



City of Emeryville

CALIFORNIA

MEMORANDUM

DATE: March 20, 2018
TO: Carolyn Lehr, City Manager
FROM: Andrew Clough, Acting Public Works Director
SUBJECT: East Bay Community Energy Product Choice

Resolution Of The City Council Of The City Of Emeryville Requesting East Bay Community Energy Enroll All City Of Emeryville Municipal Accounts In Brilliant 100 (100% Greenhouse Gas Free) As The Default Electricity Product

Resolution Of The City Council Of The City Of Emeryville Requesting East Bay Community Energy Enroll All City Of Emeryville Commercial, Industrial, and Institutional Accounts In Brilliant 100 (100% Greenhouse Gas Free) As The Default Electricity Product

RECOMMENDATION

Staff recommends that the City Council adopt both of the attached resolutions.

BACKGROUND

Emeryville's Climate Action Plan, adopted in 2016, identifies Community Choice Aggregation (CCA) as a priority for reducing greenhouse gas (GHG) emission, a major contributor to climate change. A CCA allows public agencies to procure a greater percentage of electrical power from renewable and/or GHG-free sources on behalf of electricity customers. Unlike an investor-owned utility like Pacific Gas & Electric (PG&E), a CCA does not own the transmission and delivery systems, but is responsible for generating and/or purchasing electricity used by residents and businesses. With a CCA, energy transmission, distribution, repair, customer service, and billing continue to be administered by PG&E. Customers retain the choice to continue to purchase power directly from PG&E by opting out of the CCA. Customers who receive electricity from a CCA are still entitled to PG&E's special pricing, efficiency programs, and rebates.

Emeryville was the first City in the region to update its Climate Action Plan, in 2016, to align with the State of California's emissions reduction targets of reducing the community-wide GHG emissions to 40% below 2004 baseline emission levels by 2030 and to 80% below baseline levels by 2050

As part of an effort to meet the City's GHG emission reduction goals and to increase opportunities for local development of renewable energy, the Emeryville City Council voted to join the East Bay Community Energy (EBCE) CCA on November 1, 2016, and subsequently appointed representatives to its Board of Directors.

DISCUSSION

EBCE intends to roll out electricity to municipal, commercial, industrial and institutional customers in June, 2018. Residential accounts will receive power from EBCE in late 2018 or early 2019, and City Council will have an opportunity to discuss the default power content for that product later this year.

Regional CCA Product Offerings

	2016						2018		
	PG&E	MCE (Marin)	SCP (Sonoma)	PCE (Peninsula)	CPSF (SF)	SVCE (Silicon Valley)	PG&E *	EBCE Bright Choice	EBCE Brilliant 100
Renewable Content (default)	33%	55%	42%	50%	40%	50%	42%	38%	40%
GHG-free (default)	69%	68%	91%	80%	78%	100%	88%	85%	100%
Commercial Rate compared to PG&E**	-	+0.5%	+2%	-5%	+2.4%	-1%	-	-1.5%	equal

**PG&E Forecast from November 2017 Renewable Portfolio Standard report using statewide investor-owned utility average and calculations for GHG-free based on PG&E testimony filed on 12/6/2017 for its Energy Resource Recovery Account. The most conservative estimate of this number is 69%, which was the 2016 value.*

***Discount applies only to the generation costs for electricity and not for transmission, distribution, and other costs borne by PG&E*

EBCE Product Offerings

The EBCE Board recently began discussions about power mix and rates for their electricity. The Board set the following power mix and rates on February 7, 2018:

Product	Renewable Content	GHG-Free Content ¹	PG&E Rate Comparison ²	GHG Reduction Potential
Bright Choice	38%	85%	1.5% discount	Unknown (reductions are unlikely; pending release of PG&E's 2018 power mix) ³
Brilliant 100	40%	100%	Same price	Will result in decrease in GHG emissions (exact reductions unknown; pending release of PG&E's 2018 power mix)

¹GHG-free electricity is defined as renewable electricity (solar, wind, and small hydroelectric) combined with large hydroelectric power.

²This potential discount will be applied to electricity generation charges only, and are estimated to be at or below 1% on a customer's energy bill.

³The Fosterra report (summary attached) claims that PG&E has forecast its power mix for 2018 will be 88% GHG-free, slightly better than Bright Choice at 85% GHG-free.

EBCE staff set the Bright Choice power mix based on PG&E's 2016 power mix, which was 33% renewable and 69% GHG-free electricity prior to having information on PG&E's 2017 or 2018 power mixes, which by all indications are substantially less GHG-intensive. Bright Choice includes up to 15% fossil fuel-generated electricity, which could be problematic if PG&E continues to increase their percentage of GHG-free electricity, as they have been doing. There is concern that EBCE could launch with a product that emits more GHG emissions than PG&E's default product, meaning GHG emissions within Emeryville would increase from this source. The EBCE program can play a crucial role in helping the City reach its GHG reduction targets, and a 100% GHG-free default product is a key element in the City's Climate Action goals.

Energy consultants KyotoUSA/Sequoia Foundation and Fosterra received a grant from the Bay Area Air Quality Management District to study the effects of EBCE launching accounts at a 100% GHG-free level. The Cities of Albany, Berkeley, Emeryville, Hayward, Oakland, Piedmont, and San Leandro expressed interest in being included in this study. The study explores economic and social factors that could enable a CCA program to successfully provide all electricity customers in self-selected jurisdiction a 100% GHG-free and 100% renewable power default product with an option to "opt down" to the basic power mix product offered to all other jurisdictions within the program. Their analysis for Emeryville indicates that a default to Brilliant 100 for municipal accounts would result in a reduction of 461 metric tonnes of carbon-equivalent GHGs, representing an additional 28% reduction in municipal emissions (based on 2014 numbers) compared to the Bright Choice option (metric tonnes are approximately 10% larger than U.S. tons). For commercial, industrial, and institutional accounts, even with some customers opting down to Bright Choice or opting out to PG&E, defaulting to Brilliant 100 would result in a reduction of 10,061 metric tonnes of carbon-equivalent GHGs, representing an 8.6% reduction in community-wide emissions (based on 2014 numbers) compared to the Bright Choice default. Default enrollment in the Bright Choice product would not have significant GHG emissions savings, and might in fact result in more GHG emissions than PG&E's default electricity product.

The study's findings include:

- Renewable electricity continues to become more affordable.
- Investor-owned utilities such as PG&E are rapidly increasing renewable percentages in their electricity mix.
- EBCE's Bright Choice product is likely to have no incremental reduction in GHG emissions. PG&E has forecast that their power mix for 2018 will be 88% GHG-free, slightly better than Bright Choice at 85% GHG-free.
- EBCE's Brilliant 100 option would not increase average customers' bills.

- Brilliant 100 is 100% GHG-free, but neither it nor Bright Choice is 100% renewable, and EBCE's (and PG&E's) current reliance on GHG-free large hydroelectric power does not promote the additional development of renewable sources, storage, and related technologies.
- A 100% renewable product could be developed and priced competitively, with a minor impact on overall customers' bills.

EBCE is not considering a 100% renewable option in their initial offering, but EBCE staff have indicated that they may consider it in the future.

The Sustainability Committee will discuss these power mix options at their meeting on March 12, 2018; its recommendations can be discussed with City Council's review of these Resolutions.

FISCAL IMPACT

There is no fiscal impact of enrolling electrical accounts in the Brilliant 100 product, as it is the same price as PG&E.

STAFF COMMUNICATION WITH THE PUBLIC

Staff have met with representatives of EBCE to discuss these options, and they have been discussed at public meetings of the StopWaste Energy Council Technical Advisory Committee and at the Emeryville Sustainability Committee.

CONCLUSION

The procurement and use of 100% GHG-free electricity would be a major positive step in reducing the City's and the community's contribution to climate change and achieving the City's Climate Action Plan goals, without additional cost to the City or to the commercial, industrial, and institutional electricity customers within Emeryville.

PREPARED BY: Nancy Humphrey, Environmental Programs Supervisor

**APPROVED AND FORWARDED TO THE
CITY COUNCIL OF THE CITY OF EMERYVILLE:**



Carolyn Lehr, City Manager

ATTACHMENTS

- Resolution to Request Enrollment of Municipal Accounts in EBCE's Brilliant 100 Product
- Resolution to Request Default Enrollment of Commercial, Industrial, and Institutional Accounts in EBCE's Brilliant 100 Product
- Presentation Slides From Upcoming Fosterra Report