



## Programs at a Glance

Wondering what program may be right for you? It really depends on your individual situation and your short- and long-term goals. If you're trying to decide between available programs for private rooftop solar or other renewables, here are a few questions to help determine the best fit.

How do you currently use energy? How might that change in the future? What do you want to achieve through participating in one of our programs? Here's a quick comparison of the available programs.

This chart provides an example of a hypothetical total bill for each available program using the same amount of energy delivered and received. As with all examples, your result will vary depending your energy use. Please review the details for each program for additional information that will help you determine the program that's right for you.

OAHU	CGS	CGS Plus	CSS	Smart Export
<b>Export Allowed</b>	Yes	Yes	No	Yes
<b>Export Restrictions</b>	No	No	N/A	Solar Day
<b>Reconciliation</b>	Monthly	Annual	N/A	Annual
<b>Minimum Bill</b>	\$25	\$25	\$25	\$25
<b>Credit rate (c/kWh)***</b>	\$0.15	\$0.10	N/A	\$0.15
<b>Program Cap</b>	51.3 MW	35 MW	N/A	25 MW
<b>Inverter Requirements</b>	Advanced with Volt Var and Frequency Watt activated; Fixed Power Factor deactivated.*	Advanced with Volt Var and Frequency Watt activated; Fixed Power Factor deactivated.	Advanced with Volt Var and Frequency Watt activated; Fixed Power Factor deactivated.	Advanced with Volt Var and Frequency Watt activated; Fixed Power Factor deactivated.
<b>Controls</b>	N/A	Yes: Utility or Aggregator	Customer	Yes: Economic
<b>Communications</b>	N/A	N/A	Yes	N/A
<b>Hypothetical Bill Comparison:**</b>	\$93.28	\$118.38	\$169.09	\$93.79

\* Prior to 3/10/2018 CGS Customers were required to program their advanced inverters to include TROV-2, Full ride-through and Fixed Power Factor. They must now be re-programmed to current requirements as noted in Rule 14H.

\*\* Assumes a residential bill with Delivered (DEL) energy of 503 kWh, Received (REC) energy of 907 kWh, with a NET of 404 kWh and the application of the monthly bill credit for Oahu. Does not reflect any benefit from accrued credits. Calculation is based on rates effective October 2018. Some rates vary monthly. Non-residential customers subject to different rate schedules and higher minimum bill.

\*\*\* Credit rate shown is rounded to the nearest whole value. Standard retail rates applied for energy delivered/used when rooftop solar or other renewable system is not in use or exporting to the grid. Customers on rates other than retail should contact us to verify whether those options will apply in coordination with these programs.

Customer Grid-Supply remains open until installed capacity is reached. New applications are placed into queue for processing when space in the program becomes available. There is no guarantee that space will become available. New applications may be submitted via mail and are not supported in the Customer Interconnection Tool.

NEM and NEM Plus are not shown in this table. The NEM program is closed and NEM Plus is only available to customers already enrolled in the NEM program.



# Hypothetical Oahu Bill and Credit Calculations

This chart shows how we calculated the hypothetical total bill for each program. Here are the key items to note:

- We used the same net kilowatt hour usage to demonstrate the impact of each rate.
- The dollar amount shown is derived from multiplying the usage by the rate in effect in October 2018. Just like usage, some rates adjust monthly too. So, please keep that in mind while studying this example.
- The credit calculation is an important difference with the program. Please refer to the charts below to see how those credits are determined.

Oahu	NET kWH	CGS Total	CGS Plus Total	CSS total	Smart Export Total
Customer Charge	Flat	11.5	11.5	11.5	11.5
Base Fuel Energy	404	51.45	51.45	51.45	51.45
Non Fuel Energy	404	55.49	55.49	55.49	55.49
Energy Cost Adjustment	404	20.16	20.16	20.16	20.16
IRP Cost Recovery	404	-0.03	-0.03	-0.03	-0.03
PBF Surcharge	404	2.34	2.34	2.34	2.34
Purchased Power Adjustment	404	21.76	21.76	21.76	21.76
RBA Rate Adjustment	404	5.21	5.21	5.21	5.21
<b>Grid Supply Credit</b>	<b>404</b>	<b>-75.81</b>	<b>-50.71</b>	<b>N/A</b>	<b>-75.3</b>
Green Infrastructure Fee	404	1.21	1.21	1.21	1.21
Total		93.28	118.38	169.09	93.79

The next two charts provide a look at how the bill credit is calculated. As with the previous example, we've kept the amount of delivered, received and net kilowatt hours the same for comparison purposes. However, we've demonstrated how the banked credit is applied by reversing the amount of delivered and received energy. Here are the key items to note:

- Credits are earned for each kilowatt hour you delivered to the grid each month multiplied by the rate for your chosen program.
- Smart Export and CGS Plus allow you to accrue and use credits over a one-year period. So, if the utility receives more energy from you than it delivers – you'll be able to bank unused credits to use in other months when the situation is reversed.
- Each year, remaining credits in your bank will be applied to any eligible kilowatts that haven't yet been credited during the previous 12 months. Credits that remain after the true-up are surrendered.
- Appropriately sizing your system is the most important consideration. Ideally, you want to have earned enough credits to offset each kilowatt hour of energy delivered to you throughout the year and end up (after the annual true-up) with very few, if any, banked credits remaining. However, make sure to consider future energy use plans such as home improvements (i.e. split A/C) or the purchase of electric vehicles when determining your overall system size.



**Hawaiian  
Electric**

<b>Oahu: When energy delivered to customer exceeds energy received from customer.</b>						
Program	Rate/kWh	DEL	REC	NET	Monthly Total	Banked Credit
CGS	0.1507	907	503	404	\$75.80	N/A
CGS Plus	0.1008	907	503	404	\$50.70	0
CSS	N/A	907	503	404	N/A	N/A
Smart Export	0.1497	907	503	404	\$75.30	0

<b>Oahu: When energy delivered to customer is less than energy received from customer.</b>						
Program	Rate/kWh	DEL	REC	NET	Monthly Total	Banked Credit
CGS	0.1507	503	907	404	\$75.80	N/A
CGS Plus	0.1008	503	907	404	\$50.70	\$ 40.72
CSS	N/A	503	907	404	N/A	N/A
Smart Export	0.1497	503	907	404	\$75.30	\$ 60.48