

Table S1. The deduction percentages used in the calculation model for Scenario 1.

SCENARIO 1		
Consumption category	Reduction	Background information
A01 Food and non-alcoholic beverages		
Meat	50 %	Average meat consumption in Finland was 80 kg/a/person in 2015 [1] while the recommended consumption is 38 kg/a/person [2]
Dairy products and eggs	20 %	The consumption of saturated fats should be lowered and the largest amount of saturated fats comes from dairy products in the Finnish diet [3]
Unhealthy foods*	75 %	Foodstuffs containing lots of sugar, salt and/or saturated fats should be cut down from Finnish diet [3]
Plant-based products		Plant based protein is estimated to be 25 % cheaper than meat protein, in which case 75 % of the savings from meat are used to purchase plant based products.
A02 Alcoholic beverages and tobacco		
Alcoholic beverages	60 %	Average consumption of 100 % alcohol in Finland was 7.1 l/a/person in 2015 [1] while safe amount of consumption is under 3 l/a/person [4].
Tobacco	75 %	Consumption of tobacco should be decreased as tobacco contains many harmful chemicals and can cause several diseases [5].
A03 Clothing and footwear	20 %	Moderate estimation: a Finnish study suggests that every year consumers and institutions discard 54 700 t of clothing and textiles and the amount of new clothing and textiles increases by 0.8 kg/person annually according to 2012 data [6] which is not sustainable in the long run.
A04 Housing		
Residential energy consumption	10 %	Can be achieved easily with small energy saving actions [7].
A05 Furnishings and household equipment	10 %	Moderate estimation: Lettenmeier et al. [8] suggest that an 83 % reduction in the material footprint of household goods is necessary and can be achieved if households own less items than today.
A07 Transport		
Purchase and usage of private vehicles	15 %	There is an urgent need to cut private driving: in Finland private car usage causes 11 % of total greenhouse gas emissions [9] and worldwide the abrasion of tyres is a major contributor to microplastic waste to oceans [10].
Overseas travel tickets	20 %	Moderate estimation: in 2012, aviation caused 3 % of total greenhouse gas emissions in Europe and they are likely to increase 45 % by 2035 unless traffic load decreases [11].
A09 Recreation and culture		
Package tours and cruises abroad	20 %	Moderate estimation: in 2012, aviation caused 3 % of total greenhouse gas emissions in Europe and they are likely to increase 45 % by 2035 unless traffic load decreases [11].
A11 Hotels, cafés and restaurants		
Unhealthy foods*, alcoholic beverages	50 %	Foodstuffs containing lots of sugar, salt and/or saturated fats should be cut down from Finnish diet [3].
A12 Miscellaneous goods and services		
Personal care	10 %	Moderate estimation: Lettenmeier et al. [8] suggest that a 83 % reduction in the material footprint of household goods is necessary and can be achieved if households own less items than today.
Consumption n.e.c. abroad	10 %	Consumption abroad decreases as traveling abroad decreases.

*incl. soft drinks and processed food containing lots of sugar, salt and/or saturated fat

Table S2. The deduction percentages used in the calculation model for Scenario 2.

SCENARIO 2		
Consumption category	Reduction	Background information
A01 Food and non-alcoholic beverages		
Meat	80 %	Average meat consumption in Finland was 80 kg/a/person in 2015 [1] while the recommended consumption is 38 kg/a/person [2]. According to Lettenmeier et al. [8], the material footprint of nutrition should be reduced by 50 % which will require notable decrease on meat consumption.
Dairy products and eggs	80 %	The consumption of saturated fats should be lowered and the largest amount of saturated fats comes from dairy products in the Finnish diet [3]. According to Lettenmeier et al. [8], the material footprint of nutrition should be reduced by 50 % which will require notable decrease on dairy product consumption.
Unhealthy foods*	90 %	Foodstuffs containing lots of sugar, salt and/or saturated fats should be cut down from Finnish diet [3].
Coffee, tea and cocoa	50 %	By decreasing the coffee and tea consumption, the sustainability of Finnish diet would increase [3].
Plant-based products		Plant based protein is estimated to be 25 % cheaper than meat protein, in which case 75 % of the savings from meat are used to purchase plant based products.
A02 Alcoholic beverages and tobacco		
Alcoholic beverages	90 %	Average consumption of 100 % alcohol in Finland was 7.1 l/a/person in 2015 [1] while safe amount of consumption is under 3 l/a/person [4].
Tobacco	100 %	Consumption of tobacco should be decreased as tobacco contains many harmful chemicals and can cause several diseases [5].
A03 Clothing and footwear	50 %	Synthetic materials are no longer used because the abrasion from washing synthetic textiles is a major cause for microplastic pollution [10]. In developed countries, 48.2 % of clothing was made of synthetic materials in 2010 [12].
A04 Housing		
Rental and owner-occupied housing	35 %	The average floor area per person is 40 m ² in Finland [3] could be reduced by 30-50 % while still providing sufficient private space. According to Lettenmeier et al. [8] a floor area of 20 m ² per person is desirable to achieve sustainable level of material footprint in housing.
Residential energy consumption	30 %	Can be achieved with energy saving actions [7]. According to Lettenmeier et al. [8], annual energy usage should decrease from 11 500 kWh of heat and electricity per capita to 1 000 kWh of electricity per capita in order to achieve sustainable material footprint in housing.
A05 Furnishings and household equipment	50 %	Need for furnishings will decrease together with decreasing floor area and the transition to sharing economy will reduce the need for private ownership of household equipment. Lettenmeier et al. [8] suggest that a 83 % reduction in the material footprint of household goods is necessary and can be achieved if households own less items than today.
A07 Transport		
Purchase and usage of private vehicles	75 %	There is an urgent need to cut private driving: in Finland private car usage causes 11 % of total greenhouse gas emissions [9] and worldwide the abrasion of tyres is a major contributor to microplastic waste to oceans [10].
Overseas travel tickets	90 %	In 2012, aviation caused 3 % of total greenhouse gas emissions in Europe and they are likely to increase 45 % by 2035 unless traffic load decreases [11].
A09 Recreation and culture	70 %	Transition towards sharing economy and reduction in need and appreciation of private ownership will bring new possibilities to spend leisure time. According to Lettenmeier et al. [8], a reduction of 75 % is necessary in the material footprint for leisure activities.
A11 Hotels, cafés and restaurants		
Unhealthy foods*, alcoholic beverages	90 %	Foodstuffs containing lots of sugar, salt and/or saturated fats should be cut down from Finnish diet [3].
Accommodation services	50 %	Need for accommodation services decreases as traveling decreases.
A12 Miscellaneous goods and services		

Personal care and personal effects	50 %	Lettenmeier et al. [8] suggest that a 83 % reduction in the material footprint of household goods is necessary and can be achieved if households own less items than today. Requires cutting all unnecessary products, minimizing the use of necessary products and shifting towards sharing economy.
Consumption n.e.c. abroad	80 %	Consumption abroad decreases as traveling abroad decreases.

*incl. soft drinks and processed food containing lots of sugar, salt and/or saturated fat

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