Industry Report on Production Carbon Emissions

2023-2024

50	24.3	6,979
Productions Analyzed	Ave. Tonnes CO2/hr	Total Tonnes CO2

1 tonne CO2

=

1 way road trip from Vancouver to Montreal

Table of Contents

Executive Summary

We need all hands on deck to address the climate crisis. This means individuals, organizations, governments, and industries. As Canada's public broadcaster, CBC/Radio-Canada is taking a leading role to make the media industry more environmentally-friendly in order to embed sustainable mindsets into every action taken and every decision made, whether it be on or off screen.

This is CBC's second annual report on carbon emissions in the Canadian industry. It breaks down the carbon footprints of our productions to help us determine where the emissions are coming from, and to identify reduction opportunities. This report adds to the other metrics and updates about CBC/Radio-Canada's environmental initiatives.

This year's report remains consistent with last year's, showing the three carbon hotspots of travel & transport, materials, and filming spaces. The findings also remain consistent with Radio-Canada's carbon emissions report on French productions (which is being released simultaneously) as well as BAFTA's albert recent reports.

We all need to continue our journey towards decarbonizing these hotspots. How can we do this with impact? Some suggestions are: limiting diesel generator usage, applying the circular economy principles wherever possible, and increasing vegetarian options for meals.

Every action, every production, every person, has a role to play in helping the planet. We've provided suggestions and resources to help reduce your production's environmental impact. We encourage you to connect with others, to exchange information, and to talk about collaboration possibilities. This is how we will make an impact, together.

Foreword from Lisa Clarkson, CBC Production Sustainability

What a world we live in! From the exquisite beauty of a goose gliding through the sky to the smell of a field of wildflowers to the sound of a skate scraping on ice, we are surrounded by the wonders of nature. So we can continue to see and smell and hear those wonders, together, we have set off on a path to understand and reduce the carbon emission pollution of our industry.

We have come so far in just a handful of years. From starting to collect carbon calculator data in early 2022 to sharing the learnings in our first and the industry's largest carbon emission report last year to the release of this year's carbon emissions report (simultaneously with Radio-Canada's carbon emissions report) we have made great progress. We've developed tools to speed up our actions like the producer's guide to sustainable production (Producing for the Planet); development checklist (CBC), the carbon reduction plan (CBC) and the sustainable toolkit (Ontario Green Screen). On top of all that, we have brought organizations together (some for the first time ever) to speed up the sharing of information and increase the impact of the actions we take (Reel Green; On Tourne Vert; Canadian Broadcasters for Sustainability; Producing for the Planet and, just this past fall, Green Frame).

And.... we have far to go. And.... we need to go faster. The areas where we are creating the most carbon pollution with our productions are now no surprise - whether you look at CBC's report last year; Radio-Canada's two reports; or Telefilm's report or the reports from organizations outside of Canada like BAFTA albert, the hotspots remain the same. In the year to come, we need to apply all of our brain power and focus our collective tools and efforts on the biggest polluter - the energy we use on road transport. How can we reduce the trips taken on our shoots - make use of virtual meetings and production; local services and crew; plan locations closer together; build camaraderie with car pools; use electric bikes and vehicles; try out bio-fuels. I have every hope and confidence that if we put our heads together and take action, we will be able to reduce the carbon pollution from our travel on the roads.

I want to thank Elsa Tokunaga, CBC's Environmental Sustainability Lead, Rob Long, Director - CBC's Strategic Insights & Decision Support and Athena Traselis, Director, Environmental Sustainability, National Sustainability Strategy for CBC/Radio-Canada, for their dedication to deciphering these carbon calculator results so we can all produce content more sustainably. Finally, I want to take this space to acknowledge and celebrate the collaboration and positive change brought about by Tracey Friesen - who led CMPA's environmental change and who died this year - far far too young. I am inspired by her example of positive collaborative change and so let's push for change even harder, in her memory, in the year to come.

Background

In 2021, CBC/Radio-Canada released our corporate sustainability strategy. Greening Our Story provides a map to help CBC and its partners minimize our environmental impact- behind the scenes and on-screen.

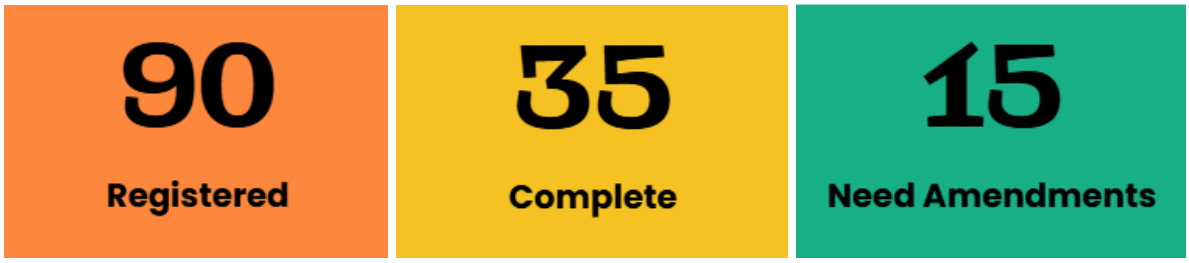
As a part of this strategy, CBC committed to calculating the carbon footprints of 100% of our in-house productions, and 50% of our independent productions by 2026. We are doing so by using the BAFTA tool "albert". We are well on track to meet these goals as over 60% of our in-house productions and 100% of our independent productions are now calculating their carbon footprints.

We ask productions to measure their carbon footprints as a tool to help us understand the environmental impacts of different production decisions. This report, borne from albert results, can help productions learn where their environmental impacts are coming from, and help us all focus on meaningful reduction strategies.

Introduction

In 2023/2024, 90 CBC-affiliated productions signed up to use the carbon calculator. This report will analyze the 35 footprints that are "complete" as well as 15 that require some amendment[1]. Additional carbon footprints are in the albert system from 2023/2024 but since they haven't yet been completed, we didn't analyze them.

These productions provide insights into the most carbon-intensive spaces in the Canadian film and television industry in 2023/2024, and help direct us to where we can all have the greatest impact in reducing carbon emissions.



[1] *Amendments required: productions that have submitted their footprints for audit, but need clarification before albert can approve the report.*

2023 Numbers[2]

Our last report analyzed 64 productions, which were in varying states of completeness, and found that the total overall emissions for all genres and production methods were: 9,508 tonnes CO2e, translating to 36 tonnes/hour CO2e. Travel and transport were responsible for **43%** of overall emissions, filming spaces **23%**, and materials **22%**.

Remember, **1 tonne of CO2e is the equivalent of driving from Vancouver to Montreal... so that number represents 9,508 trips!**

Results

The analysis of the 50 productions from this year shows us that Travel and Transport is again responsible for the most emissions on a production (**63%**), with Materials (**16%**) and Filming Spaces (**12%**) following as the second and third highest emission sources.

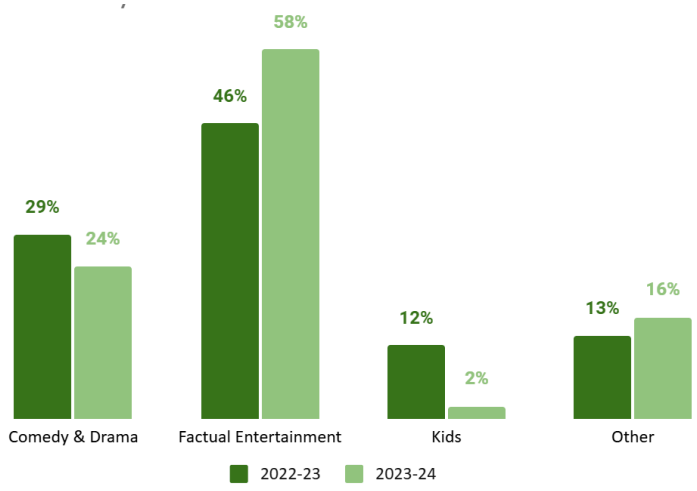
For the fiscal year 2023/2024, the total overall emissions for all genres and production methods were: **6,979 tonnes CO2e**, which translates to an average of **24.3 tonnes/hour CO2e**.

From the 2022/2023 report, emissions per hour have decreased, from 36 to 24.3 tonnes/hour CO2e. While this is overall good news - less CO2 in the atmosphere! - we must be careful when we try to compare year over year averages, since as an industry we are just learning how to measure our carbon emissions, the production mix changes year over year, etc.

Production Mix by Genre

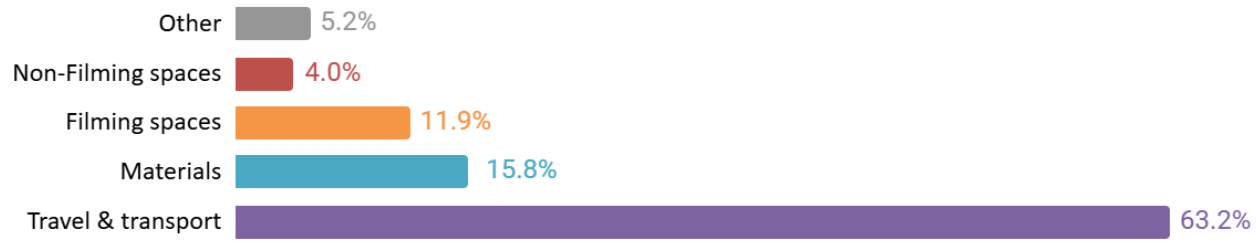
The changing mix of productions is shown in the chart to the right.

The types of genres measured has an effect on the amount of emissions produced, making it challenging to compare year-over-year emission averages, as you can see in the breakdowns by genre on pages 8 & 9.



[2] *It is important to note that year-on-year average comparisons do not compare like-for-like. The reports are analyzing different productions with different budgets, needs, etc.*

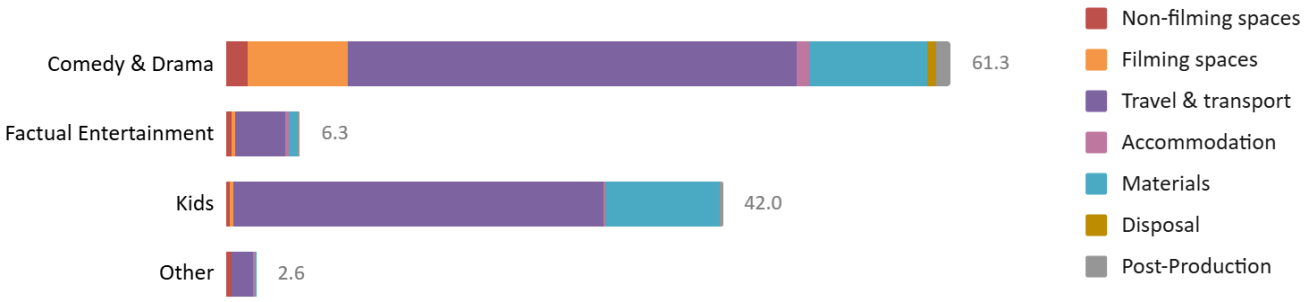
Which Production Activities Contribute Most to Emissions?



**Other = Accommodation, Disposal, Post-Production*

Suggestions for how to best reduce these emissions can be found on page 9 of this report.

Carbon Emissions by Genre



**Other= news, current affairs, sports, miscellaneous entertainment*

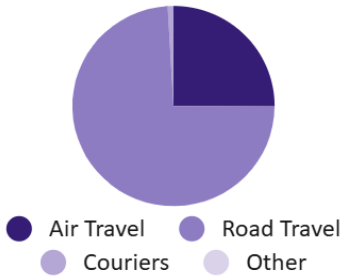
Comedy and Drama are the highest-emitting genres in 2023/2024, with **61.3tCO2e** for every screened hour produced. This is the equivalent of **driving across Canada (Vancouver-Halifax), over 40 times.**

The scripted genre generally works with larger crews and budgets, and often film on location, increasing travel emissions. They also tend to have longer shooting times.

A breakdown of the emission sources by genre:

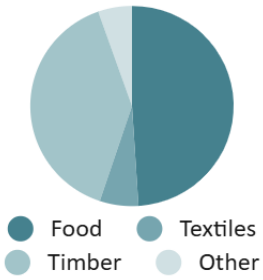
♺Comedy and Drama:

Travel & Transport: 62%



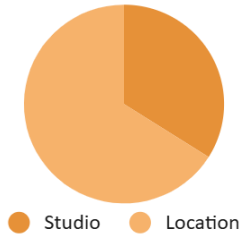
Road Travel: 74.0%
Air Travel: 25.1%
Couriers: 0.9%

Materials: 16.4%



Food: 49%
Timber: 39.5%
Textiles: 6.2%
Other: 5.4%

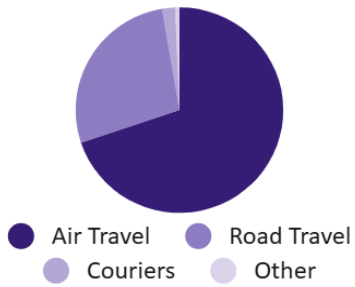
Filming Spaces: 13.6%



Location: 66%
Studio: 34%

♺Factual Entertainment:

Travel & Transport: 67.6%

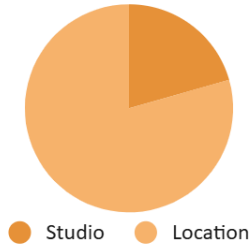


Air Travel: 69.9%
Road Travel: 27.5%
Couriers: 2%
Other: 0.7%

Materials: 12%

Food: 66.7%
Textiles: 12.2%
Other: 12.6%
Timber: 8.5%

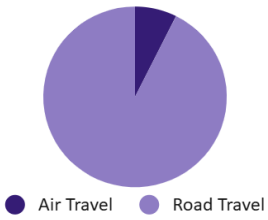
Filming Spaces: 4.2%



Location: 79.4%
Studio: 20.6%

♺Kids:

Travel & Transport: 74.5%

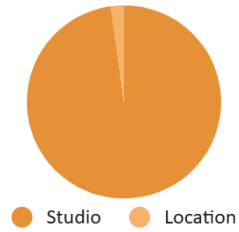


Road Travel: 92.6%
Air Travel: 7.4%

Materials: 23.1%

Food: 97%
Textiles: 2.1%
Timber: 0.7%
Other: 0.2%

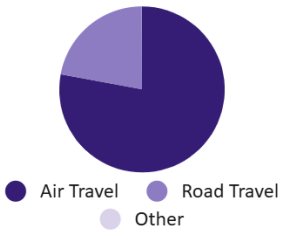
Filming Spaces: 0.8%



Studio: 97.8%
Location: 2.2%

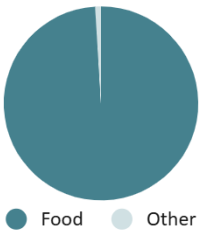
♺Other (news/current affairs/sports/misc. entertainment):

Travel & Transport: 71.6%



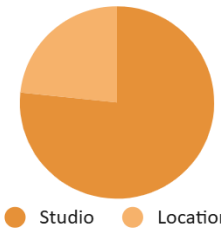
Air Travel: 77.9%
Road Travel: 22%

Materials: 1.8%



Food: 99%
Other: 1%

Filming Spaces: 0.1%



Studio: 76.7%
Location: 23.3%

Across all four genres, travel and transport is the highest emitter.

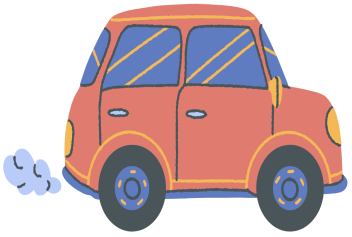
Conclusions & Recommendations

We have compiled a few suggested steps to take so your production can make meaningful reductions. As you consider what steps to take, remember that **you're** the expert in your field and **you** know the intricacies of your production the best. That knowledge will lead you to the most impactful and doable actions. To help you get started, we've put together a series of suggestions below. If you have your own solutions that aren't on the list, please submit them to our Sustainability Lead Elsa Tokunaga so she can share them with other producers and in future reports.

General Best Practices

- Start the sustainability process early, in project development
- Invest in sustainable production training for staff
- Send a green memo to all cast and crew explaining sustainability priorities and encouraging them to get involved
- Make time to discuss sustainability considerations at every meeting
- Ask cast and crew what they think could be made greener; involve them in the process

Travel and transport accounted for over **60%** of overall emissions, up from **43%**. To reduce this impact, you can:



1. **Question**
   - Is travel necessary?
   - Can I use remote and digital technology (video calls, virtual production, etc) instead?
   - Can I source this talent/item locally?
2. **Look into low carbon impact options**
   - Hire local cast and crew
   - Prioritize sourcing products and services from local vendors
   - Walk, cycle, carpool, or take public transit (also improves health and team connections)
   - Use tools to help you reduce (ex: DGC Power Budgeting Tool)
3. **If travel/long distance shipping is necessary, make sure to**
   - Use low/carbon-free options like hybrid/electric vehicles & choose a suitable vehicle size
   - Book economy seats and direct flights when using air travel
   - Order in bulk to minimize shipments sent/received
   - Don't ask for next-day delivery- choose the slow option!
   - Limit idling
   - Schedule back-to-back meetings to avoid separate trips

Materials accounted for **16%**, down from **23%**. Food had the largest impact in this category, across all genres. You can:

1. **Question**
   - Can we consume less meat/can we work with a caterer that exercises sustainable practices?
   - Do we need this item; will another item work instead?
   - Am I following the principles of the circular economy (reduce-reuse/repurpose)?
     - Can I repurpose material we already have?
     - Can I source this locally/second-hand/rent it?

2. **How can I best choose the lowest impact option?**
   - Serve plant-based meals
   - Buy local, second-hand, or rent these items
   - Use recycled materials and materials that can be donated/reused
   - Use reusable kitchenware and encourage cast and crew to bring their own water bottles, coffee cups, and tupperwares
   - Use multi-use items - get rid of single-use materials!
   - Minimize printing paper: determine how to reduce call sheets/script revisions, etc.
   - Build modularly for easy reuse/reconstruction/recycling

3. **Ensure a low-waste production**
   - Donate food leftovers to food rescue programs/your local shelter
   - Separate recycling/compost and waste on set
     - See Ontario Green Screen's new waste sorting kits.

Energy accounted for **12%**, down from **22%**. You can:

1. **Question**
   - Do we need this much power? (we often will overpower our sets).
   - Is there a tie-in option for electricity?

2. **Have we explored**
   - Rechargeable batteries?
   - Energy-efficient equipment?
   - Electric generators?
   - Studios/locations that use renewable energy for power/certified green energy providers?
   - Powering down & unplugging equipment when we're not using it?

Appendix

Methodology

This report was generated using data supplied by the 50 CBC-affiliated productions that have completed or require amendments on their albert carbon footprint reports from the 2023-2024 fiscal year.

This data was then amalgamated using Microsoft Power BI, a tool for building dashboards to synthesize large amounts of raw data. Information on how the albert carbon calculator determines carbon emissions associated with each production can be found in their Methodology Paper.

Clarifications

WORKING FROM HOME DISCREPANCY

Energy coefficients associated with working from home were based on a global benchmark assigned by albert, as per DEFRA's recommendations. The global average they used assumes each energy grid constitutes 91% gas and 9% electricity. This energy mix is more heavily weighted toward gas than that of many Canadian provinces, including the largest filming jurisdictions: Ontario and Quebec.

This means the resulting emissions were overestimated wherever productions reported working from home. Because aggregated albert reports don't provide details on where working from home activities took place, we are unable to adjust for this retroactively.

MEASUREMENT UNCERTAINTY

CBC relies on data from both internal tools and third parties to measure these greenhouse gas emissions. While this data is based on what we believe to be reasonable calculations for the applicable periods of measurement, there are inherent challenges in collecting this information, particularly as more accurate data sources become gradually available.

For these reasons, the albert data presented herein has not been included in Scope 3 greenhouse gas calculations for CBC/Radio-Canada. Additional testing and review of the methodology, as well as third party verification, is needed.

Acknowledgements

CBC is grateful to all the independent and in-house productions that calculated their carbon footprints in 2023-2024. Without them, this report would not have been possible. Thank you for seeing and contributing to a more sustainable, healthy, and liveable future that is possible if we continue to advance and develop our environmental actions.