

Australian Capital Territory

Climate Change and Greenhouse Gas Reduction (Renewable Electricity Target Measurement Method) Determination 2020

Disallowable instrument DI2020–17

made under the

Climate Change and Greenhouse Gas Reduction Act 2010, s10 (Measuring renewable energy targets—determinations)

1 Name of instrument

This instrument is the *Climate Change and Greenhouse Gas Reduction (Renewable Electricity Target Measurement Method) Determination 2020**.

2 Commencement

This instrument is taken to have commenced on 1 January 2020.

3 Renewable Energy Target Compliance Measurement Method

I determine that the method in the Schedule will be used for measuring compliance with the target as set under section 9(1) of the *Climate Change and Greenhouse Gas Reduction Act 2020*.

Shane Rattenbury MLA
Minister for Climate Change and Sustainability
19 February 2020

*Name amended under Legislation Act, s 60

Schedule

A. Renewable electricity percentage calculation

The first compliance assessment will be undertaken for a 6-month period from 1 January 2020 to 30 June 2020, with annual assessment on a financial year basis thereafter.

Renewable electricity percentage is calculated as:

$$\text{Renewable Electricity percentage} = \frac{\text{renewable electricity supply}}{\text{ACT electricity consumption}} * 100$$

B. Measuring electricity consumption

ACT electricity consumption is calculated as the total energy transferred from the Transmission System Operator's (currently Transgrid) system to the Distribution System Operator's (currently Evoenergy) network.

C. Measuring renewable electricity supply

(i) Feed in tariff contracts with large-scale generators

Each large-scale generation certificate (LGC) voluntarily surrendered by the Territory will be counted as 1 megawatt hour of renewable electricity generation, attributable to electricity consumers in the Territory.

LGCs will be assigned to a certain compliance period, which may or may not correspond to the year in which they were created or surrendered.

(ii) The ACT's share of Commonwealth policies

The Territory may count the ACT's share of renewables driven by Commonwealth policies, such as the large-scale renewable electricity target under the *Renewable Energy (Electricity) Act 2000*.

Measurement for the ACT's share of the large-scale renewable electricity target will be based on the formula below:

$$S_1 = \alpha_i \times (\beta_i + \gamma_i)$$

Where,

S_1 = Total LRET purchases;

α_i = Renewable power percentage;

β_i = Total electricity supplied to residential customers;

γ_i = Total electricity supplied to non-residential and other customers.

Data sources:

α_i - Clean Energy Regulator

<http://www.cleanenergyregulator.gov.au/RET/About-the-Renewable-Energy-Target/The-certificate-market/The-renewable-power-percentage>.

β_i - ActewAGL Distribution (a component of the annual RIN submission to the AER).

(iii) Greenpower purchases in the ACT

The ACT may also count Greenpower purchases in the ACT towards its target. The MWh figures for ACT Greenpower purchases are published in the annual audit of the Greenpower program.

$$S_2 = \sum_i \delta_i$$

Where,

S_2 = Total GreenPower sales in the ACT;
 $\sum_i \delta_i$ = Sum of Quarterly GreenPower Sales in the ACT

Data sources:

$\sum_i \delta_i$ = National GreenPower™ Accreditation Program. Annual Compliance Audit for 1 January 2013 to 31 December 2013 <http://www.greenpower.gov.au/Business-Centre/Annual-Audit/~media/7E75EC20541B4CA39E97DE708D1816B6.pdf> (see Table 8: Summary of GreenPower Sales 2013 (MWh)).

Also National GreenPower Accreditation Program Status Report. Executive Summary. Quarterly status of National GreenPower Accreditation Program http://www.greenpower.gov.au/~media/Business%20Centre/Quarterly%20Reports/2014_Q4_Report.pdf

(iv) Grid connected generation within the ACT

The Territory may count electricity exported from grid connected generation within the ACT. This includes rooftop solar, as calculated below.

$$S_3 = \sum_i \varepsilon_i$$

Where,

S_3 = Total Rooftop PV output;
 $\sum_i \varepsilon_i$ = Sum of metered output in the year of all PV installations with capacity less than 200 kW in the following categories:

- supplied with ACT feed in tariff (f.i.t.)
- supplied under gross metering but without f.i.t.
- supplied under net metering.

Data sources:

$\sum_i \varepsilon_i$ - As advised by Evoenergy in regular reports to the ACT Environment, Planning and Sustainable Development Directorate

This could also include other 'grid connected assets' in the ACT including large-scale renewable electricity generators, provided they are not counted under **Error!**

Reference source not found..

(v) The ACT's share of Below Baseline NSW region NEM renewable generation

$$S_4 = \frac{\sum_{m=1}^5 G_m}{5} \times \left(\frac{1}{n} \times \sum_{i=1}^n x_i \right)$$

Where,

1 = Inventory year - 4;
 2 = Inventory year - 3;

- 3 = Inventory year – 2;
- 4 = Inventory year – 1;
- 5 = Inventory year.

Where,

- n = the number of inventory years from 2012-13 to the current inventory year;
- x_i = the ACT's percentage share of below baseline NSW region NEM renewable generation as calculated for the relevant inventory year.

and

For each of the following Stations: Hume, Blowering, Guthega, Tumut 1, Tumut 2, Tumut 3 (net of pump energy input)¹:

$$G_m = \sum_{n=1}^6 \left(\text{Min} \left(ES_n, \left(\frac{\omega_n + \varphi_n}{2} \right) \right) \right)$$

Where,

For each of the following Stations:

- 1 = Hume;
- 2 = Blowering;
- 3 = Guthega;
- 4 = Tumut 1;
- 5 = Tumut 2;
- 6 = Tumut 3 (net of pump energy input);

$\text{Min} \left(ES_n, \left(\frac{\omega_n + \varphi_n}{2} \right) \right)$ = the lesser of:

- ES_n = electrical energy sent out in the inventory year, and
- $\frac{\omega_n + \varphi_n}{2}$ = the simple average of the RET Baseline in the calendar year covering the first half of the reporting year and the calendar year covering the second half of the reporting year.

ED = Electrical energy supplied by TransGrid to Evoenergy;

ND_{NSW} = Total NSW region Native demand;

NG_{NSW} = NSW region Small Non-scheduled Generation;

TL_{NSW} = NSW region transmission losses.