

1.5 degree changemaker: a student in a wheelchair from Lahti

Baseline in 2021

21-year-old Eveliina Hämeenoja lives in Lahti in an apartment building built in the 2010s. Hämeenoja is a wheelchair user. She studies in Helsinki, but lives and works in Lahti. In 2021, Hämeenoja's carbon footprint is 4.5 tonnes. About half of her carbon footprint is caused by food and consumption.



"I know I should shop less and come up with a new hobby. I could at least take better care of the clothes I already own so that they last longer," says student Eveliina Hämeenoja. She would like to increase the amount of vegetarian food in her diet and choose good quality products.

"It's cool that so much more information is available today about sustainable options in everyday life. For example, at school, it was always mostly just said to 'walk and use more public transport'. That's why I had a hard time figuring out what I could do to reduce my carbon footprint for a long time. Well, at least I haven't flown in four years. Because of COVID-19, I have discovered that Helsinki is also a nice local holiday destination!

Having been in a wheelchair since I was a child, I haven't really been able to heed the tips given at school to walk more. I can't just walk downtown. Fortunately, going by train is perfect for me! I travel by train to school in Helsinki many times a week, but I also travel a lot by taxi, as it feels much safer than other public transport. Developing accessibility would also make it easier for me to move around in an urban environment. Wheelchair access would be helped even by lower street curbs and better street maintenance during the winter.

Food is life for me. I would call myself a foodie, a real food fan. I like to cook at home and go to a lot of restaurants with my friends. I'm an omnivore, but I want to eat more vegetarian food for health reasons and out of curiosity too! I try to eat good quality food and I don't want to compromise on fresh ingredients. I like to pay for quality. I don't think I could give up chicken, but I could eat local wild fish and game more often. I also recently had a phase where I tested many meat substitutes for environ-

mental reasons. A couple of them really passed the test and stayed!

Fortunately, there is no need to compromise on flavor when it comes to plant-based food, because properly seasoning any food will make it taste good. I recently ate a vegan "chicken" pita dish at a restaurant and was surprised at how delicious it was. I think I could easily eat vegan food half of the time. Even dairy products would be easy to switch to plant-based ones. In the future, I hope that a variety of meat substitutes and delicious vegan dishes will be better stocked in grocery stores and restaurants.

I've always liked beautiful things and clothes, and I love to be surrounded by them. I know that buying new things often isn't a good thing at all, but I really enjoy shopping. It is even therapeutic for me. Going to clothes stores with friends is like a hobby: it's a nice way to relax and get away from it all. I know I should shop less and come up with a new hobby or way to spend time with friends. I could definitely relax and escape everyday life by doing something different. However, it feels difficult to give it up because I am so used to shopping and the fact that I can always buy new nice beautiful things and clothes.

I could at least take better care of the goods I already own so that they last longer, and I could definitely start buying better quality products. Yes, I have to buy less full stop. It would certainly save quite a bit of money that I

could then invest in some emission-reducing companies or projects after my graduation instead of using it for shopping.

I would also like to start recycling clothes and other things. I haven't found a suitable platform for this yet because I don't use Facebook. There are also no good second hand shops in Lahti where you can find nice clothes to wear quickly and easily. I hope that in the future there will be better options."

Emission reduction from 2021 to 2030



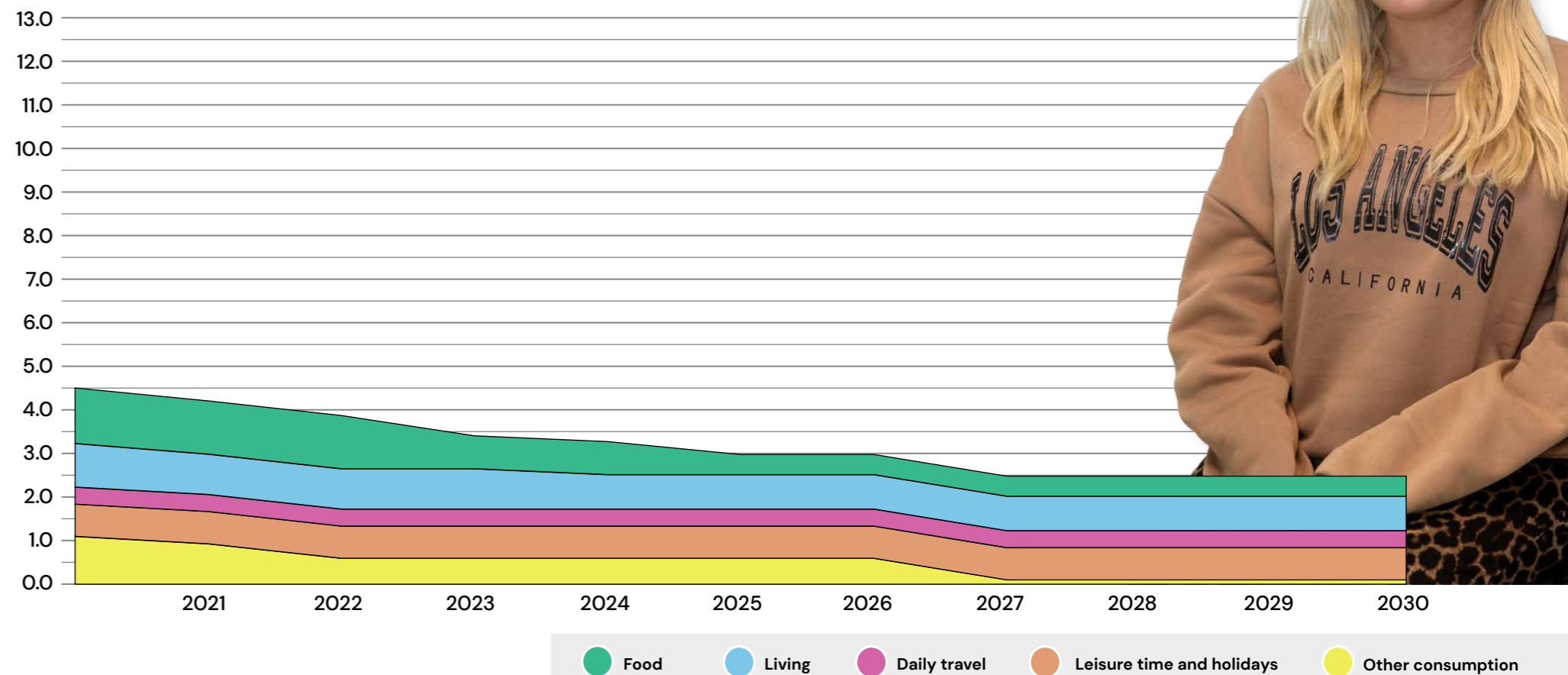
Eveliina reduces her carbon footprint the most by:

- investing the money saved from sustainable lifestyles in green ways -510 kg
- buying less clothes and shoes and prioritizing quality in all purchases -410 kg
- eating plant-based food more often -300 kg

With these lifestyle changes, Eveliina can reduce her carbon footprint by 2 tons. Her carbon footprint would then be 2.5 tonnes, the level required by the 1.5 degree climate target.



Eveliina: Carbon footprint 4.5 → 2.5 (tCO₂e/person/year)



1.5 degree changemaker: docent from Oulu

Baseline in 2021

Ville-Valtteri Visuri, 34, lives in Oulu with his wife Paula in an apartment building. Visuri works as a research and development manager in the steel industry as well as a part-time university researcher and docent. In 2021, his carbon footprint will be 12.9 tons. The largest emissions come from commuting as well as leisure and holidays, which account for about 60 percent of his carbon footprint.



"Switching to an electric car and reducing my flying will alone almost halve my carbon footprint," says Ville-Valtteri Visuri, who works as a research and development manager in the steel industry. He could further reduce his emissions by moving to an energy-efficient wooden house and traveling less often across the country.

I am confident that technology will radically reduce emissions in the future. However, I do not know whether technology alone is enough to reduce emissions in a country like Finland. There is a cold climate, long distances and a high standard of living here, which is why we consume and move a lot compared to other countries. The basic burden of Finnish lifestyles on the climate is so great that we must also change our consumption habits.

My spouse and I have been eating game and wild fish for some time. My father hunts and my wife likes to fish. Diet affects the carbon footprint, but so does driving. It was significant for us to give up our second car. We can handle one car when we can travel by train to another location if needed. Because of my work, I have to travel between Oulu and Helsinki, for example, at regular intervals. I travel by train instead of by plane whenever possible.

We live in an apartment building, meaning we can't make huge changes to our emissions from housing. But over the next 10 years, we plan to buy ourselves an A-energy-class wooden house as a home, where we could make big changes. For example, we could start generating electricity with solar panels and heat the water with a solar collector.

Smart solutions could automate the emission savings for housing. Consumption could be optimized with

energy-efficient appliances as well as energy-saving shower heads and taps. At the same time, smart solutions could help to monitor our water and electricity consumption more closely due to the data that they collect.

An electric car is an expensive purchase, but it has the greatest positive environmental impact compared to other sustainable actions that suit us. Another way for me to reduce my driving carbon footprint would be to work from home for a day or two a week in the future as well. That way, I would drive tens of miles less every week. For short trips from home I could just cycle. In the near future, I could buy or borrow a cargo bike so that even larger shopping trips can be pedaled.

On leisure and holidays, alternatively, we could reduce emissions by travelling by land instead of flying. My wife and I enjoy vacationing in Central Europe. In the future, we could go there by ship or train if the connections were faster than they are now.

I would prefer to make other emission reductions before changing my diet. However, we could make small compromises. We could certainly eat vegetarian food, for example, for three days a week. Fortunately, my carbon footprint is already almost halved when I switch from an internal combustion engine car to an electric car and travel less by plane.

Emission reduction from 2021 to 2030

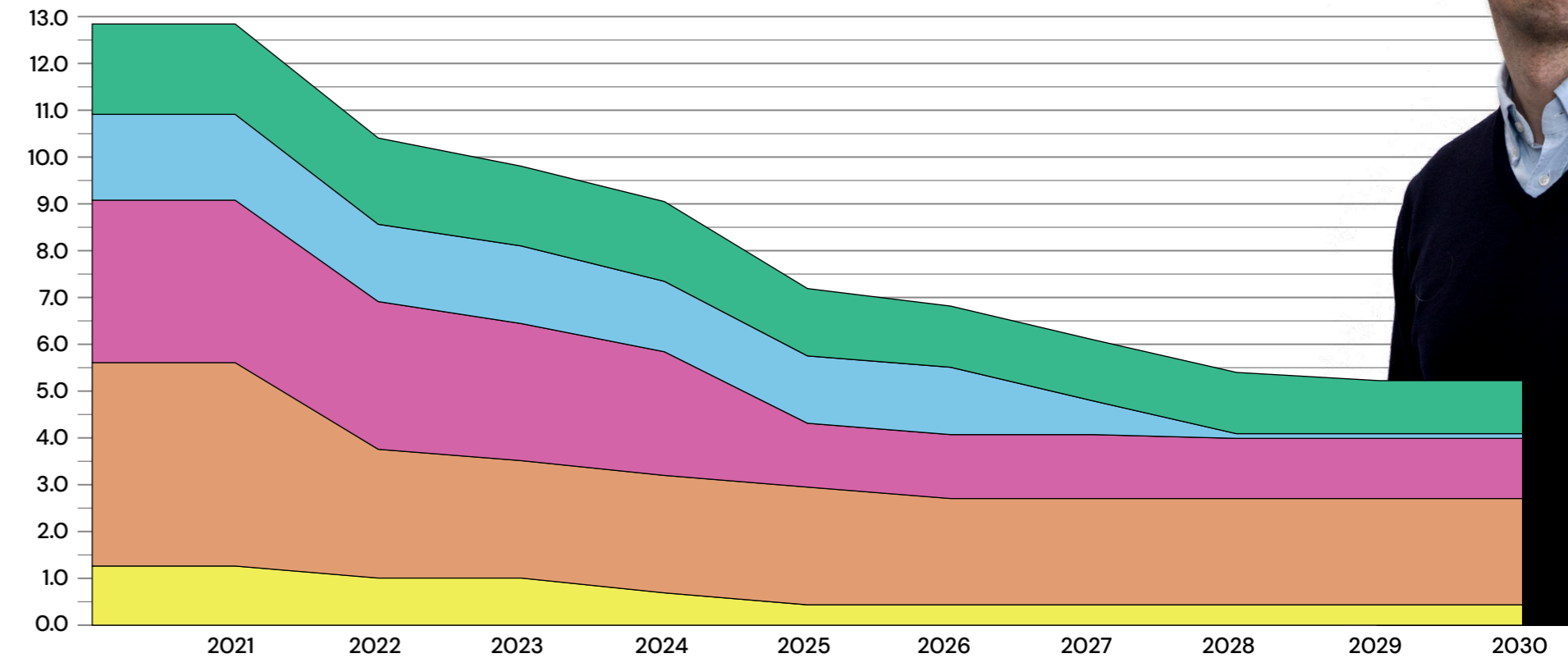


Ville-Valtteri reduces his carbon footprint the most by:

- reducing flying -1600 kg
- switching to an electric car -1200 kg
- moving to a wooden house with A energy class -1000 kg

With these lifestyle changes, Ville-Valtteri can reduce his carbon footprint by 7.7 tonnes. This would put his carbon footprint at 5.2 tonnes, more than half that of 2021.

Ville-Valtteri: Carbon footprint 12.9 → 5.2 (tCO₂e/person/year)



1.5 degree changemaker: father of two from Tampere

Baseline in 2021

In 39-year-old Antti's family of four are two children under school age and his spouse, Pauliina. The family lives in a housing company built in the 2010s in Eastern Tampere. The family's carbon footprint in 2021 is about 2.7 tonnes per person, which is in line with the 2030 climate target. Goods and consumption account for just over 40 percent of their carbon footprint.



"Life doesn't have to be miserable to be sustainable," says Antti. Antti, describes himself as someone who enjoys life's pleasures whilst living thriftily, and he and his family are already living in line with the 1.5 degree climate goals. Antti estimates that this is mainly due to not owning a car, the use of green electricity and shopping for second hand products. However, he would like to eat vegan food even more often, generate electricity with solar panels and invest in green businesses.

"Smart spending guides my consumption choices as much as my desire to live sustainably. Still, I would say I have an acquired taste and am a person who enjoys life's pleasures. I am not ready to compromise on my quality of life. For example, I have reduced my eating of red meat since my studies for health and environmental reasons, but I still enjoy meat dishes.

My spouse Pauliina is already a vegetarian, but for myself it would be difficult to become a full vegetarian or vegan. The kids and I eat meat a few times a week. Of course, kids like meat dishes the most, and since I enjoy a lot of yogurt, ice cream, and chocolate, I'll probably never give up on dairy products altogether. However, I could increase the amount of vegan food by even a couple of days a week. So many of my mates are increasingly eating vegetarian food that it feels normal.

I want to prioritize quality and experience in my everyday life. This is reflected not only in our culinary choices but also in the products that we buy. There's a lot of things we don't have because it doesn't feel smart to spend money on them. For example, about 90 percent of our furniture is recycled. The furniture has moved with us from one place to another. It has been nice to retrospectively add up how much money we have saved with these choices. I have calculated that it is in the thousands, maybe even the tens of thousands.

Our experience is that life doesn't have to be miserable to be sustainable, even if Pauliina would like a little more simplicity. We have chosen many of our current lifestyles out of a desire to spend money smartly. For example, we buy used, high-quality and value-preserving household goods. We have not purchased a car either, because we have calculated the costs and found that it is not worth it. We need a car a few times a year, for example for domestic trips, and then we resort to a rental car or Paulina's parents' car. We are the only people without cars in our neighborhood.

Everyday travel is also easy for us by public transport or electric bike. Next year, we are thinking of getting an electric cargo bike because our kids are outgrowing the current one we have. We started buying food online with home delivery some time ago. We can now see from the invoices that we save about 30 percent per month on food costs thanks to planning.

Pauliina's relatives live in Switzerland and we visit their village once a year, usually during the autumn holidays. So far we have flown as it is the fastest way to travel. In the future the dream would be to travel for a week by train to Switzerland and then spend another week with our relatives. If in the future work and school were not so place-bound, it would be easier to travel at this slower pace. We do not want to stop traveling.

In the future, we could also invest the money saved from these lifestyle changes in green companies or projects. In this way, we would support sustainable development and increase our positive handprint. For example, when we next move, we could invest in solar panels and collectors. In this way, we would generate electricity ourselves and heat our water with the power of the sun."

Emission reduction from 2021 to 2030



Antti reduces his carbon footprint the most by:

- investing the money saved from sustainable lifestyles in green ways -510 kg
- starting to generate electricity with solar panels and heating water with a solar collector -410 kg
- eating vegan food more often -330 kg

With these lifestyle changes, Antti can reduce his carbon footprint by 1.5 tonnes. His carbon footprint would then be 1.2 tonnes, well below the level required by the 1.5 degree climate target of 2.5 tonnes.

Antti: Carbon footprint 2.7 → 1.2 (tCO₂e/person/year)

