

Carbon Footprint Preparation Checklist

The carbon calculator allows you to measure and assess the carbon footprint of your production. There are three sections in the calculator: Energy, Transport and Accommodation, and Materials and Disposal. Each section requires you to gather data from a variety of sources.

During pre-production you will create a draft footprint, this is an estimate of what your production's impact will be. The draft is a working document, as production progresses and you can add more data and finalise your entries when you know they are correct. Remember, if you are completing a Carbon Action Plan this also needs to be started in pre-production, please check our toolkit resources or FAQs for more information on how to complete a Carbon Action Plan.

It can be difficult to know where to start, so use this resource first to gather data before starting the Carbon Footprint calculator. It will streamline the process and save you time. For more information on how to create a production, timelines for the carbon footprint or other questions please check our FAQs or email hello@sustainablescreens.au.

You will need:

- ☐ Production schedule
- ☐ Crew list
- ☐ Maps of studio and locations
- ☐ Location list

Working Title:

Length:

Genre:

Use the production schedule to complete

Prep-production start	Pre-production finish	Pre-production number of days
Production start	Production finish	Production number of days
Post-production start	Post-production finish	Post-production number of days
		Total number of days

Use the crew list and production schedule to complete

Average number of crew pre-production	Pre-production number of days
Average number of crew production	Production number of days
Average number of crew post-production	Post-production number of days

Use the map and locations to list the spaces to complete the Energy section. The number of days is used for “BENCHMARK” estimates on the Carbon Footprint calculator.

Non-Filming Spaces (production office, art, construction etc.,)			Filming Spaces (studio, stages, locations etc.,)		
Space	Average number of crew	Number of days used	Space	Average number of crew	Number of days used
<i>e.g. Production Office</i>	<i>10</i>	<i>180</i>	<i>e.g. Stage 9</i>	<i>100</i>	<i>100</i>

The Carbon Calculator works out your production’s carbon emissions based on everything the production pays for. Your travel to set, production office food etc., is not captured here unless it is paid for by the production. The only exception to this is home working, which should be included regardless of whether the electricity is paid for by the production.

When you complete the Energy, Travel and Transport, and Accommodation sections, you will need:

- ☐ Studio stages dimensions in metres squared by looking at Studio website
- ☐ Unit Manager estimate on water usage in litres
 - ☐ Per day at a studio space / stage
 - ☐ Per day on location
- ☐ Budget line items for:
 - ☐ Fuel spend total and per department
 - ☐ Flight spend total
 - ☐ Courier and freight spend total
- ☐ Accommodation tracker for:
 - ☐ Locations, accommodation type and length of stay

Notes on estimates and total spends:

Water:

Fuel:

- Transport fuel spend estimate:
- Flight spend estimate:
- Courier / freight and excess baggage spend estimate:

ENERGY

Estimating Electricity and Gas Use for Filming Spaces

It can be difficult to estimate electricity and gas usage without a bill. The table below shows the average daily electricity usage in Kilowatt hours (kWh) based on available Australian sources. Use this to record an estimate in the draft Carbon Footprint which will be amended once you have a bill to record a more accurate measure. Include electricity and gas together in the one daily total for the draft Carbon Footprint. You will get a more accurate measure once you receive your electricity, gas, and water bill. If you are using battery powered equipment and not paying for mains power on location, you do not need to include location power in your footprint.

Space	Annual	Daily	Source
Australian Household – small production office	4615 to 8619 kWh	13 to 24 kWh	Australian Energy Regulator
Australian small business – total smaller productions	13,000 to 36,000 kWh	52 to 144 kWh (business days – 5 days a week)	Canstar
Australian medium business – total medium productions	150,000 to 1,000,000 kwh	481 to 3205 kWh (business days – 6 days a week)	Leading Edge Energy
Australian large business – total tentpole and large scale productions	1,000,000 to 7,500,000 kwh	482 to 24,039 kWh (business days – 6 days a week)	Leading Edge Energy

Once you receive your bill, which you may need to get from the owner of the property or studio, work out the daily average energy use per space. In some productions, spaces such as art, costume and the production office may come under one space. In some productions, you may just have a bill for everything on site and may not be able to separate electricity use per space and that's okay.

For Post-production suites, you will need:

- ☐ The average number of hours per day and number of days of post-production to use with the benchmark

Post-production records energy use and whether the electricity is from renewable / green power.

For Home Working, you will need:

- ☐ The number of people working from home and their number of days working from home that the production pays for.

MATERIALS AND DISPOSAL

The Materials and Disposal section requires estimation, conversation with HODs and walkthrough department observations to complete the draft Carbon Footprint. You will need to use your best judgement to estimate as some materials are difficult to quantify and that's okay.

The Disposal entries should capture similar data to the Materials section. Disposal is very difficult to estimate early on in a production, for example Materials may be stored if a show is greenlit for another season. Talk to departments early and let them know well in advance that you want to know about everything they are disposing of, whether it be sent to landfill, recycled, donated or stored.

For batteries and cardboard, you will need:

- ☐ The number of batteries – hopefully zero here if your sound department is using rechargeable batteries
- ☐ The weight of cardboard or number of boxes

For food, you will need:

- ☐ The crew list
- ☐ The percentage of vegetarian, vegan, fish, chicken, pork, lamb, and beef meals based on a conversation with the catering manager and observation of menus and mealtime
- ☐ The weight or volume sent to landfill, composted and recycled based on a conversation with Catering and Unit and observation of food waste in bins during meal times – if you have a compost collection service, you can use their reports

For glass and metal, you will need:

- ☐ The weight of glass and metal and paint used in art, set, construction etc., based on conversation with HODs and observations

For paint, you will need:

- ☐ To discuss with Art, Construction and other relevant departments, an estimate of the number of litres of solvent based and water-based paint and based on your walkthrough observations

For paper, you will need:

- ☐ The average number of reams used per day
- ☐ The number of paper in reams printed from the Printer software data – a Production Secretary or Coordinator can give you this information
- ☐ Create a separate entry for cardboard using the totals entered for Materials and/or based on monthly waste reports

For plastics, you will need:

- ☐ The weight of construction / art / unit plastic purchased e.g. perspex, garbage bag rolls, foam, polystyrene etc., – complete a separate entry for each type of plastic
- ☐ The total number of plastic bottles, plates, cups and cutlery – hopefully zero if you ban all single use plastic – complete a separate entry for each

For textiles, you will need:

- ☐ To estimate the total number of tops and bottoms wardrobe/costume for each lead and supporting member
- ☐ To estimate the total number of tops and bottoms wardrobe/costume provided for extras and day players
- ☐ To discuss the percentages of silk, cotton, leather, nylon, polyester and unknown (other) textiles with the Costume department and work out average percentages based on your conversation with Costume and counting items on a lead character's and supporting character's costume rack as a rule of thumb.

A cotton t-shirt for example can weigh between 130 and 200 grams which is a good starting point for weight to multiple out against the number of pieces.

For timber, you will need:

- ☐ The budget line item spend for timber across all departments

For rubbish (general/mixed), you will need:

- ☐ The weight or volume sent to landfill and recycled based on a conversation with Unit Manager and observation of the frequency of rubbish collection
- ☐ Waste management companies can provide you with a monthly report that outlines the weight of rubbish, cardboard, plastic and glass recycled each month – ask for this early on

For timber, textiles, electronic waste, batteries, plastic, metal, glass and construction disposal you will need:

- ☐ The total weight or volume of the bin or container. If you're stuck, copy the totals from the Materials entries into the Disposal entries until you have more data. This will give you the worst case scenario and you can work to reduce this with recycling, repurposing, donating and storing materials
- ☐ Departments will often organise recycling skips which can be tracked through accounts and department ledgers or petty cash

Completing the Carbon Calculator can be overwhelming, but it's so important to gather as much information as possible, so you know the baseline and can improve from there. Remember the draft footprint you complete at the beginning of the production is an estimate. It's an informed estimate based on your observations, conversations, calculations and in-built benchmark data.

Once you have more evidence in the form of reports, bills, invoices, ledgers etc., you will be able to provide a more accurate final Carbon Footprint early on during post-production.

Remember, we can only manage what we measure – so completing the Carbon Footprint calculator is so important.

Use this list of data sources at different production stages to complete your draft and final Carbon Footprint

Data Source	Carbon Footprint Section	Pre-production	Production	Wrap & Post-production
Production Schedule	ALL	✓	✓	✓
Crew List	ALL	✓	✓	✓
Call Sheets	ALL	✓	✓	✓
Locations list	Energy	✓		
Studio and locations maps	Energy	✓	✓	
Electricity Bills	Energy		✓	✓
Gas Bills	Energy		✓	✓
Water Bills	Energy		✓	✓
Vendor report: water cooler / delivery service	Energy			✓
Budget: fuel spend estimate and final	Transport and Accommodation, Energy	✓		✓
Flight Tracker	Transport and Accommodation		✓	✓
Movement Orders / Log	Transport and Accommodation			✓
Transport vehicle list	Transport and Accommodation	✓		
Budget: flights spend estimate and final	Transport and Accommodation	✓		✓

Budget: courier, freight and excess baggage spend estimate and final	Transport and Accommodation	✓		✓
Accommodation Tracker	Transport and Accommodation		✓	✓
Waste and recycling reports	Materials and Disposal		✓	✓
Vendor report: timber	Materials and Disposal		✓	✓
Vendor report: steel	Materials and Disposal		✓	✓
Vendor report: foam and other plastics	Materials and Disposal		✓	✓
Vendor report: glass	Materials and Disposal		✓	✓
Vendor report: textiles	Materials and Disposal		✓	✓
Vendor report: paint	Materials and Disposal		✓	✓
Vendor report: office paper suppliers	Materials and Disposal		✓	✓
Printer job list data: total pages printed	Materials and Disposal			✓
Purchase orders: rechargeable and non-rechargeable batteries	Materials and Disposal	✓		✓
Catering Menus over a week	Materials and Disposal		✓	
Petty Cash ledgers by department where appropriate	Materials and Disposal		✓	✓
Compost service report	Materials and Disposal			✓
Vendor report: specialised recycling (steel, timber, e-waste, batteries, bottles, teracycle etc.,)	Materials and Disposal		✓	✓
Art report: donations list	Materials and Disposal			✓
Costume report: donations list	Materials and Disposal			✓
Storage Manifests from each department	Materials and Disposal			✓

Other lists and logs of specialised recycling and donations.	Materials and Disposal			✓
Post-production schedule	Energy			✓