

Sustainable Lifestyles

A brief look at lifestyle impacts in the USA



wbcd sustainable lifestyles



Global Footprint Network
Advancing the Science of Sustainability

Our Vision

WBCSD's Sustainable Lifestyles cluster has a clear vision: **the innovative power of business can enable and inspire more sustainable lifestyles**, essential, if 9 billion people are to live well, within planetary limits.

With an extra 3 billion people due to enter the middle class by 2030, we will need to go beyond product improvements alone – we must explore lifestyle challenges from a broader perspective, considering not just products, but infrastructure, technology, business models and individual behaviors related to their use too.

This is a huge opportunity for forward-looking business. Understanding the limits of product improvements frees businesses to explore more transformative ways of addressing key challenges - it points the strategic lens to understand how people are living, and how they want to live their lives. By identifying where the highest impacts are occurring, business can invest in developing solutions that improve the system in which products are used, first enabling more sustainable lifestyles and then inspiring people to live them.

We are investigating where the highest consumption impacts are occurring in key lifestyle areas (where we live, how we move around, what we eat and the things we use in our homes), uncovering where business can best improve lifestyle impacts but also where we must adapt as individuals to our changing world.



wbcscd sustainable lifestyles

Overview

WBCSD's Sustainable Lifestyles cluster has focused its research on developing markets this year (Brazil, India and China). This is where the highest growth in lifestyle impacts will occur in the coming years. In each country, we have looked at resource availability, current and likely future environmental impacts from consumption, the associated value chain social challenges, and aspirations and behavior drivers.

The invitation from Whirlpool offers us the opportunity to explore U.S. lifestyles as well. To provide an idea of where the key challenges lie in the USA, the Global Footprint Network (<http://www.footprintnetwork.org>) has kindly extracted data from its recent State of the States report, which we encourage you to read.

The next section has been prepared by the Global Footprint Network, outlining where the U.S. is consuming beyond its own environmental means, measured by calculating individual **ecological footprints** (annual biocapacity demand). The final section has been prepared by WBCSD's research partner, CSCP, and provides 2 example illustrative **lifestyle footprints**, calculated in terms of gross kg of materials used annually.



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Global Footprint Network
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cscp

COLLABORATING CENTRE ON SUSTAINABLE
CONSUMPTION AND PRODUCTION

In 2015, Ecological Deficit Day landed on July 14.

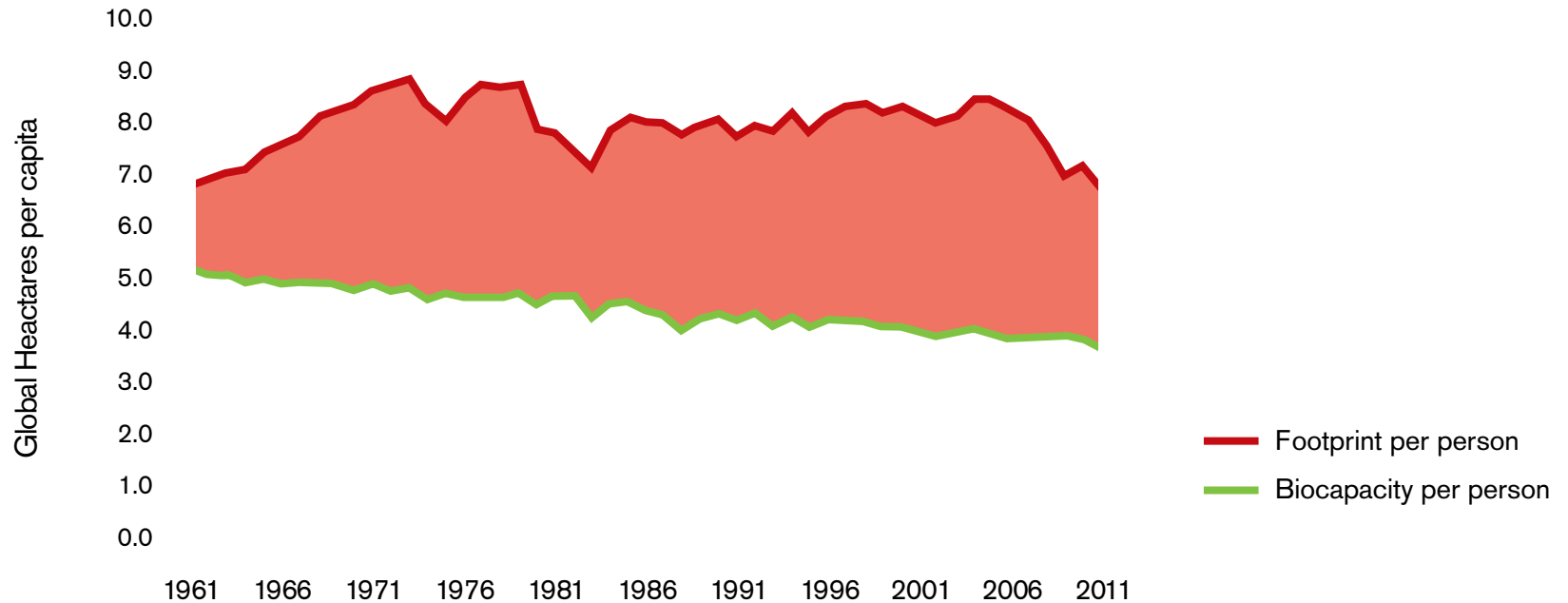
U.S. Ecological Deficit Day marks the date when the United States has exceeded nature's budget for the year. The nation's annual demand for the goods and services that our land and seas can provide — fruits and vegetables, meat, fish, wood, cotton for clothing, and carbon dioxide absorption — now exceeds what our nation's ecosystems can renew this year. Similar to how a person can go into debt with a credit card, our nation is running an ecological deficit.

Ecological Footprint

- State of the States Report: released on July 14, 2015, U.S. Ecological Deficit Day www.footprintnetwork.org/states
- The Deficit Day marks the point in the year by which the United States' consumption has exceeded what its ecosystems can renew that year.
- Global Footprint Network calculated the Ecological Footprint and Biocapacity for each state in the union.
- **Ecological Footprint** of average U.S. citizen is 7.0 gha (global hectares). Of this, 5.4 gha is short-lived household consumption (the remaining parts are paid for by government or are part of long-lived capital investment).
- **Worldwide, an average of 1.7gha/person are available.** The U.S., with its vast resources, has 3.7 gha available for each resident but this must also accommodate millions of wild species.

U.S. Footprint & Biocapacity

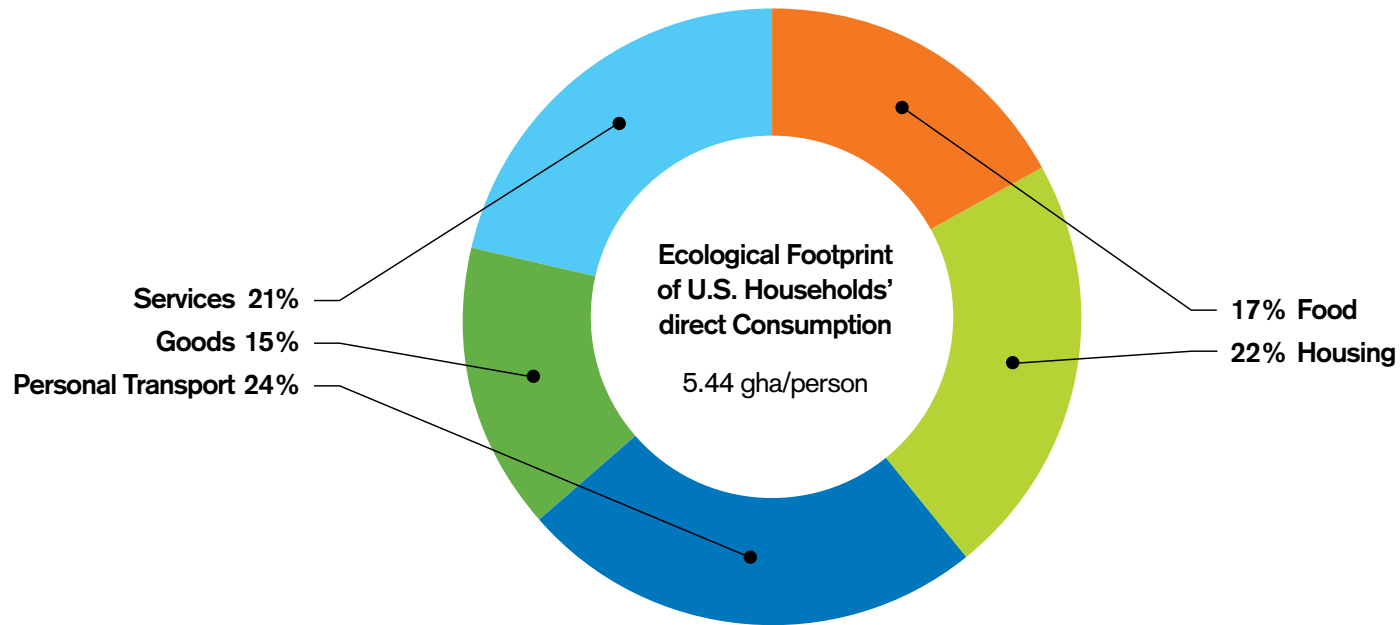
Per person in gha/person



Consumption by category.

What are the hotspots in terms of the Ecological Footprint of U.S. households for direct consumption?

Total per person Footprint is 5.44 gha (for consumption paid for directly by households) plus 1.5 gha (for Government and Gross Fixed Capital Formation), adding up a total of 7 gha per person.



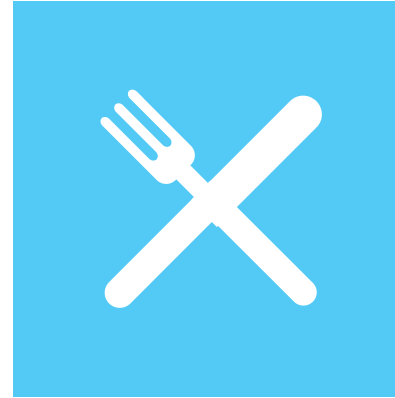
Major hotspots



Personal Transportation:
Personal vehicles



Housing:
Electricity and Heating
(including fuel composition)



Services:
Carbon footprint of restaurant
& catering, education



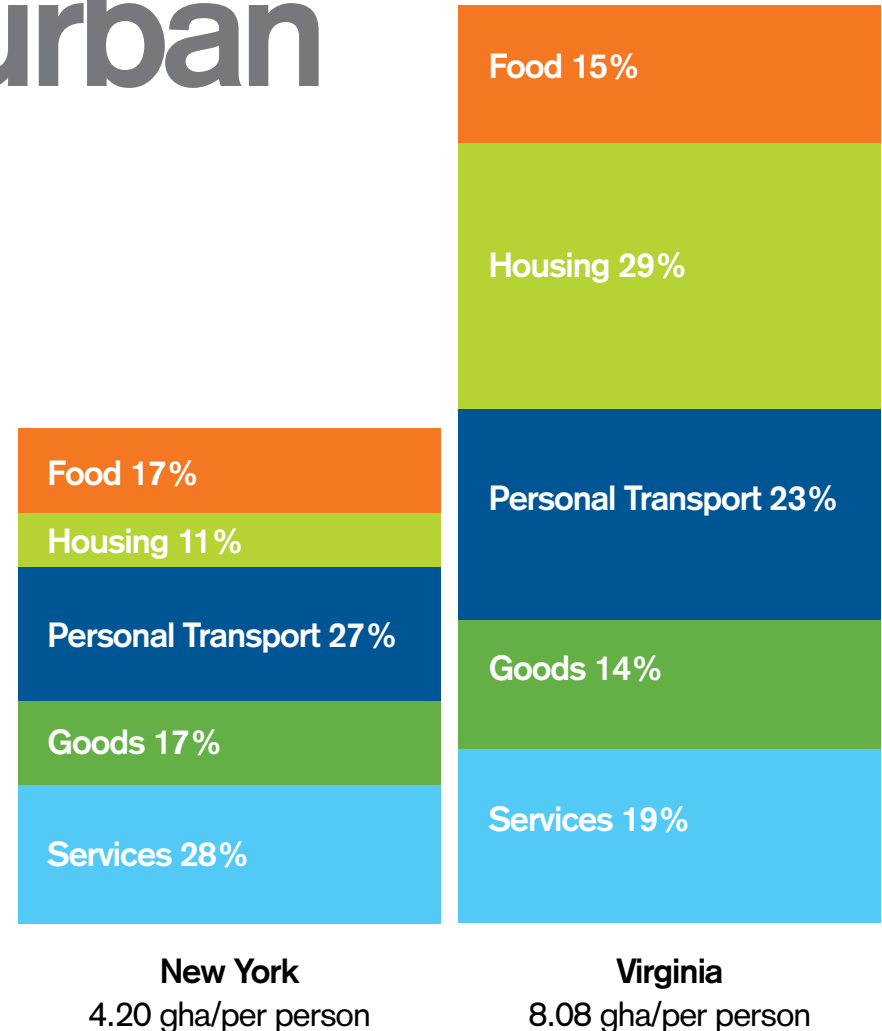
Personal Goods:
Electronics, recreational
goods, tobacco, clothing

Urban vs. Suburban

Comparing New York, the state with the lowest Ecological Footprint per capita, **and Virginia**, the state with the highest, exposes striking differences.

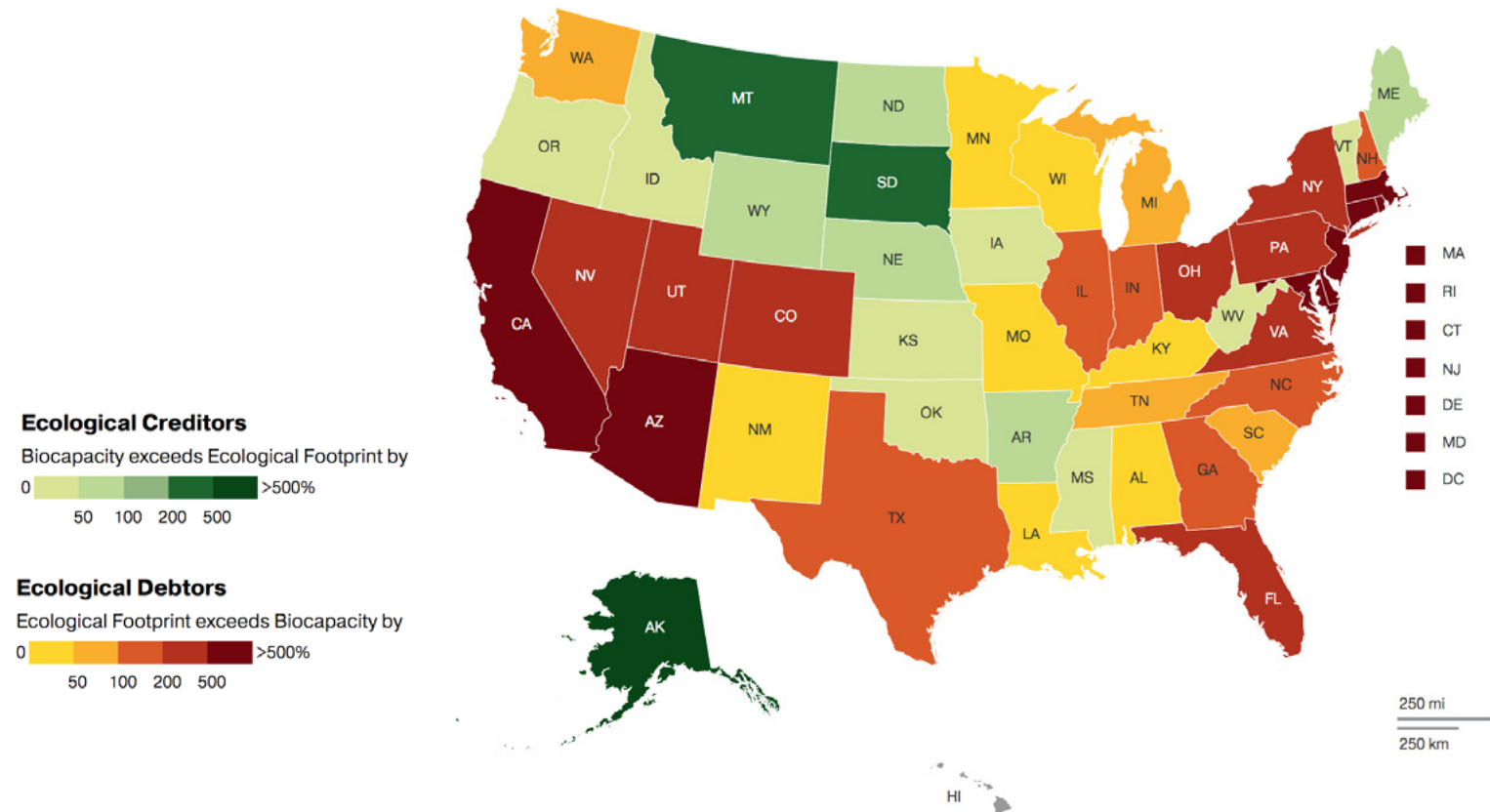
The higher density of New York City, enables efficiencies such as greater public transit use.

Housing comprises a larger portion of Virginia's Ecological Footprint than New York's, in part, because the average house in Virginia is larger than in New York.



Creditors and debtors.

Is your state consuming more than what its ecosystems can renew?



Lifestyle Footprint

- The Collaborating Centre on Sustainable Consumption and Production (CSCP) has been WBCSD's primary research partner for our 2015 work on Brazil, India and China.
- CSCP's research investigated current consumption pattern hotspots to understand where resources may be at risk due to consumption. The Global Footprint Network's Ecological Footprint data is used in these calculations. CSCP's calculations convert all elements of a lifestyle into a material (kg) level of consumption of all goods and services in terms of natural resources and the material intensity required in production. This methodology is peer-reviewed: it was used in a 2012 EU-funded research project that established pathways towards sustainable lifestyles in Europe through to 2050. Further details are available on request.
- CSCP has used this methodology to calculate example **Lifestyle Footprints**¹ for 2 individuals from the U.S. They have also provided two example footprints from comparable individuals in Brazil and India. Individual Lifestyle Footprints from different countries provide a snapshot of middle income consumer footprints - individual footprints appear to be similar from country to country within relative income brackets.
- These are **illustrative Lifestyle Footprints** only, calculated from a household survey and self-reported data.

¹ Please note the difference between Lifestyle Footprint (measured in kg) and Ecological Footprint (measured in gha). Lifestyle Footprint represents the weight of embodied resources, Ecological Footprint translates the weight into the land area needed to regenerate those resources.

U.S. lifestyle Footprint

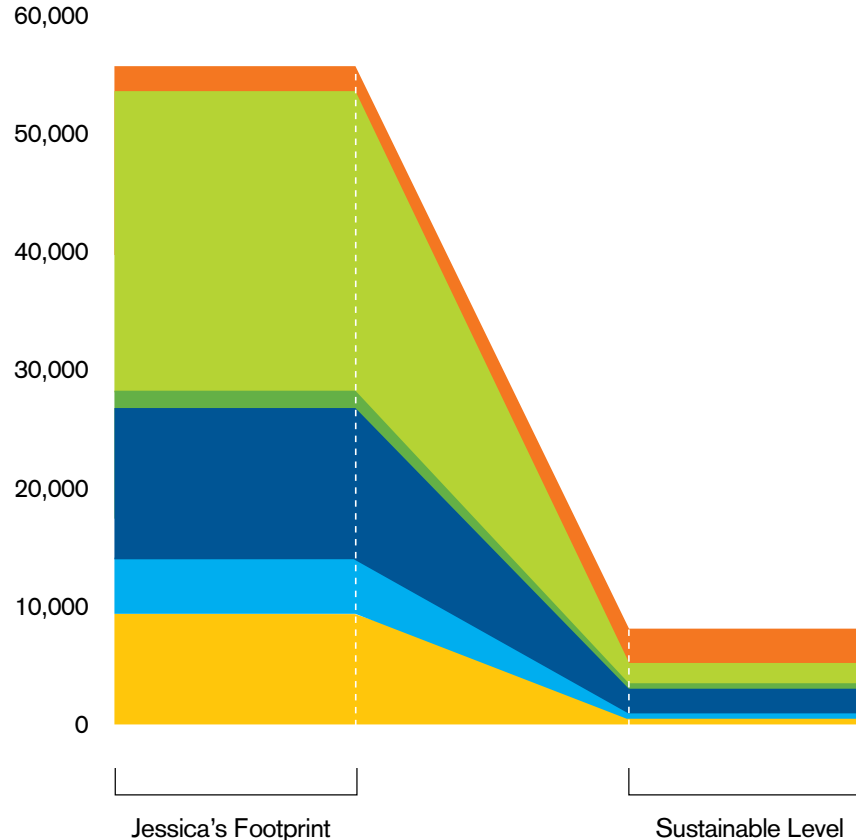
Large home & meat consumption awareness



Jessica

Consultant
Washington, DC

- Food & nutrition
- The home
- Household goods
- Mobility
- Leisure
- Others



Jessica's footprint, 56,800 kg/a, is 3 times the average Chinese footprint.



She avoids red meat but has dairy and coffee everyday. She usually buys cruelty-free poultry and eggs. Her food consumption is below the US average.



Her home is 110 m² and she personally consumes 4,200 kWh of electricity per year, besides the energy needed for heating. She aspires to decrease her carbon and waste footprints.



She usually buys 8 pieces of clothing and 3 pairs of shoes per year, which she likes to share with friends.



Public transport, cycling and walking are her main means of transportation, although she does use the car once a week. Jessica travels at least once a year abroad by plane. When traveling regionally, she usually takes the train.



Jessica has a dog and a cat. She also enjoys a lively social life and loves to travel and go barbecuing with friends on weekends.

U.S. lifestyle Footprint

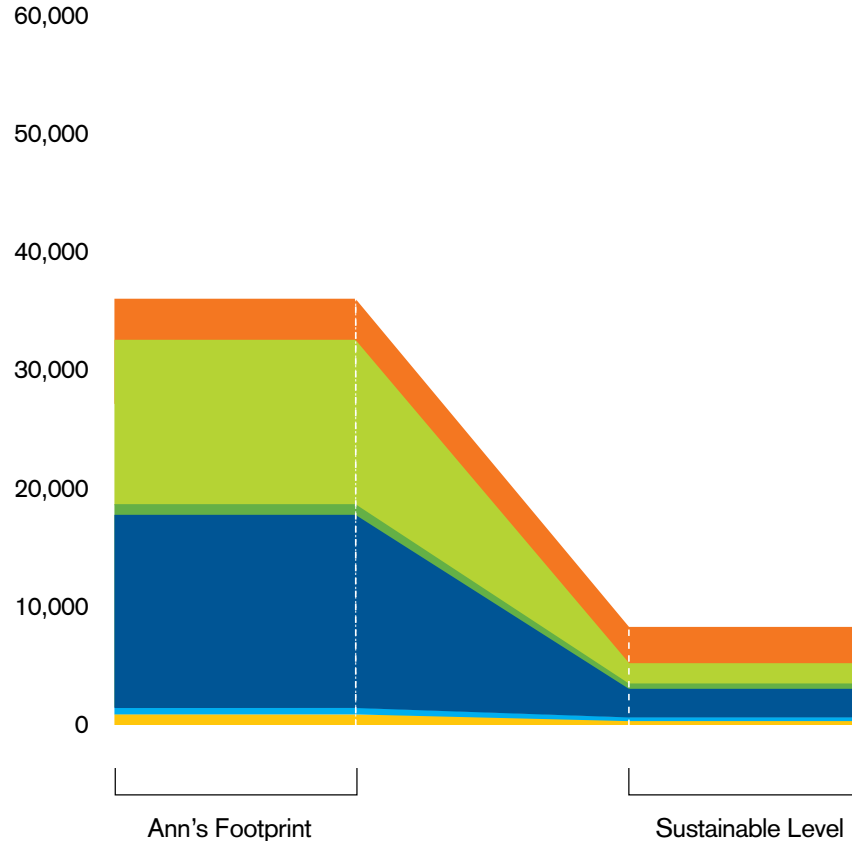
Holiday flights & unknown water consumption



Ann

Sustainability advisor
San Francisco

- Food & nutrition
- The home
- Household goods
- Mobility
- Leisure
- Others



Ann's footprint, 36,100 kg/a, is over 2 times the average Chinese footprint



She eats meat every week and drinks 2 cups of coffee a day, usually organic. She would like to cook more often with fresh ingredients.



She shares a 80 m2 flat with her husband and 2 children. Personally, she consumes 1,200 kWh of electricity/year, which is about one fourth of the American average. She regrets not knowing her water consumption, as it is included in the rent.



Ann's car is her main means of transport. Although she aspires to drive less and cycle more, driving is especially convenient to move around with the kids. She travels at least twice a year by plane to enjoy holidays: once in the country and once abroad



She does not have a TV at home and spends most of her free time at the park with her children

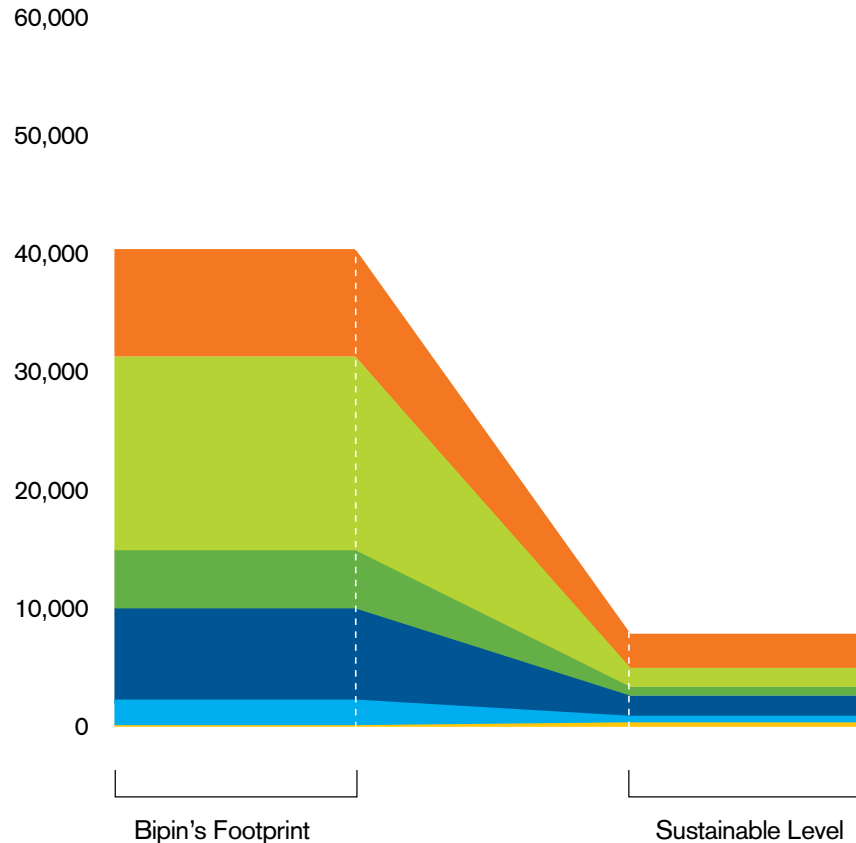
Indian lifestyle Footprint



Bipin

Entrepreneur
New Delhi, India

- Food & nutrition
- The home
- Household goods
- Mobility
- Leisure
- Others



Bipin's Footprint, 40,100 kg/a, is nearly 5 times the size of the average Indian Footprint.



He eats meat 4 times per week and aspires to increase his consumption of organic food in the future.



He lives alone in a 93m² flat and consumes 1,800 kWh of electricity per year — 12 times higher than the Indian average.



He owns a mobile phone, a laptop, a stereo and a TV.



Bipin enjoys travelling to the mountains, usually by bus or train. On a daily basis, he commutes by car and metro.



Bipin does a lot of sports, at least 5 hours per week.

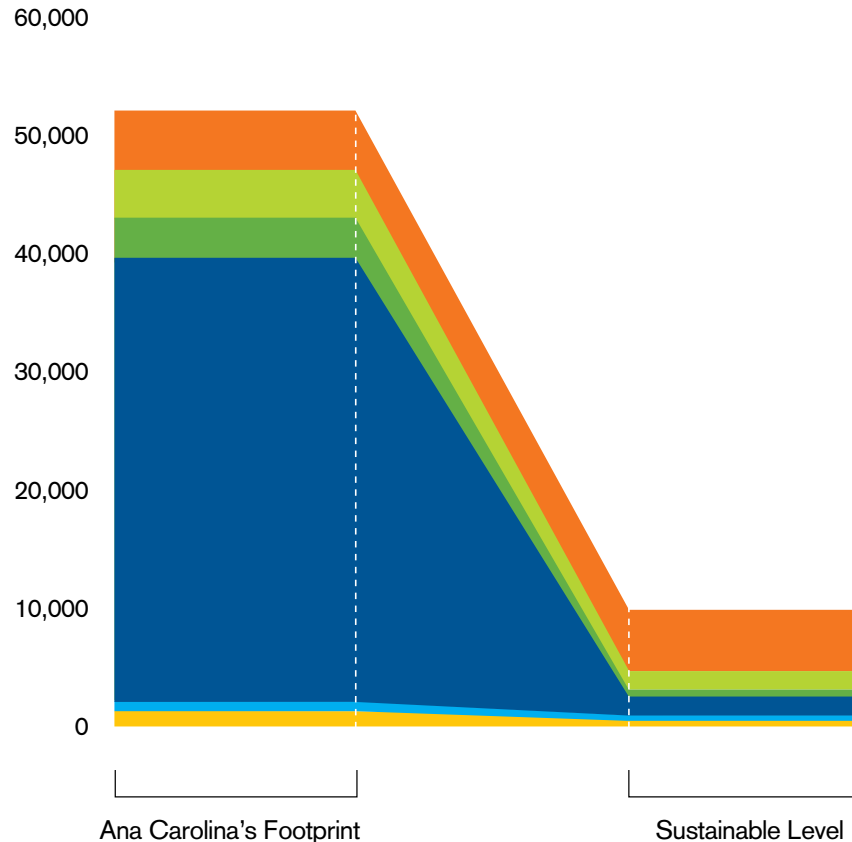
Brazil lifestyle Footprint



Ana Carolina

Architect
Caxias do Sul, Brazil

- Food & nutrition
- The home
- Household goods
- Mobility
- Leisure
- Others



Ana Carolina's footprint is 51,900 kg/a, nearly 4.5 times the average Brazilian footprint.



She has meat, dairy and 2 cups of coffee daily. She buys groceries at supermarkets and doesn't take eco-labels into account.



She shares a house with her mother and has low electricity consumption.



Her household has 4 TVs and she buys 12 new pieces of clothing per year.



Ana Carolina travels at least twice a year by plane: once abroad and once in Brazil. She uses her car every day.



She has a dog and a cat. For leisure she enjoys a lively social life, loves to travel and spend time with friends on weekends.

Sustainable Lifestyles

US Working Group Meeting, 26-27 August 2015
Whirlpool ReNEWW House, Purdue University

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