

# CLP Renewable Energy Certificate (CLP REC) Specification

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# 1 - INTRODUCTION

CLP Power Hong Kong Limited (“**CLP**”) introduced the CLP Renewable Energy Certificate (“**CLP REC**”) on 1 January 2019. The aim is to provide a means for purchasers of CLP RECs to demonstrate renewable electricity purchase, delivery and use within the broader context of a voluntary commitment to protect the environment and support the development of local renewable energy. This is particularly relevant to those who do not have resources to generate renewable electricity themselves. The CLP REC is developed under the Scheme of Control Agreement and recognised by the Hong Kong Government.

# 2 - THE PRODUCT

## **PRODUCT OVERVIEW**

The CLP REC is a certificate which represents units of electricity produced by local renewable energy sources and purchased or generated by CLP. These renewable energy resources include only solar, wind, and/or landfill gas.

## **CUSTOMERS**

A CLP electricity supply account holder may purchase CLP RECs.

## **ENVIRONMENTAL ATTRIBUTES**

Each unit of renewable electricity in a CLP REC represents all the environmental attributes associated with one kilowatt hour (“**kWh**”) of electricity generated from eligible renewable energy systems (“**Renewable Electricity**”). The holder of a CLP REC is entitled to the rights to claim all greenhouse gas and other pollutant emission reduction benefits associated with the kWh of Renewable Electricity when it was generated (“**Environmental Attributes**”). The Environmental Attributes do not include any energy, capacity, reliability, or other power attributes from the renewable energy system.

## **PRODUCT OFFERING**

Customers will choose the amount of Renewable Electricity (100 kWh or more) in the CLP REC they would like to purchase.

A prospective product content label (“**PCL**”) will be made available to customers via access to CLP’s website/app prior to purchase setting out the anticipated underlying fuel mix (in terms of percentage of renewable resource type) and vintage (year) of the generation that is associated with the CLP REC they may purchase. A historical PCL will be provided to customers via access to CLP’s website/app within 3 months after each vintage setting out the actual percentage of renewable resource type(s) and vintage (year) of the generation that is associated with the CLP REC purchased.

A digital CLP REC will be issued to the purchaser. The information shown on the digital CLP REC will include:

- name of CLP registered customer (holder of CLP REC);
- amount of Renewable Electricity purchased in kWh;
- a unique digital CLP REC number; and
- issue date of the digital CLP REC (month/year).

Each CLP REC will meet the following criteria:

#### Date of Renewable Electricity Connection (“New Date”)

The CLP REC is designed to support the development of local renewable energy in Hong Kong. CLP will supply CLP RECs representing Renewable Electricity generated from renewable energy systems that are connected to CLP’s power network on or after 4 May 2018 (“**New Date**”).

During the initial period when the CLP REC is first offered to customers (“**Product Launch Transition Period**”), a minimum of 20% of Renewable Electricity represented by the CLP RECs will be sourced from renewable energy systems that have been connected to CLP’s power network on or after the New Date (with the remaining percentage being sourced from renewable energy systems that were connected before the New Date). As more renewable energy systems connect to CLP’s power network, the proportion of Renewable Electricity generated from systems connected after the New Date will be increased.

#### Vintage

The CLP REC will represent Renewable Electricity that is generated in the calendar year in which the CLP REC is sold, the first three months of the following calendar year, or the last six months of the prior calendar year.

## 3 - CLP REC ISSUANCE AND TRACKING

### PURPOSE OF CLP REC INVENTORY SYSTEM

The CLP REC Inventory System (“**Inventory System**”) is CLP’s inventory system of Renewable Electricity and the associated Environmental Attributes available for sale in the form of CLP RECs. Each unit of Renewable Electricity and the associated Environmental Attributes will not be assigned to more than one CLP REC. The Inventory System will create and track the issuance and retirement of CLP RECs.

All Renewable Electricity and Environmental Attributes contained in the Inventory System, whether from renewable energy systems participating in the CLP Feed-in Tariff Scheme (“**CLP FiT Scheme**”) or owned by CLP, will be the property of CLP prior to the associated CLP RECs being sold to customers and retired from the Inventory System.

## RENEWABLE ENERGY SYSTEM ELIGIBILITY AND REGISTRATION

The renewable energy systems registered in the Inventory System must be traceable in records and meet certain eligibility criteria, including:

- renewable energy resource being either solar, wind and/or landfill gas;
- location of the renewable energy system being in Hong Kong;
- renewable energy system must be connected to CLP's power network in Hong Kong; and
- date of connection to CLP's power network must be on or after the New Date (except during the Product Launch Transition Period).

In order to be registered in the Inventory System, documentation or other evidence verifying the above criteria along with an application for registration to CLP via the CLP FiT Scheme or other applicable programmes must be provided to CLP.

## INVENTORY SYSTEM OPERATIONS

### CLP REC Issuance

The Inventory System will create CLP RECs according to the amount of Renewable Electricity associated with the CLP RECs as purchased by customers.

### *Renewable Energy System Data Requirement - Static Data*

CLP must receive certain data in respect of an eligible renewable energy system before the system can be registered in the Inventory System. This type of data describes the constant physical attributes of the renewable energy system ("**Static Data**") includes:

- owner contact information;
- representative contact information (if primary contact is not the owner of the renewable energy system);
- renewable energy system location;
- renewable energy system capacity;
- meter information;
- approved grid connection agreement; and
- date of connection to CLP's power network.

Static data must be reviewed for accuracy and verified by CLP prior to acceptance of renewable energy system registration in the Inventory System. Where the renewable energy system is not owned by CLP, such renewable energy systems are contractually bound to pass the title of all Environmental Attributes associated with the Renewable Electricity to CLP.

### *Generation Data Requirement - Dynamic Data*

Generation data of renewable energy systems registered in the Inventory System will be captured by its meters and transmitted to CLP. The meters and the transmission process will be verified and checked periodically. CLP RECs are issued in the Inventory System based on the generation data transmitted. Each unit of Renewable Electricity in the CLP REC issued shall represent one kWh of

electricity generation from a traceable source and will be clearly identified within the Inventory System by:

- date of the CLP REC issuance (month/year); and
- date range of Renewable Electricity generation (month/year).

#### CLP REC Retirement

CLP will maintain a ledger of all Renewable Electricity registered in the Inventory System for the issuance of CLP RECs. The Inventory System will retire a CLP REC with its associated Renewable Electricity and Environmental Attributes once the CLP REC is sold to a customer. As such, no Renewable Electricity and associated Environmental Attributes represented by a CLP REC will be sold to more than one customer.

### **MONITORING**

CLP will monitor the Renewable Electricity registered in the Inventory System to check its accuracy. Static data will be reviewed and reverified as necessary. In addition, CLP requires that the renewable energy systems registered in the Inventory System to notify CLP of any changes in the type of renewable resource or technology, the status of its meter(s), and the decommissioning or repowering of the renewable energy system. Site visits to the renewable energy systems may also be carried out as determined by CLP.

CLP will assess as necessary any claims in relation to Renewable Electricity or Environmental Attributes to identify potential double claims or double counting of Renewable Electricity, Environmental Attributes or CLP RECs.

### **VERIFICATION OF DATA IN INVENTORY SYSTEM**

CLP will develop a verification procedure to be implemented by a qualified third party to check that the processes for inputting data into the Inventory System are properly implemented and that operational errors are avoided (e.g. incorrect or improper retirements, inaccurate ledger entries etc.).

### **INVENTORY SYSTEM PUBLIC REPORTS**

Inventory System reports setting out information related to the CLP RECs (such as a list of the top CLP REC customers with associated amount of renewable electricity purchased and historical PCLs) will be publicly available to view.

## **4 - PRODUCT VERIFICATION**

The CLP REC programme will undergo annual verification procedures. The verification procedures will reconcile CLP REC sales with the amount of Renewable Electricity generation to verify that the quantity of CLP RECs sold match the quantity of CLP REC retirements.

## 5 - MARKETING AND CLAIMS GUIDANCE

CLP and all renewable energy systems registered in the Inventory System must make accurate marketing and renewable energy claims.

Purchasers of the CLP REC may seek independent advice or guidance in relation to their renewable energy claims. Depending on the quantity of CLP RECs purchased, the purchaser may claim that the corresponding portion of their energy consumption is renewable energy.