b>
11. End Users can subscribe partially (not 100% of their electricity demand)	<b>Ø</b>	X



- The supply of UGT1 is from EGAT's existing Hydro power stations
- The supply of UGT2 is from additional solar farms, solar farms with battery energy storage systems, and wind farm projects that are yet to be commissioned.

# Can UGT be used for Green Hydrogen Production?

Definitely. Green hydrogen is produced through the electrolysis of water using renewable electricity, making it a clean energy carrier. While I-REC(E) tracks electricity for UGT, the I-TRACK foundation has also introduced the I-REC(HX) Product Code to certify hydrogen and hydrogen derivative fuels, such as green hydrogen; thereby linking the renewable generation source in UGT to the hydrogen product.





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