

HOME CHECKLIST



Home Ecological Footprint Calculator

The Home Ecological Footprint Calculator measures the amount of biologically productive land and water (in global hectares) needed to supply the resources and assimilate the waste we generate. It may help you identify the environmental impacts of everyday activities and encourage progress towards more sustainable practices. The following questions require information about the types and amounts of products and resources you use in your home, enabling you to estimate how many global hectares are required to support your home, in other words, what sort of Footprint are you leaving on planet Earth.

Further Information:

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YOUR HOME

The following questions ask for information about the built structure of your home and take into account the material and energy inputs across its life cycle - from extracting the materials needed to build your home through to energy needed to light and heat your home.

1	What is the floor area of your home (inside)? Include the 'built' areas of your home, including your garage. Your front and backyard area and driveways are covered later. Measure the floor areas on all levels. For example, a home with a ground level measuring 80 square metres and an upper level measuring 40 square metres has a total floor area of 120 square metres. The average new house size in Victoria is now approximately 250m ² . The average bedroom is approximately 13m ² (3.6m * 3.6m).	Square metres
2	How many levels or storeys is your home or apartment building? If your home is single storey, enter 1. For a double storey house enter 2 and so on. If you live in an apartment building, enter the total number of levels in the building, not just those occupied by your home (even if your home occupies only part of one level).	Number of levels
3	Do you have information about any green design features of your home? To answer yes to this question you need to list percentages for the following:	YES / NO %
	Recycled aggregate in concrete	
	Average percentages of extenders in concrete (fly ash or slags)	
	Use of second hand building materials	
	Use of recycled building materials	
	<i>Note: The environmental benefits of other green design features such as solar power or greywater tanks will be reflected in energy savings and a lower water bill and associated Footprint.</i>	
4	What is the ground area occupied by your home or apartment building? Include only the area of land occupied by the built structure of your home or apartment building. Do not estimate the area of your entire block, only the area of the built structure (the area of the ground storey). For example if you are in a building of 6 apartments over 2 levels you should estimate the area for the total ground floor level in square metres. If you live in a single storey free standing home, your answer should be the same as Question 1.	Square metres
5	What is the area of your backyard, driveway, garden etc (outside)? Include the entire area of your block EXCEPT for the inside of your home and garage (i.e. all outside areas).	Square metres
6	What is the expected life of your home in years? If you know how old your home is and how long it is expected to last, enter the total of these two figures. For example if your home or apartment is 25 years old and you expect the building to last another 20 years, then the total expected life is 45 years.	Year(s)
7	How many people live in your home? Include all people living at your home, regardless of age. Your Ecological Footprint will be shown for your entire household and for each person living in your home. The following questions should be answered for ALL people living in your home (e.g. how much does the household collectively spend on textile products and how many kilometres do you travel by airplane between you.)	Number of residents



ENERGY AND WATER USE

Your electricity, gas and water bills should provide information in units of kWh, MJ and Litres - units required to complete this questionnaire. You will need to estimate consumption per month for each utility item below. If you are billed on a quarterly or yearly basis, estimate the monthly usage from the detail provided on your household billing information. Take into account seasonal variations where possible.

8	How much electricity does your household use per month? Billing period information may vary across utilities. Divide the total consumption by the number of days and multiply this number by 30 for an average monthly usage.	kWh/ month
9	If you have green power enter it as a percentage of total supply. Green Power is energy sourced from renewable sources such as wind, solar or hydro. Most energy providers give customers an option to purchase Green Power, usually at a small additional cost.	%
10	How much natural gas does your household use per month? Billing period information may vary across utilities. Divide the total consumption by the number of days and multiply this number by 30 for an average monthly usage.	MJ/ month
11	How much water does your household use per month? Ecological Footprint accounts for water usage by measuring the required energy demand to supply the water, for example pipe infrastructure. <i>Note: Litres are required (not KL - KiloLitres), please check your bill to determine</i>	Litres/ month
12	How much firewood does your household use for heating per month? If you do not use any firewood (for a fireplace or potbelly stove for example), enter '0'	Kg/ month

APPLIANCES

Ecological Footprint accounts for goods such as electrical items by measuring the area of biologically productive land and water required to produce the inputs, and absorb wastes across the life cycle (from material extraction to construction, transport, energy used during the product life and disposal).

13	How many of the following items does your household use?	Number of items in your household
(a)	Fridge(s)/Freezer(s) Note: If adjoining, count as 1	
(b)	Dishwasher(s)	
(c)	Washing Machine(s)	
(d)	Clothes Dryer(s)	
(e)	TV(s)	
(f)	Video/ DVD player/ Stereo/ CD player(s)	
(g)	Computer(s)	

FOOD

Food is not always associated with environmental impact but there are inputs from, and outputs to, the environment associated with growing food. Your food Ecological Footprint includes land use associated with growing crops, grazing animals for meat and absorbing emissions from the energy required for producing and transporting your food. It may help to look at a few shopping dockets to estimate how much your household spends on food per month. For more information on the spending habits of Australian households, see the Australian Bureau of Statistics website, www.abs.gov.au.

14	Please estimate expenditure on the following food products:	\$/month
(a)	Meat and meat products including fish	
(b)	Dairy products	
(c)	Fruit and vegetable products	
(d)	Oils and fats	
(e)	Flour and cereal foods	
(f)	Bakery products	
(g)	Confectionery	
(h)	Other food products	
(i)	Soft drinks and other non-alcoholic beverages	
(j)	Beer	
(k)	Wine and spirits	



TRAVEL

Different transport modes have differing ecological impacts based on materials required to construct vehicles, roads and rail, together with greenhouse gas emissions when in use. Ecological Footprint allocates land to absorb these emissions. Figures for average distances travelled for each mode are included in the calculator. No environmental impact is attributed for walking or cycling.

Vehicle types

Hybrid

A hybrid vehicle combines electric power with fuel (gasoline or petrol) technology to achieve greater efficiency, allowing you to travel further with less fuel input.

Small

4-cylinder (e.g. small hatchback)

Medium

< 6-cylinder (e.g. small to medium sedan)

Large

> 6-cylinder (e.g. 4-wheel drive, V8 or people mover)

Motorbike

Scooter

15	Do people in your home travel by car or motorbike/scooter?	YES / NO
(a)	If YES please complete parts (b), (c) and (d)	
(b)	Which of the following information do you have <i>(select one option)</i> (i) How much your household spends on fuel OR (ii) How far people in your household travel by car or motorbike/scooter	\$ spent on fuel OR kms travelled
(c)	Enter amount spent on fuel per month OR kilometres travelled per month depending on selection for (b) <i>(enter details for only one option)</i> Total amount spent on fuel for the household	\$/month
	Total kilometres travelled for the household	km/month
(d)	Complete the following table	

Vehicle type (see list left)	Number of vehicles	% of total household use	Fuel type used	Fuel price per litre	% of travel with more than driver only

16	How many trips are made by public transport each month? Include trips as a RETURN trip to and from home. An average distance is taken into account for each return trip.	Trips/month
17	How many trips are made by taxi each month? Include trips as a RETURN trip to and from home. An average distance is taken into account for each return trip.	Trips/month
18	How many kilometres do people in your home travel by airplane each month? Work related travel should be covered in your organisation's Office Ecological Footprint calculation. If you don't know how many kilometres people in your home travelled by airplane in a particular month, just divide the number of kilometres people travelled per year by 12. You can estimate how many kilometres you travel using the following conversion. One hour of air travel is roughly equivalent to: • 1000 kilometres for international flights • 750 kilometres for domestic flights	Km/ month
(a)	International flights	
(b)	Domestic flights	

CONSUMABLE PRODUCTS

Ecological Footprint accounts for goods such as clothing, books, curtains and shoes by measuring inputs across the life cycle (from material extraction to assembly, transport and product disposal). It takes into account land for growing trees to make paper and grazing cattle for leather products for example. For more information on the spending habits of Australian households, see the Australian Bureau of Statistics website, www.abs.gov.au.

	Please estimate expenditure on the following food products:	\$/month
19	Tobacco products	
20	Textile products	
21	Clothing	
22	Footwear	
23	Leather and leather products	
24	Paper products, newspapers and books	



RECYCLING AND WASTE

These questions ask for information about how much waste is generated by your household in order to measure how much land is required to assimilate this waste. The Ecological Footprint Calculator will assign credits against the items that are recycled.

25	What is your garbage composition? If you don't know the composition of your household garbage, you could use one of the average compositions listed in Table 1 below. The percentage should add up to 100%.	%
(a)	Food waste	
(b)	Garden waste	
(c)	Paper waste	
(d)	Metals	
(e)	Plastic waste	
(f)	Other materials	

Table 1 - Garbage composition data

%	Food	Garden	Paper	Metals	Plastic	Other
Average Victorian	38	18	10	7	7	20
Average Victorian with garden waste composting (or garden waste collection)	43	7	11	8	8	23
Average Victorian with garden and food waste composting (or organic waste collection)	20	10	16	11	11	32
Average Victorian with good recycling	44	21	4	3	5	23
Average Victorian with good recycling, garden and food waste composting	26	12	7	5	9	41

26	What is the capacity of your garbage bin? A 20-litre bin is about the size of a standard kitchen bin (the type that attaches to the cupboard under the sink). An 80-litre bin is the size of a small wheelie bin. A 240-litre bin is the size of a large wheelie bin. If you have more than one bin add the volumes together ie. 2 small wheelie bins = 160 litres	Litres
27	How full are your garbage bins after a week? If you have more than one bin please provide an average percentage of total waste volume	%
28	Enter the number of recyclables put out for recycling each week below:	Number
(a)	Plastic bottles Include milk bottles, soft drink containers (large and small), juice containers and so on	
(b)	Cartons (Milk and Juice) Include fresh milk cartons, long life milk cartons, juice cartons and so on	
(c)	Newspapers and magazines	
(d)	Boxes (cardboard) and other paper This includes corrugated boxes, cereal boxes and so on	
(e)	Steel cans For example soup or canned vegetable cans	
(f)	Aluminium cans For example soft drink cans	
(g)	Glass bottles and jars	

NEXT STEP

Now you have all the necessary information to complete the Ecological Footprint Calculation for your home.

Return to EPA's website and use the appropriate link to calculate the amount of land needed to sustain your home. You can then refer to some of the tips for reducing the environmental impact of you and your home. You could also use your calculation to encourage friends, family and housemates to take a moment to think about the impact they have on the Earth, and how you might all work together to make your home and lifestyles more sustainable.

RESULTS

Once you have used the calculator to obtain your results record them here

<input type="text"/>	Total GHA
<input type="text"/>	Soccer Fields
<input type="text"/>	GHA per person
<input type="text"/>	Planets per person