

Waterfootprint





To expand on our tips on "how to reduce your water consumption" in the home and a calculator to solidify this in quantitative data the story does not end there. Every day you buy and consume goods and services water has been used to give you the satisfaction of usage. This usage was developed further and is known as the water

Footprint index.



This index that was created by my fellow and important for it complements our carbon footprint

So, what is it?

It is an empirical indicator that gives you the water footprint of an individual, community or business, and is defined as the total volume of freshwater that is used to produce the goods and services consumed by the individual or community or produced by the business. So, focusing on our individual usage it will take into account your direct and indirect use of water which is pretty awesome. Not going into much detail, the water footprint goes beyond the three components making up the index: blue water use only (i.e. use of ground and surface water), a green water footprint component (use of rainwater) and a grey water footprint component (polluted water).

How does it work and how can you use it for personal or family use?

You know with everything you do you consume water in your daily life, including the water used to grow the food you eat, to produce the energy you use and for all of the products in your daily life – your books, music, house, car, furniture and the clothes you wear.



Understanding your water consumption can help you provide a solution to one of our most pressing problems: making sure there is enough water to sustain all living things on our planet. Good information about water footprints of communities and businesses will help to understand how we can achieve a more sustainable and equitable use of freshwater.

The water footprint helps to show the link that exists between our daily consumption of goods and the problems of water depletion and pollution that exist elsewhere, in the regions where our goods are produced. Nearly every product has a smaller or larger water footprint, which is of interest for both consumers that buy those products and businesses that produce, process, trade or sell those products in some stage of their supply chain

So is the water footprint comparable to the carbon footprint?

As mentioned previously the two concepts complement each other, each concept addressing another environmental issue: the carbon footprint addresses the issue of climate change, the water footprint relates to the issue of freshwater scarcity. In both cases, a supply-chain perspective is promoted. There are also differences, however. For a carbon emission it doesn't matter where it happens, but for a water footprint it does matter. A carbon emission in one place can be offset by carbon emission reduction or sequestration in another place, which is not true for water: one cannot reduce the local impact of water use in one place by saving water in another place.

In various posts on LinkedIn, I reflected on our daily and yearly direct personal consumption of water, singling out some domestic appliances (showers, toilets etc) which vary across geographical boundaries.

Just to reflect for those who have missed these posts:

Location: Australia state: Queensland:



Direct internal household consumption for a family of 4-800l pd total approx. 300.000 litres (so disregarding use for pools, car wash, garden irrigation etc which would add another 200.000 litres)

For this household you would add indirectly approx. 20.000 I water a day relating to food, clothes and all that has been made with the help of water. Scary and mind bobbling right so how are we going to be part of a great movement to reduce our water footprint.

Of course you can control your own water use::

You will read numerous blogs, free to air advertising etc with the common headline: How to reduce your water usage.? These pop up more frequently when we are going through a drought and are reactive in approach, but they are still useful for they create a positive mindset to the cause although this may impact their level of comfort.

A calculator is enclosed for you to run the numbers yourself and compare this to your water bill. All good but how we can maintain our comfort level without having to change our behaviour well if we could reduce our consumption even more by using smart systems which cycle water used for certain appliances e.g. shower, washing machine, air-conditioning and bath and use this for flushing toilets, re-routing to washing machines, car washing, irrigation of garden reducing your consumption with more than 75-80% also impacting the capacity of the heat-pump you install you would say tell me more.

As mentioned prior to get a complete picture of your water usage the water Footprint index is introduced.

The water footprint helps us understand for what purposes our limited freshwater resources are being consumed and polluted. The impact it has depends on where the water is taken from and when. If it comes from a place where water is already scarce, the consequences can be significant and require action, I am not going on a crusade here and wave my finger at everybody not respecting our limited water resources. The only thing I want to do is create awareness



Just to reiterate: you are using the checklist provided (How to.....) reducing my water consumption by 75.000 l (family of 4) then I research and find some smart state of the art water solutions reducing my consumption by another 75% reducing my overall usage to approximately 65.000 l pa That is just awesome Now the really difficult part is to calculate the indirect use of water in the goods and services we use/buy.

It is comparable with SCOPE 3 to determine your CARBON footprint. From research we gain the following information for beef and chicken: The water footprint of 200 grams of beef is the equivalent to 47 eight-minute (10 l per min) showers so approx. 4000l of water Assuming you consume on average 1 portion of beef per week for a family of four that would imply:

4*4000*1 per week 16000l per week 800.000l pa wow that is a lot Now add this to no smart solution and you are talking about 1.000.000 l pa for a family of 4 putting that in perspective: pool filled 5/10/2 -100.000l) so your direct and indirect use is 10 times the size of average sized pool.

Changing your intake from beef to chicken reduces the amount of water by 75% reducing the water consumption to 200.000 l plus 65.000 l using smart solutions looks a whole lot better

Enclosed the link to calculate your own footprint which was developed by UNESCO-IHE

https://waterfootprint.org/en/resources/interactive-tools/personal-water-footprint-calculator/

Although you cannot influence all parameters in the overview your awareness should have a positive impact on reducing your domestic water footprint. Understanding your impact and also realising that as technology has evolved and overlaid with the environmental sector there have been some cool products developed waiting to be implemented and showcase

So as a consumer you can reduce your water footprint by indirectly been conscious of your habits /diet and directly by being more conscious and using smart water solutions that recycle.

http://www.bom.gov.au/water/dashboards/#/water-markets/national/state/at?s=National