

From: ["Mochrie, Paul" <Paul.Mochrie@vancouver.ca>](mailto:Paul.Mochrie@vancouver.ca)
To: ["Direct to Mayor and Council - DL"](#)
CC: ["City Manager's Correspondence Group - DL"](#)
["LaClaire, Lon" <lon.laclair@vancouver.ca>](mailto:lon.laclair@vancouver.ca)
Date: 3/4/2021 5:33:59 PM
Subject: Memo - RTS 13364 - Eliminating Generators Greening Vancouver's Film and Food Truck Industries
Attachments: Memo - RTS 013364 - Eliminating Generators Greening Vancouver's Film and Food Truck Industries.pdf

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire **regarding Eliminating Generators: Greening Vancouver's Film and Food Truck Industries – RTS 13364**. A short summary of the memo is as follows:

- The curbside electrification program has brought together film, events, and food truck with other curbside electrical needs such as e-bikes, 5G, EV charging and digital advertising
- The Film industry generator elimination strategy is progressing well with a focus on three areas:
 - A citywide film power kiosk network
 - Film Fees and incentives
 - Film By-laws and policies
- Food truck sites are starting to get connections installed and more are planned for 2021
- The Special Event Policy links City financial support to events reducing their carbon footprint over the next 10 years
- Special events will benefit from all of the curbside electrification initiatives, as well as new portable clean technology being developed, driven by film industry investments

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or lon.laclair@vancouver.ca.

Best,
Paul

Paul Mochrie (he/him)
Acting City Manager
City of Vancouver
paul.mochrie@vancouver.ca



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməŋəm (Musqueam), ləwú7mesh (Squamish), and səilwətał (Tseil-Waututh) Nations.

MEMORANDUM

March 4, 2021

TO: Mayor and Council

CC: Paul Mochrie, Acting City Manager
Karen Levitt, Deputy City Manager
Lynda Graves, Administration Services Manager, City Manager's Office
Maria Pontikis, Director, Civic Engagement and Communications
Rosemary Hagiwara, Acting City Clerk
Anita Zaenker, Chief of Staff, Mayor's Office
Neil Monckton, Chief of Staff, Mayor's Office
Alvin Singh, Communications Director, Mayor's Office

FROM: Lon LaClaire
General Manager, Engineering Services

SUBJECT: RTS 013364 – Eliminating Generators: Greening Vancouver's Film & Food Truck Industries

Curbside Electrification Program

In response to the Motion Eliminating Generators: Greening Vancouver's Film & Food Truck Industries, staff developed an overall Curbside Electrification Program that aims to deliver a coordinated strategy to provide power for multiple uses to the curbside to help transition to renewable clean sources of energy, while leveraging and exploring revenue or cost offset opportunities. This includes enabling power locations for film industry, food trucks, special events, e-bike charging stations, electrical vehicle charging stations, digital ads, and 5G. This approach will reduce the overall reliance on generators for curbside uses and leverage revenues and cost recovery to provide a clean power source at the curb. The overall Curbside Electrification Program details are shown in Appendix A.

Film Industry Generator Use Reduction Strategy

The strategy developed to reduce the use of generators is data-driven and involves three distinct approaches:

1. Target having a purpose built power kiosk within ten minutes' drive of the most common film locations within the City;
2. Create a Clean Energy Incentive that reduces permit fees to encourage industry to develop and use portable power technology where purpose built kiosks are not viable;
3. Develop by-laws and policies that encourage owners of commonly used private property film locations to make their own capital investments into providing clean energy power connections on their properties.

A Power Kiosk Within 10 Minutes of Common Film Locations

A data driven approach will be used to locate power kiosks within ten minutes' drive of the most commonly used areas of film locations around the City used for base camps or staging of trucks such as mobile dressing rooms, catering, and other support vehicles. These staging sites generally require the use of at least one large diesel generator and account for one-third of all film generator uses in the City.

Initial analysis of data and engagement with industry indicates that there are about 12-15 sites around the City that fit this description, with many of them being around the downtown core (data analysis Appendix B). Based on this initial data, the Northeast False Creek (NEFC) area has been selected for the first installation of these purpose built kiosks. The NEFC sites are expected to be installed in Q2 2021 and once operational, have the potential to reduce the use of up to 200 generators annually. Learnings from these initial installations and ongoing data collection will be used to aid in the annual selection of additional kiosk sites until the strategic objective of a kiosk within ten minutes of all commonly used film locations is achieved.

While some areas of the City may not be as high volume as the downtown core, a complete network of kiosks will provide film producers with the confidence they need to eliminate generators from their fleets. For this strategic reason, evaluations of potential sites will add the completeness of the network in addition to usage data to determine feasibility. However, as a guiding principal, a site should have the potential to be used at least 20-30-times per year to be considered feasible.

The 2021 budget for the installation of the kiosks is \$400,000 with capital coming from revenue collected through film permits fees. Additionally, ongoing operating and power consumption costs are accommodated within film permit fees. Drawings of the kiosk design can be found in Appendix C.

Clean Energy Incentive

The second approach in the strategy was the introduction of a Clean Energy Incentive on permit fees. Beginning in August 2020, as part of a film permit fee restructuring and the implementation of a new IT system, a Clean Energy Incentive was introduced that provides a 50 percent reduction in the daily permit fee when a film company can demonstrate a reduction in their use of diesel generators. The initial qualifications for this incentive will be the reduction of at least one generator from the production's "fleet" of generators each day of filming. It is estimated that in the first few years of the program between 10-25 percent of productions will be able to meet this threshold. As we get closer to completing the city wide network of power kiosks, this initial threshold to qualify can be reviewed to further the objective of elimination of generator use. For example, when more than 50 percent of productions qualify for the incentive it may be appropriate to move the qualifying threshold up to at least two generators needing to be eliminated from the daily fleet, and ultimately in time we should be able to move to the elimination of all generators as the qualifying threshold.

Initial industry reaction to this incentive has been overwhelming positive; they like the simplicity of it and the initial low threshold to qualify makes it possible to achieve now. Additionally, it acknowledges that generators are still a necessity in many cases and the option remains to use them without penalty. Furthermore, staff have been approached by many other film jurisdictions to learn more about the program as a potential model in their areas.

Finally, developers and suppliers in the clean tech sector have responded positively to how this incentive creates a tangible value for them and their clients, and that it encourages further R&D and investment into emerging clean energy technology. It is this type of private investment that will be critical in getting the industry to eliminate the use of the two-thirds of generators that cannot be accomplished by power kiosks alone.

Film By-Law Linked to Generator Reduction

The film By-Law will be developed in 2021 and will include the objective of reducing the film industry's reliance on diesel generators. Under consideration would be policies such as:

- Making the approval of certain types of high impact film activity, such as late night filming in residential areas, which is a major area of citizen complaints, conditional on enhanced requirements to reduce or eliminate generator use.
- Setting permitting volume or frequency of use restrictions at popular private property locations based on the property owner's ability to supply clean energy to film productions working on their sites, for example when frequency of use for filming is greater than a certain number of days annually.
- Allowing more flexible guidelines on the closure of streets in order to consolidate film production support vehicles into smaller areas closer to film sets, thereby reducing the number of generators required, as well as the "shuttling" of equipment from remote sites using gas powered vehicles.

Food Truck Generator Use Reduction

Short and long term opportunities to provide curbside electrical power for food trucks have been developed. Through this work an initial pilot along Robson street was completed in 2019 and electrical power connections are provided along the 900 Block of Robson Street. The program was expanded to include multiple electrical connections in the new 800 Robson Plaza expected to be completed in 2021 and three additional downtown locations are currently under construction.

Special Events Generator Use Reduction

Initial work to reduce the reliance on generators at special events has been linked to the eligibility for City financial support of events to greenhouse gas (GHG) emissions, as approved by Council with the updated Special Event Policy in 2019. Between now and 2030, to qualify for the City's FestShare program, events must demonstrate a gradual reduction in GHG emissions, with the end goal of zero emissions by 2030. For most events this means an average 10 percent reduction of fossil fuel use per year for the next ten years. More information on this policy work and the FestShare program will be presented along with an update to Mayor and Council on the Special Event Policy in the fall of 2021.

The special event sector will benefit from many of the curbside electrical initiatives throughout the City. For example, popular sites such as the Vancouver Art Gallery plazas and NEFC film kiosks designs have included connection types that meet both film and event specifications. Additionally, the film industry's investment into alternative forms of clean energy technology such as small and large battery systems is expected to be transferable to the event sector. Companies, such as Portable Electric, are developing these battery systems along with "adaptors" that could temporarily convert a curbside EV station into a power connection point for film and special event use.

Food trucks provide a great opportunity to further reduce emissions during special events. A challenge with food trucks is that special events can take place in a variety of (changing) locations where power connections currently will not be feasible and other power sources such as battery power may be explored for those events. As curbside electrical connections allow food trucks to rely on electrical power it enables them to convert their equipment from fossil fuels to electrical. This power source transition does require some investment and work from the food truck operators to connect to these new electrical power connections.

Overall, the approach to special events has been a combination of policy and ensuring they are secondary beneficiaries of broader curbside electrical initiatives, with a focus on identifying synergies and technologies created by and for the film industry and food trucks that also help special events.

Summary

As part of the overall Curbside Electrical Program, staff continue to plan, design and implement power locations for the film industry, food trucks, special events, e-bike charging stations, electrical vehicle charging stations, digital ads, and 5G to achieve the goals of the Climate Emergency Response.

Significant progress has been made in the development and implementation of a strategy to reduce the film and food truck industries' need to use generators. This strategy includes both the installation of purpose built kiosks for the film and food truck industry and financial incentives to encourage industry to develop and use portable clean energy solutions in areas where investment in a purpose built power kiosk is not viable.

It is expected that with this strategy, at least one-third of generator use at film locations can be eliminated through the capital investment in a network of 12-15 purpose built power kiosks by 2025, with the remaining two-thirds of generator use being significantly reduced by 2030 through industry development and innovation related to portable clean energy technology.

Additionally, the special event sector will benefit from both the installation of power kiosks and the transfer of technology, such as portable batteries, from the film industry and food truck sector.

If you have any questions, please feel free to contact me directly.

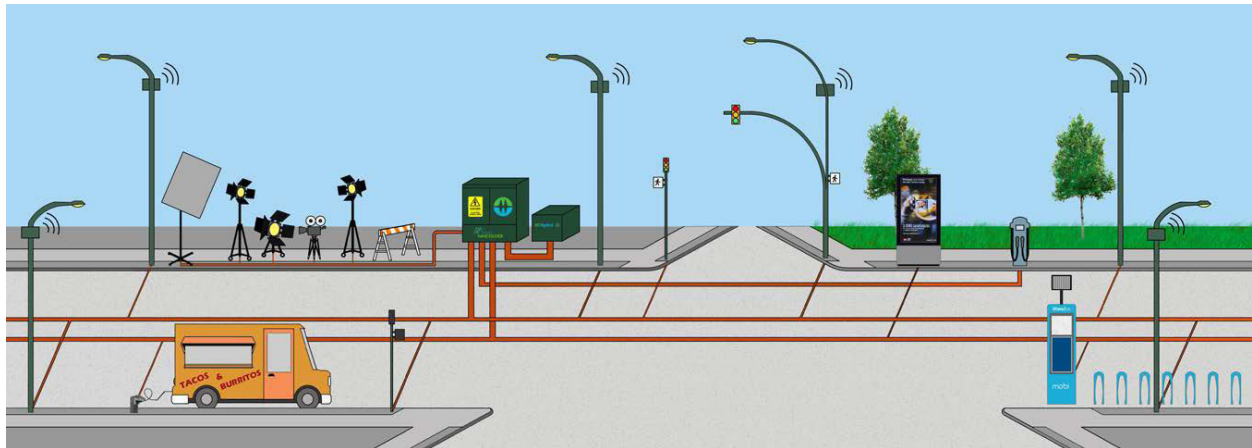


Lon LaClaire, M.Eng., P.Eng.
General Manager, Engineering Services

604.873.7336 | lon.laclaire@vancouver.ca

Appendix A: Curbside Electrification Program Details

The Curbside Electrification Program aims to deliver a coordinated strategy to provide power for multiple uses to the curbside to help transition to renewable clean sources of energy, while leveraging and exploring revenue or cost offset opportunities. As shown in the infographic below, this includes enabling film kiosks, food trucks, event power, e-bike charging stations, electrical vehicle charging stations, digital ads and 5G.



By enabling power for multiple uses, the Curbside Electrical Program provides a framework to:

- Achieve the goals of the Climate Emergency Response;
- Accelerate Transportation 2040 goals;
- Respond to the Council Motion to reduce dependency on generators for filming, events, and food trucks;
- Implement the Special Event Policy and green power requirements;
- Support connected City goals, enabling a smart city through 5G implementation; and,
- Support Engineering's Strategic Plan objective to advance the City's strategic and sustainability plans, initiatives, and policies.

Appendix B: Film Generator Data Analysis

June 2019 – March 2020: Internal data collection and analysis

During this initial phase, comprehensive data collection was conducted as part of the film permitting process. During this time the film industry reported the use of approximately 1,300 generators, with about 75 percent of productions self reporting details of their generator use and locations. This data confirmed previous anecdotal accounts that about 3,000 film generators are used in the City of Vancouver annually. Additionally, the data helped identify and prioritize sites around the City with the most significant amount of generator use.

March 2020 – Sept 2020: COVID Data Gap

Data collection was stopped due to the almost complete stop of filming activity as a result of the COVID-19 pandemic.

October 2020 – Present: Reel Green BC Open Data Collaboration

Beginning in October 2020, data collection restarted in collaboration with regional effort by Reel Green BC and CreativeBC using a self-serve reporting and mapping application on the platform “MapMe”. This new app was developed with a mobile-first and open data approach increasing ease of use and engagement with the industry. Additionally, this collaboration was able to bring on additional municipalities, which is starting to provide a visualization of current and future clean power connect points around the entire region (see screen shot below).

Generator Use Map (MapMe screen shot Feb. 25th, 2021)

*Please note: Includes data from Vancouver starting from June 2019; other municipalities joined Oct. 2020.

