Eco Impact Checklist

Title of report: Electricity Contract Procurement and Renewals				
Report author: David Gray				
Anticipated date of key decision: 12th July 2022				
Summary of proposals: To extend the current half-hourly (large site) electricity supply contract in order to allow participation in a sleeving product from a Public Sector Buying Organisation				
Will the proposal impact on...	Yes/ No	+ive or -ive	If Yes…	
			Briefly describe impact	Briefly describe Mitigation measures
Emission of Climate Changing Gases?	Yes	+ive	The sleeving arrangement will allow the direct use of zero-carbon electricity generated by the Council for use in Council sites. This will displace direct emissions from grid electricity supplies of around 2,700 tonnes CO_{2e} per year. *See Note at the end of this report on how electricity-related emissions are determined.*	This initial contract will focus on making use of the Council's own renewable energy generation. The successor contract (from Autumn 23) will expand Renewable electricity supplies through contracting with local generators. Work will also be done with City Leap to expand energy storage options. Both these will reduce the need to top-up from the grid.
Bristol's resilience to the effects of climate change?	Yes	+ive	Making use of locally generated electricity has the potential to improve Bristol's energy security and resilience to climate change.	None needed.
Consumption of non-renewable resources?	Yes	+ive	These proposals make direct use of the council's own renewable generation.	These interim arrangements are intended to last for 14 months, after which the non-half hourly and street lighting supplies will also be migrated to sleeved supplies.
Production, recycling or disposal of waste	No			
The appearance of the city?	No			
Pollution to land, water, or air?	No			
Wildlife and habitats?	No			
Consulted with:				

Summary of impacts and Mitigation - <u>to go into the main Cabinet/ Council Report</u>	
The significant environmental impacts of this proposal will be to reduce emissions and improving energy security by directly using the electricity the council generates from wind and solar. However, it also delays plans to source additional renewable supplies by 14 months. The proposal will mitigate the impacts by fully expanding the sleeving solution 14 months after the start of the contract. The net environmental effects of the proposals are significantly beneficial.	
Checklist completed by:	
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Date:	10th June 2022
Verified by Environmental Performance Team	Giles Liddell, Project Manager - Environmental

<u>Note on how greenhouse gas emissions associated with electricity are counted:</u>
The location-based model is based on the electricity we **use**.
The market-based model measures the electricity we **buy** (or generate ourselves)**.**
Both models are generally accepted.

The sources of the electricity we receive through the grid are constantly changing and will partly depend on where in the country we are. So the carbon emissions associated with this electricity are based on the national UK grid mix for the location-based model. The weaknesses of this method are that it offers no incentive to build more renewable generation infrastructure and it gives electricity consumers no way to reduce their electricity emissions, except by reducing the amount they consume. While reducing consumption is necessary, it will not be sufficient on its own to deliver against short term emissions targets.

The market-based model addresses these weaknesses by using Guarantees of Origin Certificates (called REGOs in the UK). For every MWh of renewable electricity generated, one certificate is given to the generator. The certificate will have a financial value and can be sold with the electricity (or separately). The owner of the certificate can retire it and count the difference between zero and the average UK grid mix as avoided emissions. This gives generators a reason to build more renewable energy generation and customers the opportunity to buy the certificates with their energy to claim it as zero carbon. The weakness of the market-based model is that claiming some or all of the electricity we buy as zero carbon masks the impact of improving efficiency and reducing consumption.

We have been selling the electricity and certificates from our wind and solar generation and allowing others to claim the avoided emissions. Sleeving the electricity we generate (topped up with renewable energy from other local suppliers) will:

- Stimulate the local renewables market.
- Give us direct knowledge and control over our sources of generated electricity.
- Fix the cost of electricity and avoiding the turbulence and insecurity of the global energy market.
- Allow us (rather than others) to claim the renewable electricity with generate and buy as zero carbon.

We will adopt best practice and report both location and market-based data. That allows us the show that we are buying zero carbon electricity, and that we are still bringing our electricity use down through efficiency schemes (as we have been doing since the 1990s).