Source Description

The purpose of this Annex is to describe the calculation steps in current Excel-based carbon footprint tool, to help determining required work amounts and most suitable approaches to realize the calculator. The Excel basically combines three elements:

- The user input from the questionnaire, translated from native language to machine-readable form
- The carbon coefficients and similar, called "data factors", collected in advance from scientific sources
- The calculation flow that uses proprietary logic to determine the carbon footprint of a household / person (according to intent expressed in the questionnaire)

At the time of the tender call, the version of calculator Excel that will be used as the basis for the online version is still in a stage of development, to the extent that it doesn't give a clear picture of expected development effort. Instead, this Annex aims to provide examples and walkthroughs, hopefully giving a better depiction of the upcoming project.

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Example #1: Diet carbon footprint

This example is used to demonstrate the whole flow of a single sub-domain, namely the diet carbon footprint. In the example, household-wise intent is chosen, meaning that the user inputs diets of all family members, and the resulting footprint represents the average consumption in the household.

Required input data: age, gender and diet of each household member, chosen from a pre-determined range of diets, plus the share of "waste food" utilization, i.e. redlabeled / "rescue" food.

Required data factors: the average CFP of every listed diet with meat and dairy/eggs percentage, the reducing effect of "waste food" utilization, gender coefficients of food consumption.

Output: The diet-related CFP (excluding beverages), grained to meat, dairy/eggs and other food.

Input data

The first picture below represents the questionnaire input the user is displayed when filling in the calculator. The second picture is from the "Translation" sheet. No matter what country / language the user has selected, the questionnaire options are always converted to the same internal expressions (see "Country-specific deviations")

10	N:o	Question	Answer							
11	PAGE 2:	FOOD		OPTIONS						
12	3	People and diets. Please give age, gender and diet. Please also indicate, if people are living full-time in your home, or split in several places.								
13 14	8	YOU Age (vears)	35	[Age in years]	7					
15		Gender	Male	* male	Male	Other / prefer not to answer]			
16		Presence in household	100 %	[Percentage number]		[and the second s	_			
17		Diet	Mixed eater, meat products about every day	Vegan	Vegetarian	Pesco-vegetarian	No red meat	Mixed eater, meat products 1-2 times / wk	Mixed eater, meat products 3-4 times / wk	Mixed eater, meat products about every day
18		PERSON 2								
19		Age (years)	36	[Age in years]						
20		Gender	Female	Female	Male	Other / prefer not to answer				
21		Presence in household	100 %	[Percentage number]			-			
22		Diet	Pesco-vegetarian	Vegan	Vegetarian	Pesco-vegetarian	No red meat	Mixed eater, meat products 1-2 times / wk	Mixed eater, meat products 3-4 times / wk	Mixed eater, meat products about every day
23		PERSON 3								
24		Age (years)	3	[Age in years]						
25		Gender	Female	Female	Male	Other / prefer not to answer				
26		Presence in household	100 %	[Percentage number]						
27		Diet	No red meat	Vegan	Vegetarian	Pesco-vegetarian	No red meat	Mixed eater, meat products 1-2 times / wk	Mixed eater, meat products 3-4 times / wk	Mixed eater, meat products about every day
48	4	How big portion of your food consumption is game or "rescue" food such as "red-labeled" items	20 %	[percentage]	0				The second se	

								_		
Person: Gender	Male	male	Male final_henl	male	Female final_hen	female	Female final_hen	female	-1 final_henk	-1
	Female	female								
	Other / prefer not to answer	unspecified								
Person: presence share	[per cent]	%	1 final_henl	100 %	1 final_hen	100 %	i 1 final_hen	100 %	0 final_henk	(
Dist	Mixed eater, meat products 1-2									
Diet	times / wk	mixed12	Mixed eater, meat products about (final_henl	mixed7	Pesco-veg final_hen	pescoveg	No red me final_hen	noredmea	-1 final_henk	-1
	Mixed eater, meat products 3-4									
	times / wk	mixed34								
	Mixed eater, meat products about eve	e mixed7								
	No red meat	noredmeat								
	Pesco-vegetarian	pescoveg								
	Vegetarian	vegetarian								
	Vegan	vegan								
Share of wasted food	[prosentti]	%	0.2 final_ruok	20 %						

Data factors

The picture below shows the relevant part of "Data factors" sheet, giving the average CFP of each diet option, meat and eggs/dairy share, and gender and waste food utilization coefficients

Δ	В	с	D	E	F	G
1 Data point name	Value nme	Value 1	Value 2	Value 3	Value 4	Sources / Informatin
2 Country-specific data points are shaded red. The on	ange-shaded tend not change be	etween countries, but still need :	ourced data. Unshaded values o	re produced interally.		
		Dist (CDs (na havenages incl.)				
	Dist	blet CPPs (no beverages incl.)	Most product chore %	Milk and aggs share %		
	Diet	kg coza / p / yr	weat product share, %	Wilk and eggs share, 76		
datafaktorit ruokavalioiden hjj	mixed12	1250	0.1	.5	0.3	mixed34 = Mixed eater, meat 3-4 times / wk
5	mIxed34	1350	0.2	15	0.3	mixed7 = Mixed eater, meat circa every day
6	mixed7	1650	0.4	15	0.35	mixed12 = Mixed eater, meat 1-2 times / wk
7	noredmeat	1170	0.3	.5	0.3	
9	pescoveg	1150	0	.1	0.3	
0	vegetarian	1120		0	0.3	
						Akenji, L., Bengtsson, M., Toivio, V., Lettenmeier, M., Fawcett, T., Parag, Y., Saheb, Y., Coote, A., Spangenberg, J. H., Capstick, S., Gore, T., Coscieme, L., Power, K., Drost, E.,
1	vegan	930		0	0	Wackernagel, M., Kenner, D. & Kolehmainen, J. (2021). 1.5-Degree Lifestyles: Towards A Fair Consumption Space for All. Hot or Cool Institute, Berlin.
2						
4		Coefficient				If a responder has informed that 50 % of his/her household's food consumption is based on "rescue food" and this coefficient is set at 50 %,
5 datafaktorit_hävikkiruoan_hyödyllisyysaste	Waste food utilization	n 50%				the resulting benefit is $0.5 \pm 0.5 = 0.25$, meaning the household's calculated CFP will be reduced by 25 %.
6						
7	Gender	Coefficient				Male food-CFP is 25 % larger than female, converted to coefficient so that their average (1) is at midpoint.
8 datafaktorit_ruokavalion_sukupuolikertoimet	male	1.11				Toni Meier & Olaf Christen (2012). Gender as a factor in an environmental assessment of the consumption of animal and plant-based foods in Germany.
9	unspecified	1 1				The international journal of life cycle assessment. https://link.springer.com/article/10.1007/s11367-012-0387-x
0	female	0.89				

Calculation flow

The calculation is presented in the picture below. The logic can be read from the formula bar (column C), and it utilizes the translated questionnaire inputs (column E) and the data factors (columns F-I).



The results

The "Results" sheets display the resulting footprints as well as a visual representation of them.

С	D	E	F			
leopy me				u I		
Household	nformation					
	Name of the household	Tester's fancy home				
	Household size	3				
	Name of the contact	Test User				
	Filler's email	testuser@dor	main.com			
Ecotorints	w.sub.aroa	Carbon footn	Carbon facto			
rootprints i	y sub-alea	t co2e /				
		household / y	person / year			
Foods	Meat products	0.27916	0.09305			
	Dairy products	0.83218	0.27739			
	Other food	1.74340	0.58113			



Example #2: Diverting logic

This example demonstrates diverting of the calculation flow to two separate "sub-flows" and deciding the appropriate one, in case of heat consumption. In the questionnaire (see Appendix 2), the user is asked about geographic location (list of regions), house type (detached house / semi-detached or terraced house / flat), age (list of building decades) and indoor temperature. However, if the user has access to heating bills, he/she also has the possibility to input heat consumption (or total electricity consumption, if the main heating is electricity-based, such as electric radiators or heat pumps), and even the carbon intensity – which, for the sake of clarity, is skipped in this example.

The heat-related carbon footprint is calculated based on both estimated and reported consumption, but only one of them is chosen for the final result. In other words, the calculation flow is split in the "estimated" and "reported" pathways, and recombined by deciding the most appropriate approach. The logic favors actual consumption, but discards it, if the input is clearly flawed.

In the example, the household lives in Southern Finland in a 95 m² detached house, built between 1980-2009 and having "cool" indoor temperature (below 19C) during winter. The main heating form is district heating, and auxiliary heat sources are heat pump (est. share of heating: 20 %) and wood (10 %). In the first case, the user has not indicated a consumption reading, meaning the estimated values are used. In the second case, the user has reported consuming 10 000 kWh of district heat per year.

Case 1: Estimation-based footprint

The "Estimated" pathway is presented in the picture below. The apartment type -based heating demand (row 162) is multiplied by apartment age (row 74) and indoor temperature (row 79) coefficients. The resulting number (row 85) is then adjusted by reported geolocation (rows 86, 87), resulting in final heating demand both including and excluding domestic hot water usage (rows 87, 88). By multiplying this by the living area, the total estimated heat consumption is 14,197 kWh / year (row 103).

To get the correct CFP from this estimate, the consumption is divided into kilowatt-hours consumed by the primary heating form, namely district heating (70 %), and the auxiliary ones (heat pump 20 % and wood 10 %). As heat pumps actually produce more heat than they consume electricity, the demand is scaled down (rows 105, 106). The footprint estimate is then reached by multiplying each heating mode consumption by its respective carbon intensity (row 117).

73 2.	.3 A	apartment and heating. space heating energy, calculated		Scaling factor due to home age						
74	- [Age of the apartment	1 coefficient		1980-2009	jälkeen2010	0.9	after2010		1
75						1980-2009	1			
76						1936-1979	1.1			
77						ennen1936	1.15	before193	6	
78						Scaling factor due to inde	oor temp			[
79		Indoor temperature	0.9 coefficient		viileä	viileä	0.9	cool		
80					cool	kohtalainen	1	moderate		
81	L					lämmin	1.1	warm		
82										
83	_	The apartment's heating energy requirement per m2 (does not include ho	t water)		Heat demand in location (deg. days)	Degree day to kWh / m2	conversio	n		_
84		Apartment heating energy, basic need (by apartment type)	162.0 kWh/m2		387	B Muuntokerroin	0.00022	kWh/m2	/ C*vrk	
85		Heat demand with age and indoor temperature corrections	145.8 kWh/m2			Degree day coefficient				
86		A scaling factor based on the degree day number	0.84 coefficient							
87		Finally the apartment's heating energy need (not including dom	122.7 kWh / m2 (CAL	CULATED)						
88		Finally the heating energy demand of the apartment (incl. dom	149.4 kWh / m2 (CAL	CULATED)						
89	Ŀ	The need for heating energy of heated premises	109.1 kWh/m2 (CAL	CULATED)						
90										
98										conversion
99							kg CO2e	scaling	electricity	factor
100		Carbon footprint of space heating, calculated			Ensisijainen lämmitysmuoto	Heating forms	/kWh	factor	based	(> kWh)
01	ľ	The FP coefficient of the primary heating	0.05		kaukolämpö	kaukolämpö	0.05	1	FALSE	1
102		Scaling factor (for heat pumps)	1			suorasähkö	0.131	1	TRUE	1
103		Calculated energy demand of the premises (including domestic	14,197 kWh/hh/yr			ilp	0.131	0.5	TRUE	1
104	ļ				Auxiliary heating modes and their shar	e maalämpö	0.131	0.4	TRUE	1
05		Heating mode 2 covers the calculated energy demand	2839 kWh/yr	heat pum	ilp	puu	0.05	1	FALSE	1000
06		Heating mode 2, actual consumption (taking heat pumps into a	1420 kWh/yr		209	6 hake	0.05	1	FALSE	1000
07		Heating mode 2, FP	186 kg CO2e / yr	woo	puu	öljy	0.255	1	FALSE	255
80		Heating mode 3 covers the calculated energy demand	1420 kWh/yr		109	6 kaasu	0.198	1	FALSE	0.09
09		Heating mode 3, actual consumption (taking heat pumps into a	1420 kWh/yr			aurinkokeräin	0.01	. 1	FALSE	1
10		Heating mode 3, FP	71 kg CO2e / yr		09	6				
11		Heating mode 4 covers the calculated energy demand	0 kWh/yr							
12		Heating mode 4, actual consumption (taking heat pumps into a	0 kWh/yr							
13		Heating mode 4, FP	0 kg CO2e / yr							
14										
15		Consumption of the primary heating form (taking heat pumps i	9,938 kWh/yr							
16		FP of the primary heating mode	497 kg CO2e / yr							

Case 2: Consumption-based footprint

The only difference to Case 1 is that the heat consumption is reported in the questionnaire (Q11, see Appendix 2). The above estimation-based footprint, thus, remains unchanged, but now the actual (reported) consumption data is now available, too.

The pathway follows similar logic to differentiate the shares of main and auxiliary heating modes and multiplying them with respective carbon intensities. However, as the heating bill only involves the consumption of primary heating, the auxiliaries are added, not subtracted for the final result. Again, the "free heat" produced by the heat pump compared to its electricity consumption, is accounted, and we end up to a total heat consumption of 14,286 kWh / year (row 164).

As the reported consumption seems valid, the decision algorithm (row 167) takes the result of consumption-based pathway (759 kgCO2e / year, row 163) and discards the estimate-based one (754 kgCO2e / year, row 162). In Case 1, the latter would have been selected.

22 <mark>2.</mark> 4	Electricity use and heating of premises based on consumption				Declared consumpt	ion	
23	Heating is based on electricity	FALSE			(units)		
24	Declared heating energy use converted to kWh		10000			10000	
42							
43	b. The heating is not based on electricity						
44	Consumption of the primary heating		10000 kWł	h/yr			
45	CFP of the primary heating mode		500 kg C	CO2e/yr			
46	Heating mode 2 covers the energy requirement		2857 kWł	h/yr			
47	Heating mode 2, actual consumption (taking heat pumps into a		1429 kWł	h/yr			
48	Heating mode 2, FP		187 kg C	CO2e/yr			
49	Heating mode 3 covers the energy requirement		1429 kWł	h/yr			
50	Heating mode 3, actual consumption (taking heat pumps into a		1429 kWł	h/yr			
51	Heating mode 3, FP		71 kg C	CO2e/yr			
52	Heating mode 4 covers the energy requirement		0 kWł	h/yr			
53	Heating mode 4, actual consumption (taking heat pumps into a		0 kWł	h/yr			
54	Heating mode 4, FP		0 kg C	CO2e/yr			
59	Consumption-based FP for space heating (case b.)		759 kg C	CO2e/yr			
60							
61							
62	Estimated heating CFP (moved from above)		754 kg C	CO2e/yr			
63	Consumption-based heating-FP		759 kg C	CO2e/yr			
64	Heat consumption		14,286 kWł	h / yr			
65	_						
67	Final space heating CFP, taking into account the electric car		758.6 kg C	CO2e / yr			
69	The final heating carbon intensity		0.053 kg C	CO2e / kWh			
71	Housing, graining factor (APPLIES TO THE ENTIRE DOMAIN)		0.333 kg /	′ yr> kg / p. / yr			
72							
73							
74	2 - HOUSING. FP TOTAL		2134.8 kg C	CO2e / yr			
75							

Example #3: Domain shift

In some cases, the consumption informed in a given section of the questionnaire, actually causes impacts in a different domain. In this example, this is demonstrated by the case of electric car.

Let's assume the similar heating characteristics as in Example #2, and that the household owns a "small" electric car that is driven 10,000 km / year (Q22, see Appendix 2). As with heating, the household has the possibility to give actual electricity consumption number from the electricity bill (Q15), or just rely on estimated data.

In the estimation case, the flow is quite straightforward: housing-related electricity consumption, based on estimated utility usage (Q15), heating forms (Q11-12) and other household characteristics, is simply accounted in the Housing domain, and the domestic charging of the EV is added separately in the Mobility domain. If, however, the household reports an actual consumption reading, home-based EV charging is within that number as well (in case of separate contract, the household is asked to sum up the consumptions).

Left unchecked, this would lead to confusing results: the EV owner would seem to have a high Housing climate burden, no matter how sparingly they use utilities. On the other hand, the Mobility domain would indicate an unrealistically low carbon footprint impact, especially among heavy drivers. To address this, the calculator is aware the working mode (estimate vs. actual), and in the case of latter, subtracts the EV-charging kilowatt-hours from the consumption at Housing domain.

The following picture represents the annual consumption of EV charging (row 267) in the calculation flow. Below, the domestic electricity share is calculated using estimate from "Data factors" sheet (currently there is no self-reporting possibility in the questionnaire, but that may change in the final version). This amount, namely 1260 kWh is the amount of electricity subject to the domain shift.

266	The effect of the electric car on the electricity consumption of the residen	tial domain
267	Annual consumption of an electric car	1400 kWh/yr
269	Electricity to be deducted from residential electricity consun	1260 kWh / yr

Case 1: Estimation-based electricity consumption

The utility electricity consumption is shown in row 157. In this first case, the household did not indicate a number and, thus, the estimation of 5500 kWh / year shows up. After adding up the heating power used by the auxiliary heat pump, the total Housing-related electricity consumption is calculated at 6920 kWh / year (row 166).

	· - ·	
55	Estimated utility electricity consumption:	5500 kWh/yr
56	Utility electricity consumption based on declared consumption	-2689 kWh / yr
57	Utility electricity consumption	5500 kWh / yr
58	FP of the selected utility electricity	721 kg CO2e / yr
59	Consumption-based FP for space heating (case b.)	759 kg CO2e / yr
60		
61		
62	Estimated heating CFP (moved from above)	754 kg CO2e / yr
63	Consumption-based heating-FP	759 kg CO2e / yr
64	Heat consumption	14,286 kWh/yr
65		
66	Total electricity consumption, excl electric car	6920 kWh / yr
67	Final space heating CFP, taking into account the electric car	759 kg CO2e / yr
68	Final utility electricity FP, taking into account the electric ca	721 kg CO2e / yr
69	The final heating carbon intensity	0.053 kg CO2e / kWh
70	Final utility electricity FP factor	0.131 kg CO2e / kWh
71	Housing, graining factor (APPLIES TO THE ENTIRE DOMAIN)	0.333 kg / yr> kg / p. / yr
72		
73		
74	2 - HOUSING. FP TOTAL	2135 kg CO2e / yr
75		

Case 2: Reported electricity consumption

To demonstrate the effect of domain shift, let's fill in Case 1's electricity consumption of 6920 kWh / year to the questionnaire as "measured" consumption. As shown in the following picture, the utility consumption (row 157) is now less than before, causing the total consumption to decrease 6920 to 5660 kWh / year (row 166) – the same amount (1260 kWh) as the EV consumes domestically – and the carbon footprint accordingly.

This is caused by the domain shift. While the "estimate mode" uses input data to assess Housing-related consumption only, the "actual mode" includes domestic EV charging as well. As heating remains unchanged between the cases, the latter home must use less electricity for utilities, i.e. live more sparingly. The encouraging result is visible in the total domain CFP (row 174): while the first case boasts 2135 kg CO2e, the second has a lower one at 1969 kg.

134	Heating mode 4, 11	U NE COZE / YI
155	Estimated utility electricity consumption:	5500 kWh/yr
156	Utility electricity consumption based on declared consumption	4231 kWh / yr
157	Utility electricity consumption	4231 kWh / yr
158	FP of the selected utility electricity	554 kg CO2e / yr
159	Consumption-based FP for space heating (case b.)	759 kg CO2e / yr
160		
161		
162	Estimated heating CFP (moved from above)	754 kg CO2e / yr
163	Consumption-based heating-FP	759 kg CO2e / yr
164	Heat consumption	14,286 kWh/yr
165		
166	Total electricity consumption, excl electric car	5660 kWh / yr
167	Final space heating CFP, taking into account the electric car	759 kg CO2e / yr
168	Final utility electricity FP, taking into account the electric ca	554 kg CO2e / yr
169	The final heating carbon intensity	0.053 kg CO2e / kWh
170	Final utility electricity FP factor	0.131 kg CO2e / kWh
171	Housing, graining factor (APPLIES TO THE ENTIRE DOMAIN)	0.333 kg / yr> kg / p. / yr
172		
173		
174	2 - HOUSING. FP TOTAL	1969 kg CO2e / yr
175		

Country-specific deviations

As there are differences in lifestyles between countries, some options or even questions may deviate between countries. The calculator is, however, built in a way that minimizes the need for recurring work effort and incompatible versions. The customization can be divided to following segments:

- Language versions. When the only difference is the input language, it's only required to type in the appropriate translation in the "Translation" sheet. The internal data handling remains unaffected.
- Country-specific data factors. The same choices in different countries result in different footprints. For example, an average diet CFP, electricity carbon intensity and heating demand varies between countries. The appropriate values are inserted in the "Data factors" sheet, and the calculator automatically utilizes those values.
- Country-specific answering options. Let's, for instance, consider Example #1 about diet footprints and assume, that for "Country A" the options are fit, but in
 "Country B" there is a popular diet called "Mediterranean diet", in addition to the existing ones. As long as the diet can be expressed using the same logic, one can specify a new option by adding an appropriate row in the "Translation" sheet, and a matching abbreviation in the Data factors sheet.

The following example shows the steps to add "Mediterranean diet" into the calculator, using abbreviation "mediterr":

Step 1: Add the country-specific option to the questionnaire and "Translation" sheet, giving it an abbreviation for internal use

		-							
PAGE 2: FOOD		OPTIONS							
3 People and diets. Please give age, gender and diet. Please also indicate,									
if people are living full-time in your home, or split in several places.									
YOU									
Age (years)	35	[Age in years]							
Gender				Other / prefer not to]				
	Male	Female	Male	answer					
Presence in household	100%	[Percentage number]			_				
Diet						Mixed eater, meat	Mixed eater, meat	Mixed eater, meat	
						products 1-2 times /	products 3-4 times /	products about every	
	Mediterranean diet	r∎egan	Vegetarian	Pesco-vegetarian	No red meat	wk	wk	day	Mediterranean diet

3	Data	Arvc (kää ä)	Vast	Lopu yksik	Raak	Solu	Lopt
4	Person: Gender	Male	male		Male	final_henk	male F
5		Female	female				
6		Other / prefer not to answer	unspecified				
7	Person: presence share	[per cent]	%			1 final_henk	100%
	Diat	Mixed eater, meat products 1-2					
8	Diet	times / wk	mixed12		Mediterranean diet	final_henk	mediterr P
		Mixed eater, meat products 3-4					
9		times / wk	mixed34				
10		Mixed eater, meat products about eve	mixed7				
11		No red meat	noredmeat				
12		Mediterranean diet	mediterr				
13		Pesco-vegetarian	pescoveg				
14		Vegetarian	vegetarian				
15		Vegan	vegan				

Step 2: Add the abbreviation with appropriate carbon intensity data to the "Data factors" sheet.

	А	В	С	D	E	
1	Data point name	Value nme	Value 1	Value 2	Value 3	Val
2	Country-specific data points are shaded red. The ord	ange-shaded tend not change be	tween countries, but still need s	ourced data. Unshaded values ar	e produced interally.	
			Diet CFPs (no beverages incl.)			
3		Diet	kg CO2e / p / yr	Meat product share, %	Milk and eggs share, %	
4	datafaktorit_ruokavalioiden_hjj	mixed12	1250	0.15	0.3	\$
5		mixed34	1350	0.25	0.3	\$
6		mixed7	1650	0.45	0.35	5
7		noredmeat	1170	0.15	0.3	\$
8		mediterr	1000	0.1	0.1	
9		pescoveg	1150	0.1	0.3	\$
10		vegetarian	1120	0	0.3	\$
11		vegan	930	0	()
12						-

Step 3: The new diet is added to the calculation automatically (apart from minor cell range references), maintaining the logic of adjusting the result by variables like gender and age.

SUM	\checkmark : $\times \checkmark f_x$	=LET(diet_cfp,IFERROR(VLOOKUP(E12,\$F waste_food_utilisation,1-\$H\$29*fit gender_coefficient,IFERROR(VLOOF comment,N("Below: The children d age,IFERROR(\$E28*1,18), age_factor,MIN(1,0.293057 + 0.042 diet_cfp * gender_coefficient * was	\$12:\$G\$19,2,FALSE),0), nal_ruoka_hävikkiosuus, KUP(\$E20,\$G\$31:\$H\$33,2,FA iscounts"), 7559 * age), ste_food_utilisation * age_f	LSE),\$H\$32), actor)					
A		В	С	D	E	F	G	Н	
1	Required information		Value	Unit	Questionnaire answer	Related data factors			
11 1.1	Residents' diets		CFP		diets of people in the household		/p/yr	%	%
12	Food CFP, person 1		1110.0	kg CO2e/p. / yr	mediterr	mixed12	1250	15%	30%
13	Food CFP, person 2		1023.5	kg CO2e / p. / yr	pescoveg	mixed34	1350	25%	30%
14	Food CFP, person 3		438.7	kg CO2e / p. / yr	noredmeat	mixed7	1650	45%	35%
15	Food CFP, person 4		0.0	kg CO2e / p. / yr		noredmeat	1170	15%	30%
16	Food CFP, person 5		0.0	kg CO2e / p. / yr		mediterr	1000	10%	10%
17	Food CFP, person 6		0.0	kg CO2e / p. / yr		pescoveg	1150	10%	30%
18	Food CFP, person 7		0.0	kg CO2e / p. / yr		vegetarian	1120	0%	30%
19					genders of the people in the household	vegan	930	0%	0%
20					male				
21					female				
22					female				
23									
24									
25									
26									
27	Food FP / household, me	at	279.2	kg CO2e / yr	age of people in the household (p. 1-7)				
28	FP of food / households,	dairy products. (incl. drinking milk)	832.2	kg CO2e / yr	35	Avoided food waste "util	ity degree" c	oefficient	
29	FP of food / household, o	other food	1743.4	kg CO2e / yr	36	Coefficient	0.2		
30					3	Gender-dependent facto	rs		
31							male	1.11	
32						u	nspecified	1	
33	Food graining factor		0.333	kg / yr> kg / p. / yr			female	0.89	

Appendix 1: Example printouts of the calculation results and their graphical representation

Linua ala alal infam					Desistatio minute										
Household Inform	mation				Projektin nimi:	ort									
	Name of the household	Tester's fancy ho	me			est									
	Name of the contact	5 Tast Usar													
	Filler's email	testuser@domai	in com												
	Accelerator/workshop	Carbon footorint	t test												
	Preceleration workshop	curbon tootprint	ic.n												
Footprints by sul	b-area	Carbon footpiCa t CO2e / t C	rbon footprin CO2e /	t	Tiekarttalaskentaan väli	ttyviä kert	oimia j	a muita tietoja			Other food 410 kg	Own car 39	(3 300 km) 0 kg	Meat 330 kg	
		household / y pe	rson / year			value		unit							
Foods	Meat products	0.99233	0.33078		Heat demand of the apartment	(i 149.44		kWh/m2							
	Dairy products	1.36220	0.45407		The FP coefficient of the heatin	g 0.13600		kg / kWh							
	Other food	1.22170	0.40723		FP coefficient of electricity	0.13100	1	kg/kWh						/	
	Other drinks	0.69509	0.23170		Consumption of operational ele	ec 1833.3	1	wh/person/year		Heating (4400 kWh)			Housing [37 m7	6	Clothing
					Infra-FP of the apartment	6.900		m2		600 kg			220 kg		140 kg
tesidence	Housing	0.65568	0.21856		Area of the apartment (total)	95		m2							
	Heating	1.80054	0.60021		Area of the apartment (per per	sa 32		m2 / person				**Muut**			
	Electric	0.72050	0.24017		Domestic water consumption	109.50		m3 / household / yea	r		Services	230 kg			
					FP per km of the car	0.11693		kg / car-km			290 kg				Juice (97.1)
lovement	Own car	1.16933	0.38978		Reduction potential of driving	0.03834	1	kg / car-km							82 kg
	Other private transport	0.19908	0.06636		Driving kilometers (per househ	ol 10000		km / household / yea	r l						
	Public transport	0.08190	0.02730		Driving kilometers (per person)	3333	I	m / person / year					130 kg		Information
	Air and ship travel	4.93531	1.64510		Daily movement FP (per house	1a 1450.31	1	cm / household / yea	r l					<u>-</u>	etc. 58 kg
					Daily movement FP (per persor) 483.44		km / person / year						Boating etc. (4 t)	
ods. services and	Accommodations	0.02700	0.00900		Amount of daily movement (pe	23500		(m / year							4
e time	Activities	0.44400	0.14800		Amount of daily movement (pe	7833.33	i	km / person / year					Other drinks	Mixed waste	Taxi (180
	Summer cottage	0.00000	0.00000				ľ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Aircraft (6 t)	Dairy products.	Electric (1800 kWh)	Domestic appliance	s (150 l)	(160 kg)	km] (
	Electronics	0,28900	0.09633						1 600 kg	450 kg	240 kg	230 kg	100 kg	62 kg	44 kg 3
	Household goods	1,08335	0.36112												
	Clothes and shoes	0.41440	0.13813												
	Pets	0.27240	0.09080												
	Other consumption and se	0.86625	0.28875												
	Waste	0.19092	0.06364												
	IN TOTAL	17.4	5.8												
		17.4	5.0												
les (2014) estes			1		Anna and a large star at the star	_		(
alanjaikitulosteen kä	CEP / person (t CO.e)	iversioissaj	C1	P / person	Aputaulu kuvaajan tulostuksee	11	ľ	FALSE	Apartment location: Uusimaa						
oods, services and l	eisi 1 2	W	aste	0.05	Goods, services and leisure	Waste	0.06	FALSE	Housing type: apartment building						
oods, services and it	1.2	Se	rvices and c	0.38	soods, services and reisure	Services an	0.38	FALSE	Year of construction of the apartment: 1980	0-2009					
		Ge	oods and cld	0.60		Goods and	0.60	FALSE	The main form of heating: district heating						
		Lei	isure	0.15		Leisure	0.16	FALSE	Internal temperature: 20-22 °C						
					Mobility	Plane and	1.65	FALSE	Water consumption: 155 I / person / day						
obility	2.1	Pla	ine and ferr	1.65	Mobility	Plane and Public tran	1.65	FALSE	Water consumption: 155 l / person / day Operating electricity: 2200 kWh / person / v	ear					
obility	2.1	Pla	ane and ferr blic transpo	1.65	Mobility	Plane and Public tran Other priva	1.65 0.03 0.07	FALSE FALSE FALSE	Water consumption: 1551 / person / day Operating electricity: 2200 kWh / person / y Goods, clothes and shoes: the average cons	ear umer					
lability	2.1	Pla Pu Ot	ane and ferr blic transpo her private	1.65 0.03 0.07	Mobility	Plane and Public tran Other priva Own car	1.65 0.03 0.07 0.39	FALSE FALSE FALSE FALSE	Water consumption: 1551 / person / day Operating electricity: 2200 kWh / person / y Goods, clothes and shoes: the average cons Goods, furniture and interior design: the av	ear umer erage consumer					
lobility	2.1	Pla Pu Ot	ane and ferr Iblic transpc her private vn car	1.65 0.03 0.07 0.39	Mobility Housing	Plane and Public tran Other priva Own car House	1.65 0.03 0.07 0.39 0.22	FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 l / person / day Operating electricity: 2200 kWh / person / y Goods, clothes and shoes: the average cons Goods, furniture and interior design: the av Goods, household appliances and tools: the	ear sumer erage consumer e average consumer					
lobility	2.1	Pla Pu Ot	ane and ferr blic transpc her private vn car	1.65 0.03 0.07 0.39	Mobility Housing	Plane and Public tran Other priva Own car House Heating	1.65 0.03 0.07 0.39 0.22 0.60	FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 I / person / day Operating electricity: 2200 kWh / person / y Goods, clothes and shoes: the average cons Goods, furniture and interior design: the av Goods, household appliances and tools: the Services: the average consumer	ear sumer erage consumer averäge consumer					
lability	2.1	Pla Pu Ot Ov	ane and ferr blic transpo her private vn car	1.65 0.03 0.07 0.39	Mobility Housing	Plane and Public tran Other priva Own car House Heating Electricity	1.65 0.03 0.07 0.39 0.22 0.60 0.24	FALSE FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 l / person / day Dperating electricity 2200 kWh / person / y Goods, clothes and shoes: the average cons Goods, furniture and interior design: the av Goods, household appliances and tools: the Services: the average consumer	ear umer erage consumer e average consumer ear					
obility	2.1	Pla Pu Ot Ou Hc	ane and ferr iblic transpo her private vn car use ating	1.65 0.03 0.07 0.39 0.22 0.60	Mobility Housing Food	Plane and Public tran Other prive Own car House Heating Electricity Other beve	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23	FALSE FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 l / person / day Operating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Soods, furniture and interior dosign: the av Soods, household appliances and tools: the services: the average consumer Total amount of waste: 596 kg / person / ye	ear umer crage consumer e average consumer					
obility	2.1	Plz Pu Ot Ou Ha He Ele	ane and ferr iblic transpo ther private wn car use tating ctricity	1.65 0.03 0.07 0.33 0.22 0.60 0.24	Mobility Housing Food	Plane and Public tran Other prive Own car House Heating Electricity Other beve Other food	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41	FALSE FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 I / person / day Operating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Goods, furniture and interior design: the av Goods, household appliances and tools: the services: the average consumer Total amount of waste: 596 kg / person / ye	ear umer erage consumer e average consumer aar					
obility ousing	2.1	Plz Pu Ot Ov Hc Els	ane and ferr iblic transpo ther private wn car use tating totricity	1.65 0.03 0.07 0.33 0.22 0.60 0.24	Mobility Housing Food	Plane and i Public tran Other prive Own car House Heating Electricity Other beve Other food Milk produ	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 l / person / day Dperating electricity 2200 kWh / person / y Goods, clothes and shoes: the average cons Goods, household appliances and tools. the Services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer average consumer ar					
lability ousing	1.1	Pia Pu Ot Ov Hc Elc	ane and ferr iblic transpo iher private wn car use iating sctricity her beyerag	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23	Mobility Housing Food	Plane and i Public tran Other prive Own car House Heating Electricity Other beve Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 l / person / day Operating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Soods, furniture and interior design: the av Soods, household appliances and tools: the Services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer average consumer					
lability ousing	1.1	Pla Pu O1 O2 Hc Elc C1 O1 O1	ane and ferr iblic transpc iher private wn car vuse aating xctricity her beverag her food	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41	Mobility Housing Food	Plane and Public tran Other prive Own car House Heating Electricity Other beve Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE Vain "TRUE" -arvot si:	Water consumption: 155 I / person / day Dperating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Goods, furniture and interior design: the av Soods, household appliances and tools. the services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer e average consumer					
obility busing rod	1.1	Pla Pu Ot Ot Hcc He Elt Ot Mi	ane and ferr iblic transpc iher private wn car use sating sctricity her beverag her food k products	1.65 0.03 0.07 0.39 	Mobility Housing Food	Plane and Public tran Other prive Own car House Heating Electricity Other beve Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE Vain "TRUE" - arvot siz	Water consumption: 155 l / person / day Operating electricity: 2200 KWh / person / y Soods, clothes and shoes: the average cons Soods, household appliances and tools. the services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer average consumer					
obility busing	1.1	PL Pu Ot Ot Hc Elt Ot MM	ane and fer iblic transpc iber private wn car use sating setricity her beverag her food ik products sat product	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45 0.33	Mobility Housing Food Food	Plane and Public tran Other priv: Own car House Heating Electricity Other beve Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE Ain "TRUE" - arvot siz	Water consumption: 155 l / person / day Dperating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Goods, furniture and interior design: the av Goods, household appliances and tools: the Services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer average consumer					
obility busing	1.1	Pia Pui Ot Ou Het Els Ot Mi Mi	ane and ferr iblic transpo iher private wn car use sating sctricity her beverag her food ilk products sat product	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45 0.33	Mobility Housing Food	Plane and Public tran Other privs Own car House Heating Electricity Other bove Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE Yain "TRUE" -arvot si:	Water consumption: 155 I / person / day Dperating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Soods, furniture and interior design: the av Soods, household appliances and tools. the services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer e average consumer					
lobility susing red	1.1	Pili Pu Ot Ot He Ele Ot Mi Mi	ane and ferr iblic transpo iher private wn car use aating sctricity her beverag her food ilk products gat product	1.65 0.03 0.07 0.33 0.22 0.66 0.24 0.23 0.41 0.45 0.33	Mobility Housing Food Current footprints and goals	Plane and Public tran Other priv: Own car House Heating Electricity Other beve Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE Vain "TRUE" -arvot si:	Water consumption: 155 l / person / day Operating electricity: 2200 kWh / person / y Soods, lothes and shoes: the average cons Soods, household applances and tools: the services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer average consumer					
tobility cusing pod urrent footprints an nnish average (9.7 t	1.1 1.4 1.9 1.4 1.4 1.4 1.9 1.9 1.9 1.7 1.9 1.9 1.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	Pili Pu Ot Ot He Elt Ot Mi Mi	ane and ferr iblic transpc iher private wn car uuse sating sctricity her beverag her food ik products sat product	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45 0.33	Mobility Housing Food Current footprints and goals 2030 target (2.5 t)	Plane and Public tran Other prive Own car House Heating Electricity Other beve Other beve Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.23 0.41 0.45	FALSE FALSE FALSE FALSE FALSE FALSE FALSE	Water consumption: 155 l / person / day Dperating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Goods, household appliances and tools: the Services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer average consumer					
fobility ousing ood urrent footprints an nuish average (9.7 t aur household (5.8 t	1.1 1.1 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	Pilion	ane and fer iblic transpé iher private vn car use tating cetricity her beveraý her beveraý ker food ik products ast product	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45 0.33	Mobility Housing Food Current footprints and goals 2030 target (2.5 t) Your household (5.8 t)	Plane and Public tran Other priv: Own car House Heating Electricity Other box Other food Milk produ Meat prod	1.65 0.03 0.07 0.39 0.22 0.60 0.24 0.23 0.41 0.45 0.33 0.41 0.45 0.33	FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE Vain "TRUE" -arvot si:	Water consumption: 155 I / person / day Dperating electricity: 2200 kWh / person / y Soods, clothes and shoes: the average cons Soods, furniture and interior design: the av Soods, household appliances and tools: the services: the average consumer Total amount of waste: 596 kg / person / ye ältävä lista	ear umer erage consumer e average consumer ar					

AB C DEFGH I J K LM N O P Q R S T U V W

THE CARBON FOOTPRINT RESULTS

Overview



Goods, services and leisure: 1.2 t CO2e / p / v (21 %)



Carbon footprint tells the climate impact of the lifestyle, or how much the lifestyle causes greenhouse gas emissions in total. Its unit is carbon dioxide equivalent (CO2e).



Appendix 2: The questionnaire (subject to mostly minor changes during the project)

The questionnaire

Carbon footprint questionnaire Select or input the answers according to your current lifestyles. Please alter the Answer-column only! There are two types of input. The coloured b menu you can choose the answer from. The cells tinted in light gray expect a type found in the "OPTIONS" section next to each question)	oxes have a drop-down I answer (details can be			
N:o Question	Answer			
PAGE 1: BASIC INFORMATION		OPTIONS		
1 Would you like to calculate the carbon footprint for yourself, or include				
other household members as well?	Household	≺ elf	Household	
The results are still shown as tons CO2e / person, but in household case, they				
represent the average of the whole household.	self			
2 Where do you live [FOR TESTERS: DON'T CHANGE!]	Household	List of appropriate reg	ions]	
				-

N:o Question	Answer								
PAGE 2: FOOD		OPTIONS							
3 People and diets. Please give age, gender and diet. Please also indicate,									
if people are living full-time in your home, or split in several places.									
YOU									
Age (years)	35	[Age in years]							
Gender				Other / prefer not to	7				
	Male	* emale	Male	answer					
Presence in household	100 %	[Percentage number]							
Diet	Mixed eater, meat					Mixed eater, meat	Mixed eater, meat	Mixed eater, meat	
	products about every					products 1-2 times /	products 3-4 times /	products about every	
	day	Vegan	Vegetarian	Pesco-vegetarian	No red meat	wk	wk	day	
PERSON 2									
Age (years)	36	[Age in years]							
Gender				Other / prefer not to					
	Female	Female	Male	answer					
Presence in household	100 %	[Percentage number]							
Diet						Mixed eater, meat	Mixed eater, meat	Mixed eater, meat	
					and the second	products 1-2 times /	products 3-4 times /	products about every	
	Pesco-vegetarian	Vegan	Vegetarian	Pesco-vegetarian	No red meat	wk	wk	day	
PERSON 3			_						
Age (years)	3	[Age in years]							
Gender				Other / prefer not to					
	Female	Female	Male	answer					
Presence in household	100 %	[Percentage number]							
Diet						Mixed eater, meat	Mixed eater, meat	Mixed eater, meat	
						products 1-2 times /	products 3-4 times /	products about every	
	No red meat	Vegan	Vegetarian	Pesco-vegetarian	No red meat	wk	wk	day	
4 How big portion of your food consumption is game or "rescue" food	0.000								
such as "red-labeled" items	20 %	[percentage]							
5 How often do you consume following-type beverages? If you answer									
household-wise, include the total consumption of all household									
members,			1						
bottled water (0.5 ltr bottles)	5 portions / wk	portions / day	portions / wk						
soft drinks and mineral water (2 dl glassess)	3 portions / day	portions / day	portions / wk						
juices (3 dl glassess)	4 portions / day	portions / day	portions / wk						
milk and sour milk (4 dl glassess)	3 portions / day	portions / day	portions / wk						
plant-based milk (5 dl glassess)	3 portions / day	portions / day	portions / wk						
coffee (6 dl glassess)	3 portions / day	portions / day	portions / wk						
tea (7 dl glassess)	1 portions / day	portions / day	portions / wk						
mild alcoholic beverages (0,33 ltr cans)	7 portions / wk	portions / day	portions / wk						
wine (12 cl wine glasses)	1 portions / wk	portions / day	portions / wk						

N	o Question	Answer										
PAGE	3: HOUSING		OPTIONS									
	6 In what type of building do you live?			Terraced or semi-								
		Detached house	Flat	detached house	Detached house							
	7 How big is the living space?	95	[area in square meters									
	8 When is the house built?	Between 1980-2009	After 2010	Between 1980-2009	Between 1936-1979	Before 1936						
	9 Do you have other heated spaces like garages, storage rooms etc. in											
	addition to your living space? Shared spaces like a shared bicycle		[area in square									
	storage or garage do not count.		meters]									
1	0 Do you have a contract for green electricity or district heating. Or											
	better yet: if you know the carbon intensity of the contract, you can											
	insert it below.											
	ELECTRICITY											
	Contract type	Normal	Normal	Green energy								
	Carbon intensity (g CO2e/kWh)	I don't know	I don't know	gCO₂e / kWh								
	DISTRICT HEATING				_							
	Contract type		Normal	Green energy								
	Carbon intensity (g CO ₂ e/kWh)	I don't know	I don't know	gCO2e / kWh								
1	1 What is the primary heating source in your home? After selecting the											
	source, you can also type in your consumption, if you know it. Please											
	use the unit indicated in the answer option.											
	If your heating is based on electricity (electric heating, air- or ground-sourced											
	heat-pumps), please type the whole electricity consumption, including											
	domestic EV charge.											
	Main heat source	Direct electricity - kWh	District heating - kWh /	Direct electricity - kWl	n Air- or air-to-water	Ground-sourced heat					Solar thermal energy -	
		/yr	yr	/yr	heat pump - kWh / yr	pump - kWh / yr	Wood - m3 / yr	Other biomass - kg / yr	Oil - ltr / yr	Gas - m3 / yr	kWh/yr	
	Consumption	20000 kWh / yr	I don't know	kWh/yr								
1	2 Do you also have auxiliary heat sources. If so, please select the one(s)											
	you use, with it's approximate share of total heating.											
	Heat source 2	Air- or air-to-water	No. 1 and an		Air- or air-to-water	Ground-sourced heat		out 11	01			
		neat pump	District heating	Direct electricity	neat pump	pump	Wood	Other biomass	01	Gas	Solar thermal energy	
	Approximate snare	20 %	(percentage)			Convert accurate heart	1	1	1	1	1	
	near source s	Wood	District booting	Direct electricity	heat nump	oround-sourced neat	Wood	Other biomaga	oil	Cas	Color thormal operate	
	Annrovimato charo	10.04	[norcontago]	Direct electricity	near pump	pump	wood	other biolitass	UII	003	Jonar thermat energy	
	Heat source A	10 %	(bercentage)		Air- or air-to-water	Ground-sourced beat	1					
	100000007		District heating	Direct electricity	heat numn	numn	Wood	Other biomass	oil	Gas	Solar thermal energy	
	Approximate share		[percentage]	Sin correction only	neachamb	homb		o a.c. bioinass	1011	000	Jostar thermat chergy	
	3 How warm do you keen your home during wintertime?	Cool under 20°C	Cool under 20°C	Moderate 20-22°C	Warm_over 22°C							
	4 How would you describe your water usage, especially of warm water?	Less than average	Less than average	Average	More than average							
	5 Electricity. Please choose the most suitable option to describe your	cess dian average	constant average		and a state of the							
	electricity usage. The consumption also includes domestic EV charging											
	Total consumption		Already told in									
	,	Already told in "	h "heating" section	I don't know	kWh / year							
	How would you assess the electricity consumption of household appliances.	,										
	like lightning, electronics, cooking and refridgerators?	Average	Less than average	Average	More than average							
	If you have photovoltaic solar panels, please tell their yearly yield (kWh)	0	[kWh/year]			-						
	and a second			,								

91	N:o Question	Answer	
92	PAGE 4: MOBILITY		OPTIONS
	16 Everyday mobility. During a typical week, how much do you use the		
	following transits? If you answer household-wise, inclued the total		
93	kilometers of all household members.		
94	By bus	20	[km / week]
95	By train, tram or subway	200	[km / week]
96	By walking	20	Im / weekj
97	By biking	0	Im / weekj
98	By riding an electric bike or e-scooter	50	
00	17 Own car. Do you have, lease or frequently drive a car? If yes, the car		No. Ver
99	18 Other car driving During a typical week, how much do you use the	5	10 12
	following transits (boliday driving not included)? If you answer		
100	household wise inclued the total kilometers of all household members		
101	Taxi	10	lkm / week]
102	Mobility service	0	
103	Ride-sharing (excluding your own car)	0	km / week
	Ride-sharing: With how many people outside your household you typically		
104	ride with?		[amount of people]
	19 Other motor vehicles. If you have other motor vehichles than car,		
	please indicate how much do you typically ride with them during the		
105	active season, and how long the active season is.		
106	Electric mopeds and moped-size scooters (km / week)		km / week]
107	Season length (months / year)		[months / year]
108	Traditional mopeds and scooters (km / week)		km / week
109	Season length (months / year)		Imonths / year/
110	Motorbikes (km / week)		Im / weekj
111	Season length (months / year)		(months/year)
112	Sessen length (menthe (vear)		IMT / Weekj monthe (unor)
115	20 Elighte and envices During the last year, what kind of trins did you		(inonais y year)
	20 Fugnes and cruises. During the tast year, what kind of thips and you		
114	tell how many of your family members usually attended such youages		
	One voyage means a return trip. The traveling time refers only to the time		
	spent in the transport while it moved, not the time spent in destination or		
115	stationary transport.		
116	By plane		
117	Amount of journeys	1	[number of journeys]
118	Traveling time, all journeys combined	6 hours	hours days
119	Count of household members participating	3	[household members]
120	By "fast" ships, (route ships etc.)		
121	Amount of journeys	0	[number of journeys]
122	Traveling time, all journeys combined	0 hours	[X hours] [X days]
123	Count of household members participating	0	household members
124	Amount of journeys	1	(author of journey)
125	Traveling time all journeys combined	4 hours	Thornes of pointeryal The second seco
127	Count of household members participating	2	household members]
	21 Other leisure transportation. During the last year, how much did you	-	
	use the following transits during vacation? If you answer household-		
	wise, please also tell, how many of your family members usually		
128	attended such leisure transportation.		
129	By bike or other light transport		
130	Usage during vacation (km / year)		Ltm /year]
131	Count or nousehold members participating		inousenoia membersi
132	Usago during vacation (km / voar)		The I word
134	Count of household members participating		Inus/phal/members
135	By bus		Indection accurated
136	Usage during vacation (km / year)		km / year]
137	Count of household members participating		[household members]
138	By a loan or rental car		
139	Usage during vacation (km / year)		[km / year]
140	Count of household members participating		(household members)
141	Ride-sharing (excluding your own car)		
142	Usage during vacation (km / year)	100	[km /year]
143	Count of household members participating	3	household members
144	Taxi		$T \rightarrow T$
145	Usage during vacation (km / year)	50	Imm /year]
146	Count of nousenoid members participating	2	

17	N:o Question	Answer							
18	PAGE 5: OWN CAR [SKIPPED IF NOT HAVING ANY]		OPTIONS						
19	22 What kind of cars do you own or regularly use, and how much do you move with them? If you answer household-wise, tell the total yearly kilometers. If you chose the personal footprint, tell the yearly kilometers driven for your own purposes (such as driving to work), plus the kilometers benefiting all the household (such as grocery store visits). For personal footprint, only include the driving for your or the whole household's purposes, not the kilometers driven by other household members is rother owns.								
51	CAR 1								
52	Engine type	Electricity	Petrol	Diesel	Biofue	Electricity	Hybrid	Plug-in hybrid	
53	Consumption (the given example is for a petrol car)	Small (<5 ltr / 100 km)	Small (<5 ltr / 100 km)	Medium (5-10 ltr / 100 km)	Large (>10 ltr / 100 km)				
14 15	Yearly kilometers	10000	[km / year]	_					
57	CAR 2								
i8	Engine type		Petrol	Diesel	Biofue	Electricity	Hybrid	Plug-in hybrid	
59	Consumption (the given example is for a petrol car)		Small (<5 ltr / 100 km)	Medium (5-10 ltr / 100 km)	Large (>10 ltr / 100 km)				
60	Yearly kilometers		[km / year]			-			
51 52									
31	23 Do you give offer your car (CAR 1) to a shared pool or do you ride-share with it? If so, please indicate it below. Please note that the choice only affects the first mentioned car (CAR 1).								
12 13	"With my car, I also help people outside my household to reach their destination. Excluding me and other household members, the typical number of passengers i.e" Yearly kilometers of ride-share		1 additional person [km / year]	2 additional people	3 additional people	4 additional people			

	I:o Question	Answer	ODTIONS							
PAG	26 : GOODS, SERVICES AND LEISURE 1/2 24 How many nights did you spend outside of the home in following places		OPTIONS							
7	during the last year. excluding work trips?									
8	Hotel	1	[nights / year]							
9	By friends or relatives	4	[nights / year]							
n	Other kind of home accommodation (e.g. couch surfing)		[nights / year]							
1	Summer cottages or leisure apartments		[nights / year]							
2	A camper van or a boat		[nights / year]							
3	A tent		[nights / year]							
	With how many people (including family members) did you usually share									
	the overnight stays?	2	[number of people]							
	25 How do you tend to spend time on your vacations? Choose 1 or 2 best									
2	describing alternatives									
	The question is about vacations, not the leisure time in everyday life, which									
7	By relaying and sponding time in the nature	v	["X" (chockod)]	[" " (omoty)]						
	By having an urban holiday with sightseeing, museum visits etc.	^	["X" (checked)]	[" " (empty)]	_					
	By attending concerts, festivals and similar mass events		["X" (checked)]	[" " (empty)]	_					
0	By taking an active sporting holiday		["X" (checked)]	[" " (empty)]						
	26 Do you have a summer cottage at your disposal?				Summer time only (in					
				Summer time only (ne	o winter, maintenance-					
1		No	No	heating)	grade heating)	Round-year				
2	With how many people (including family members) do you share the cabin?		[number of people]							
	27 Leisure activities in everyday life. During a typical month, how much									
	free time do you spend in following activities (hours / month)? If you									
	answer household-wise, include the <u>total</u> hours of all household									
	members.									
	If your hobbies are not listed, please choose the most similar ones.		1 1 1 1							
	Light activities outside (walking, biking, skiing, berry-picking etc.)	30	[hours / month]							
2	Sport activities in outdoor factilities (soccer, tennis, golf, downhill-skiing Outdoor activities including beauty goat or causing significant emissions	0	[nours / month]							
	(beating mater sports, paradiding etc.)	1	[hours / month]							
	Indoor activities (cafées movie theaters gyms etc.)	5	[hours / month]							
	Attending to mass events, like outdoor concerts or football matches	1	[hours / month]							
			(notio, noninj							
		-	-							

211	N:o Que	estion	Answer											
212	PAGE 7: GOOD	DS, SERVICES AND LEISURE 2/2		OPTIONS										
	28 How	w much do you typically buy new clothes and shoes? If you answer												
213	hou	sehold-wise, indicate the typical habits of the <u>whole household</u> .				1 0 1	1							
	If the	e answer options provide no exact match, please choose the closest one.	0 1 0 1 1 1	Daugha Daulag aula	On survey Devised	More often than								
			Rarely. Buying only the	Rarely. Buying only	On average. Replacing	average. Being tashion	1							
			necessary clothes and	and learning them in	broken ciotnes and	aware and getting								
214			Reeping them in good	and keeping tien in	time to time	sometring new tor								
214	20 How	u much do you tunically huy furniture and decorative items? If you	condition	good condition	une to une	every season								
	25 10	wer household-wise indicate the typical babits of the whole												
215	how	we nouse of the whole more the typical nabits of the whole												
215	If the	e answer options provide no exact match, please choose the closest one				On average. Not		1						
						buying without	A lot, as decorating							
						reason, but broken	and new styles are							
						furniture is replaced,	close to the heart.							
						and when getting	Sometimes even							
			A little. Decorating	Hardly at all. If a piece	A little. Decorating	fantastic interior	making impulse							
			minimalistically, rarely	of furniture breaks, it	minimalistically,	design ideas, they get	purchases in furniture							
216			changing styles	will be repaired	rarely changing styles	implemented, too	stores.							
	30 How	v often do you buy following electronics? If you answer household-						95-						
217	wise	e, indicate the typical habits of the whole household.								1		1		1
218	Phor	nes	Once in 2 years	Never	Once in 10 years	Once in 5 years	Once in 3 years	Once in 2 years	Once a year	2 devices a year	3 devices a year	4 devices a year	6 devices a year	8 devices a year
219	Com	nputers or tablets	Once a year	Never	Once in 10 years	Once in 5 years	Once in 3 years	Once in 2 years	Once a year	2 devices a year	3 devices a year	4 devices a year	6 devices a year	8 devices a year
220	TVs,	, game consoles or stereo equipment	Once in 5 years	Never	Once in 10 years	Once in 5 years	Once in 3 years	Once in 2 years	Once a year	2 devices a year	3 devices a year	4 devices a year	6 devices a year	8 devices a year
221	Hand	d-held or wearable electronics, such as mobile speakers, smart watches	0	Neuror	Onco in 10 years	Onco in 5 years	Open in 2 years	Opro in 2 years	Onco a wear	2 douicor a voar	2 douicor a voar	A deuticor a vear	6 douisor a voar	8 douicor a unar
221	21 Wha	at share of the following (and similar) items are hought second-	Once a year	INEVEL	once in to years	Once in 5 years	Once in 5 years	Once in 2 years	Office a year	z devices a year	5 devices a year	4 devices a year	o devices a year	o devices a year
	ban	d? If you answer household-wise indicate the typical babits of the												
222	who	ale household.												
223	Clot	hes	30-60 %	0%	less than 30 %	30-60 %	more than 60 %							
224	Furn	niture and decorative items	less than 30 %	0%	less than 30 %	30-60 %	more than 60 %							
225	Hous	sehold appliances and tools	0%	0%	less than 30 %	30-60 %	more than 60 %							
226	Elect	tronics	30-60 %	0%	less than 30 %	30-60 %	more than 60 %	· · · · · · · · · · · · · · · · · · ·						
	32 How	w much do you have household appliances and power tools at your												
227	hom	ne?	ml			14.1 1		1						
	If the	e answer options provide no exact match, please choose the closest one.	Plenty of different			A typical average	Plenty of different							
			tools and appliances,		in addition to the	nousenoid with, in	tools and appliances,							
			piocos, to make our		previous, only general	provious a few small	pieces to make our							
			overvday life easier		such as a washing	appliances such as a	everyday life easier							
			Sometimes we even		machine and a	coffee maker, a	Sometimes we even							
			upgrade well-working	Only the most	vacuum cleaner. They	toaster and a drill. The	upgrade well-working							
			devices to get the	necessary ones, such	are also bought with	machines are repaired	devices to get the							
			newest features on the	as a stove and a	longevity in mind and	or replaced,	newest features on the							
228			market.	fridge.	repaired if they break.	whichever is more	market.							
	33 How	w would you describe your usage of services, like restaurants, hair												
	and	beauty care or maintenance services? If you answer household-												
229	wise	e, indicate the typical habits of the whole household.		Pr. 2		he 12 1 107	1							
	If the	e answer options provide no exact match, please choose the closest one.	Trying to do everything	mying to do	Using services	making everyday life								
			sen, using external	everything sen, using	approximately the	by using a wide								
220			services as intre as	little as possible	bousebolds	variety of services								
230	34 Dom	nestic animals. Please choose of the following	possible.	unic do possibile.	nouscholds.	rancey of services.								
232	Dov	(ou own one or more pets?	Yes	No	Yes									
233	If so,	, how much you typically spend money on them?	Less than €50 / month	Less than €50 / month	Around €100 / month	Above €200 / month	1							
	35 Hou	usehold waste. In total, how much waste does your household												
	proc	duce weekly? Please include all kinds of waste, also the ones you												
234	tend	d to sort.												
	Plea	ase tell the waste amount as ordinary shopping/waste bags, typically												
	hold	ding around 20 ltr:s / 2 kg:s. An average Finn produces around 3 bags /												
235	week		5	[number of waste bags	/ week]									
236	36 How	v do you sort this waster Please check the options you tend to sort												
230	Biou	vaste		["X" (checked)]	[" " (empty)]									
238	Pan	er and cardboard	x	["X" (checked)]	[" " (empty)]									
239	Plas	stic		["X" (checked)]	[" " (empty)]									
240	Glas	55	x	["X" (checked)]	[" " (empty)]									
241	Meta	al		["X" (checked)]	[" " (empty)]									
242														
	15 C													

243	N:o	o Question	Answer		
244	PAGE 8:	8: SUBMIT AND REGISTER		OPTIONS	
	37	7 Thanks for answering. Your carbon footprint is ready to get calculated!			
		If you would like to revisit the results and perhaps take the			
		questionnaire again, we invite you to fill in your details and become a			
245		registered user.			
246		Your full name T	'est User	[Free text]	
247		Household name T	ester's fancy home	[Free text]	
248		E-mail address	estuser@domain.com	[Free text]	
249		Choose a password k	sjdfhdefso	[Free text]	
250					
251					