

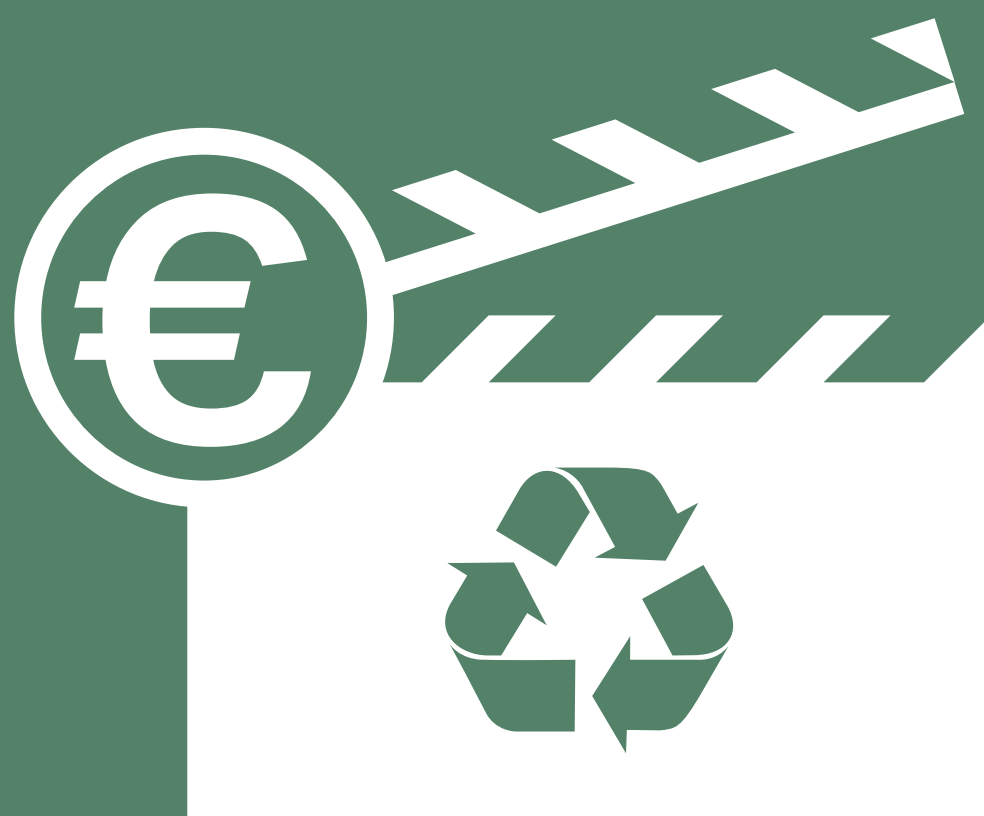
Ekosetti in Euros

A Peek into the Economics of Production Sustainability

APFI Audiovisual
Producers
Finland

avaus
vastuullinen av-ala

 Funded by
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"Ekosetti in euros" and its supplementary materials serve as an independent follow-up to Finland's first AV industry environmental guidebook, "Ekosetti – A Guidebook to Sustainable Production in Finland" (2019).



INTRODUCTION

EKOSETTI IN EUROS explores the relationship between the economy and ecology in Finnish audiovisual productions. It compiles concrete examples illustrating the environmental and economic impact of choices that productions make daily. The aim of the publication is to challenge the myth of ecological solutions being inherently more expensive and to demonstrate how sustainable decisions can also result in cost savings.

Success in the film and TV industry is often measured by audience numbers, which correlate with profitability. However, in today's world, this is no longer sufficient; planetary boundaries must also be considered.

In the coming years, the industry's sustainability will be scrutinized more closely, with sustainability becoming a key criterion for funders and commissioners, partly due to the EU's CSR Directive¹. Launched in 2023, The Growth Deal² for Finnish AV sector set Finland's goal to become the world's most sustainable production country and to achieve carbon neutrality by 2030.

Achieving this transformation requires systemic change, new expertise, and practices at both the individual and corporate levels. Despite the challenges of the current economic climate, sustainable operations are essential and cannot be outsourced. They bring multifaceted benefits: they minimize planetary strain, promote fairness and diversity, and make economic sense. The COVID years demonstrated that change is indeed possible.

Although sustainability is a well-established topic of discussion in Finland, the industry lacks concrete information on the costs of environmental sustainability or its impact on production budgets. Ekosetti in euros is the first Finnish attempt to bridge this gap. Instead of focusing on specific production budgets, it examines a range of options to benefit as many productions as possible. For deeper understanding, further data, research, and piloting are needed, alongside comprehensive information on production budgets.

DID YOU KNOW?

According to researchers, climate damage could cost up to six times more³ than reducing emissions and limiting global temperature rise to two degrees Celsius.

USER GUIDE

IMPORTANT INFORMATION before you dive into this publication.

Ekosetti in euros examines the cost of ecological choices in productions through logistics, energy, materials, and economics. All monetary values mentioned in the publication are VAT-exempt (VAT 0%). Carbon emissions are expressed according to industry standards as CO₂/CO₂e, sourced from various references.

All figures should be taken as indicative, reflecting only specific hypothetical scenarios and moments. Each example specifies the scope of data reviewed, often excluding lifecycle emissions or staff costs. Emission calculators vary in parameters and methods, leading to differing results. Thus, it's important to note when comparing results from different calculators (e.g., for travel or entire productions) that they are not entirely reliable.

COMPARE YOUR EMISSIONS WITH THESE: In 2023, Finland's electricity consumption had an emission factor of 38 gCO₂/kWh⁴, while the average Finnish citizen's annual emissions were 9,610 kgCO₂e/v⁵.

DID YOU KNOW?

CO₂ refers to carbon dioxide, a single greenhouse gas measured in mass (g, kg, t) that is produced, for instance, through the combustion of fossil fuels. CO₂e (carbon dioxide equivalent) represents the collective impact of all greenhouse gases compared to an equivalent amount of CO₂.



Some calculations are available in the Ekosetti in euros -excel sheet, recognizable by the E€E symbol.

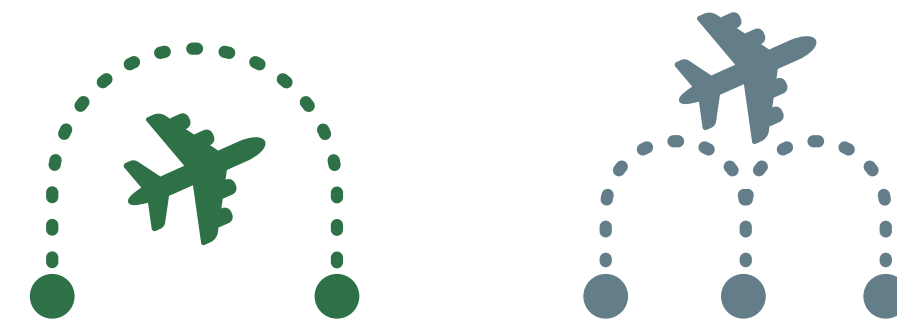
This file allows you to compare figures, costs, and emissions relevant to your own production.

It can be downloaded for free at ekosetti.fi

FLYING

THE LARGEST EMISSIONS in Finnish productions come from transportation: in 2022, most travel occurred by air, and in 2023, by road. This publication examines both transportation modes and compares them with alternative methods in terms of costs and emissions.

Globally, aviation accounts for 2–3%⁶ of all human-induced carbon dioxide emissions. Airplanes produce the most emissions during takeoff, which can consume up to 25%⁷ of the total fuel for the trip. A direct flight, i.e., a single journey, is always the most ecological option since it involves only one takeoff. Short flights generate the most emissions per passenger-kilometer, so they should especially be replaced with land-based travel. A flight's total emissions⁸ are influenced by factors such as trip length, route, travel class, aircraft type and fuel consumption, load factor, baggage, and cargo. Passengers can reduce their emissions by purchasing economy-class tickets, choosing a more fuel-efficient turboprop plane⁹, offsetting emissions, or packing lighter: if every Finnair passenger packed 1.6 kg less per year¹⁰, the saved fuel could support 20 flights from Helsinki to Tokyo.



	DIRECT FLIGHT Round-trip Helsinki-Malaga	LAYOVER Round-trip Helsinki-Riga and Riga-Malaga
COMPARISON: The costs and emissions of direct and connecting flights from Helsinki to Malaga. For one person, travel time counts as work hours (€40/hour, 100%), and for another, it is leisure time (€30/hour, 75%). Both options include two daily allowances abroad (€67 each).		
NOTES: Cheaper tickets can be tempting, but the extended travel time makes direct flights more cost-effective overall. Flights with a layover produce 25% more emissions than direct flights.		
Tickets for 2 people ¹ VAT 0%	€690	€360
Travel duration (h) ¹	flight 9 h at the airport 4 h total 13 h	flights 14,5 h at the airport 5 h total 19,5 h
Daily allowances 2 days 2 people ²	€267	€267
Travel during working hours 1 person (100%, €40/h) ³	€520	€780
Travel during leisure time 1 person (75%, €30/h) ³	€390	€585
Total costs for 2 people	€1,867	€1,992
Total emissions for 2 people (kgCO₂e)⁴	2,480	3,106



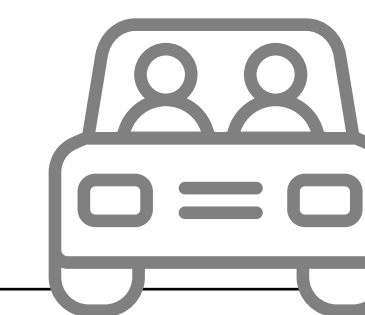
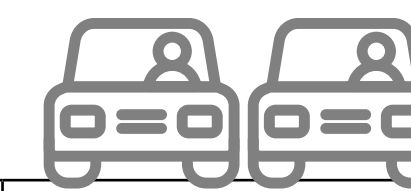
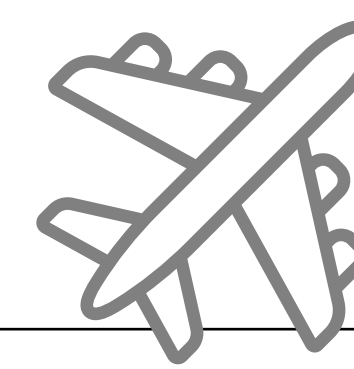
WELL DONE

Private jets are practically not used in Finland's audiovisual industry. They are both a significant emission source and a major expense—two good reasons to continue avoiding private flights!

See sources on page 16.



TRAVELING BY DIFFERENT MODES OF TRANSPORTATION



COMPARISON: A round trip for two people from Helsinki to Oulu by different modes of transportation (1,240 km). The comparison includes emissions, costs, travel time, and staff costs (Finnish daily allowances and travel during work and leisure time). For driving, the calculations include the average consumption and emissions of a gasoline car, with two scenarios: using two cars or sharing one car (adding 10% to the average consumption).

NOTES: The lowest-emission option, train travel, is the most expensive. However, trains allow for work opportunities during the trip. Driving would have taken the same amount of time. Flying is the cheapest travel mode in terms of cost, but has significantly higher emissions compared to other options.

	TRAIN	FLIGHT	CAR, 1 person avg. consumption 5.3 l	CAR, 2 person gasoline, avg. consumption 5.8 ¹
Emissions kgCO ₂ e, round-trip	1.5 ²	264 ³	139 ⁴	153 ¹
Tickets / fuel 2 people (VAT 0%)	€180 ⁵	€280 ⁶	€193 2 cars, €1.47/l ⁴	€106 1 car, €1.47/l ⁴
Travel duration	17 h	6 h incl. 3 h at the airport	17 h incl. 2 h breaks	17 h incl. 2 h breaks
Daily allowance €54/person for 2 people	€216	€216	€216	€216
Travel during working hours 1 person (100%, €40/h) ⁸	€680	€240	€1,360	€680
Travel during leisure time 1 person (75%, €30/h) ⁸	€510	€180	-	€510
Total costs for 2 people	€1,586	€916	€1,769	€1,512
Total emissions for 2 people (kgCO₂e)	3	528	278	153

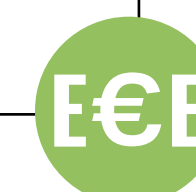
WELL DONE

The most ecological mode of travel in Finland is by rail: **95%** of government-owned railway company VR's passenger trains¹¹ run on fossil-free electricity, and emissions from non-electrified sections are offset.

DID YOU KNOW?

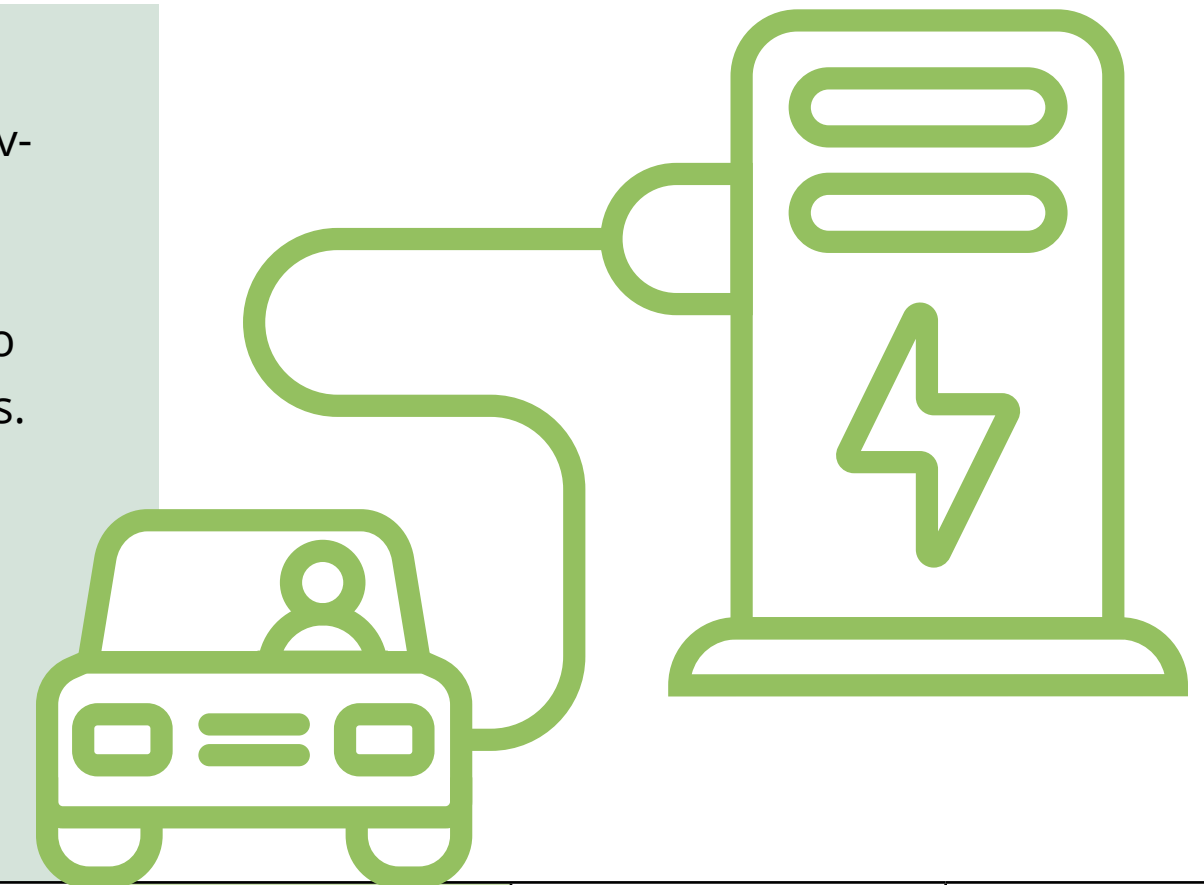
The demand for air travel is expected to grow by 4% annually over the next 20 years,¹² yet the aviation industry has set a goal to be carbon-neutral by 2050¹³. Finnish flights are subject to a reduced tax rate (10%)¹⁴, while international flights are tax-free.

See sources on page 16.



EMISSIONS AND COSTS OF DRIVING BY FUEL TYPE

FACTORS INFLUENCING car emissions include the vehicle’s age, emission values, and fuel consumption. Other factors include the type of fuel used, the car’s load, and driving habits, which can reduce fuel consumption and emissions by up to 15%¹⁵. Hybrid cars may recharge themselves (self-charging) or require external charging (plug-in), with emissions depending on the share of power sources used.



STUDY: A summary of the emissions and costs of driving 100 km in cars with different power sources. The emissions reflect the average CO₂ emissions during driving, measured using the WLTP method. Figures do not include the life-cycle emissions of vehicles or fuels.

NOTES: The most ecological and cost-effective option is driving electrically, with zero calculated emissions. Fossil fuels produce the highest emissions. The most expensive option overall is driving a gasoline car.

DID YOU KNOW?

Renewable fuels in Finland are guaranteed by the Distribution Obligation Act¹⁶ (FIN: jakelovelvoitelaki), which requires fuel distributors to deliver a certain minimum share of renewable fuel annually. For example, in 95 E10 gasoline, the “E10” indicates that up to 10% ethanol has been added.¹⁷

Renewable diesel¹⁸, made from biomaterials, is sold under various names in Finland. While diesel and renewable diesel show no significant difference in CO₂ emissions during use, the latter is biogenic, meaning it recycles carbon already in the atmosphere. This makes renewable diesel’s life-cycle emissions lower. It is also essential to note that biodiesel and renewable diesel are different fuels.¹⁹

	GASOLINE	DIESEL	ELECTRICITY	NATURAL GAS	BIOGAS
Emissions ¹ gCO ₂ /km (WLTP)	112 g	131 g	0 g	106 g	106 g
Reference consumption per 100 km	5.3 l	5.3 l	16.2 kWh	3.8 kg	3.8 kg
Average fuel cost (1.7.–30.9.2024), VAT 0 %	€1.47/l	€1.39/l	€0.13/kWh	€1.72/kg	€1.36/kg
Cost for 100 km	€7.79	€7.37	€2.12	€6.54	€5.17
Emissions kgCO ₂ per 100 km	11.2 kgCO ₂	13.1 kgCO ₂	0 kgCO ₂	10.6 kgCO ₂	10.6 kgCO ₂

See sources on page 16.



CAR RENTAL

TO EVALUATE the total cost and emissions during car usage, it is worth checking rental prices alongside CO₂ emission values and average fuel consumption. Generally, the newer the car, the more ecological its use. Productions should offer the option and support for testing lower-emission cars. A home charging option greatly facilitates work schedules but should involve financial compensation.

AVERAGE PRICE COMPARISON (VAT 0 %, spring 2024): Car rental companies in Helsinki and Oulu

GASOLINE	€689	comparison price	112 gCO₂/km¹
PLUG-IN HYBRID	€932	+35%	24 gCO ₂ /km ²
ELECTRIC	€895	+30%	0 gCO₂/km¹

See sources on page 16.

IDLING

CAR IDLING is literally money (and emissions) up in the air. By Finnish law²⁰, vehicles must avoid unnecessary idling: the limit is under two minutes or under four minutes at temperatures below -15°C. Idling consumes about 1 liter of fuel per hour²¹, with higher consumption in winter and when using air conditioning. Preheating reduces fuel consumption and emissions, especially in older cars and hybrids. Excessive use of electronic devices²², such as seat heaters, increases fuel consumption.

STUDY: The cost of car rental in Helsinki and Oulu and the cost of idling.

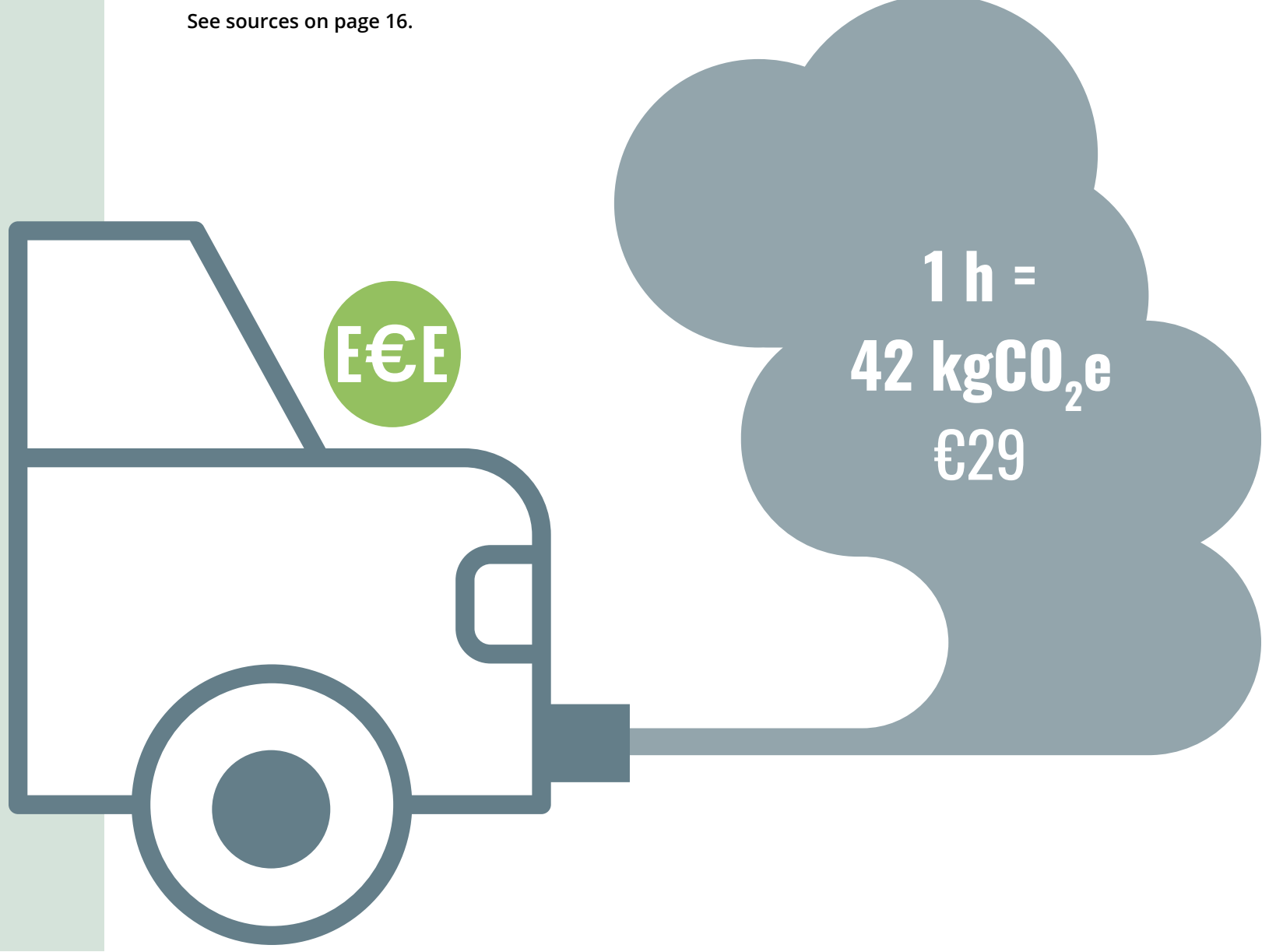
NOTES: Rental agencies often use dynamic pricing, meaning that the cost depends on the time, car category (size and body type), and model year. In the comparison, hybrid cars had the highest rental prices, while gasoline cars were the cheapest but had the highest emissions. If a mid-sized passenger car idles for one hour per day during 20 shooting days in wintertime, it would cost the production nearly €40.

The rental costs of low-emission cars are high, but their operational expenses are usually the lowest. Gasoline cars are cheaper to rent, but their total costs over the usage period are the highest.

CAR IDLING

- > 1 hour = 1 liter of gasoline¹
- > Gasoline €1.47/l (VAT 0%)
- > 20 x 1 h/day = 20 liters of gasoline
- > Winter consumption and with air conditioning +30%

See sources on page 16.



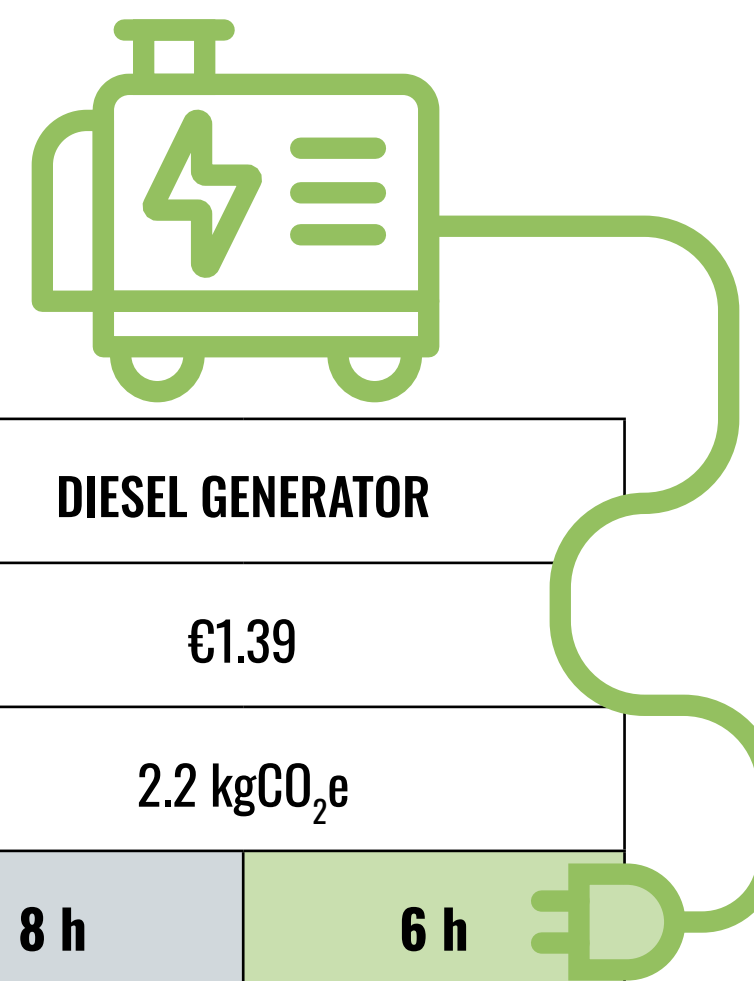
GENERATOR USE

INTERNAL COMBUSTION engine generators cause noise, emissions, and exhaust fumes, but they are increasingly being replaced with electric and quieter models. The film and TV industries also uses heavy-duty generators custom-built for trucks, with engines that meet Stage emission standards²³. In the future, these are also expected to be replaced with electric generators. A 140 kVa generator consumes approximately²⁴ 20 liters per hour on average, and when devices drawing power are added (running it at full capacity), fuel consumption can rise to 25–30 liters per hour.

COMPARISON: Emissions and costs of using a 140 kVa generator based on usage time. The analysis does not include the rental cost of the generator. If it is a generator truck, the emissions from the truck's engine and the costs of driving it between locations are also not included.

NOTES: Reducing generator usage by 2 hours per day during 20 shooting days would save the production over €1,700 and over 1,700 kgCO₂e.

Generator's average fuel consumption **20** l/h
Cost per usage hour **€15.9** € (VAT 0%)



	DIESEL GENERATOR	
Average price €/l (VAT 0%)	€1.39	
Emissions kgCO ₂ e/l ²	2.2 kgCO ₂ e	
Usage time (h)	8 h	6 h
Fuel consumption (l)	160 l	120 l
Fuel cost €	€222	€167
Total cost (fuel + operating hours)	€350	€262
Cost difference due to usage time	€87	
... and if there are 20 shooting days	€1,748	
Total emissions of usage kgCO₂e	352 kgCO₂e	264 kgCO₂e
Total emissions with 20 shooting days	7,040 kgCO ₂ e	5,280 kgCO ₂ e
Difference in emissions due to usage time	88 kgCO₂e	
... and if there are 20 shooting days	1,760 kgCO₂e	

See sources on page 16.

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ELECTRICAL CABINETS

IF THE FILMING LOCATION lacks grid electricity, it is worth checking with the energy company about the possibility of a temporary electrical connection. Practices vary by provider, so the process should start several weeks before the need arises. Costs include, for example, the daily rental fee for the temporary electrical cabinet, connection fees, and installation costs for commissioning. Renewable energy may also be available. For emissions reporting, the invoice should include the amount of electricity used.

DIGITALIZATION AND ITS ECOLOGICAL IMPACT

DIGITAL WORK can obscure the environmental impact and energy consumption of different stages—and thus also the costs. Understanding the ecological impact of digital processes in the AV industry requires further study, but the topic is outlined below in general and simplified terms. In short: the less electricity is used, the more ecological and cost-effective it is for the user.

Information and communication technology (ICT) encompasses devices, networks, and communications that enable digital systems. However, it also causes significant environmental impacts throughout its lifecycle. In 2020, ICT accounted for an estimated 2–4% of the global carbon footprint²⁵, with emissions growth linked particularly to data processing, server maintenance, and hardware usage. Data centers were responsible for 2–4% of the world's electricity consumption.

Artificial intelligence (AI) refers to systems capable of learning, interpreting, and performing tasks that require human intelligence. Its environmental impact²⁶ is primarily related to AI model training, which requires significant energy, leading to high electricity consumption and water usage for cooling data centers. While AI is not a major electricity consumer for individual users, each click triggers processes in data centers. The full lifecycle of AI (computing power, hardware energy consumption, and shortened lifespans) highlights its ecological challenges. For example, the emissions of a single ChatGPT query can equal up to 60 traditional Google searches²⁷. Understanding these environmental impacts is crucial for the responsible use of AI, and applications should be used thoughtfully and with awareness of the bigger picture.

DID YOU KNOW?

The average person spends an estimated 40% of their waking hours online²⁸ consuming 3,230 hours of digital content annually: 730 h browsing, 894 h on social media, 833 h streaming, 566 h listening to music, and 207 h in video calls. In Europe, the emissions from streaming services have been calculated at 55 gCO₂e/hour.²⁹

DEVICE USAGE

8 h/day 250 days/year

See sources on page 16.

DISPLAY MONITOR

100 kWh/year¹

€ 10/year, assuming €0.10/kWh

3.8 gCO₂e/kWh²



LAPTOP

130 kWh/year¹

€ 13/year, assuming €0.10/kWh

4.9 gCO₂e/kWh²



DESKTOP COMPUTER

400 kWh/v¹

€ 40/year, assuming €0.10/kWh

15.2 gCO₂e/kWh²



HIGH-PERFORMANCE COMPUTER

800 kWh/year¹

€ 80/year, assuming €0.10/kWh

30.4 gCO₂e/kWh²



DIGITALIZATION IN THE AV INDUSTRY

THE "DIGITAL LOAD" of productions depends not only on the amount and quality of electricity and filmed material but also on how the material is processed.

The most important consideration is to ensure that production choices and practices are appropriate to the need: for example, it is wasteful to film in 4K format if the editing stage does not require it or if the final product is a video for social media. The shooting ratio refers to the relationship between the amount of footage shot and the duration of the final work. During the film era, when the value of materials was high, filming was carefully planned, and the shooting ratio often ranged from 1:4 to 1:10. Finnish productions' shooting ratios have not been studied, and there are only few international examples. With digitalization, the shooting ratio is expected to have multiplied. Excessive material increases costs and environmental impact because it adds to costs on labor, equipment, and space as well as energy consumption.

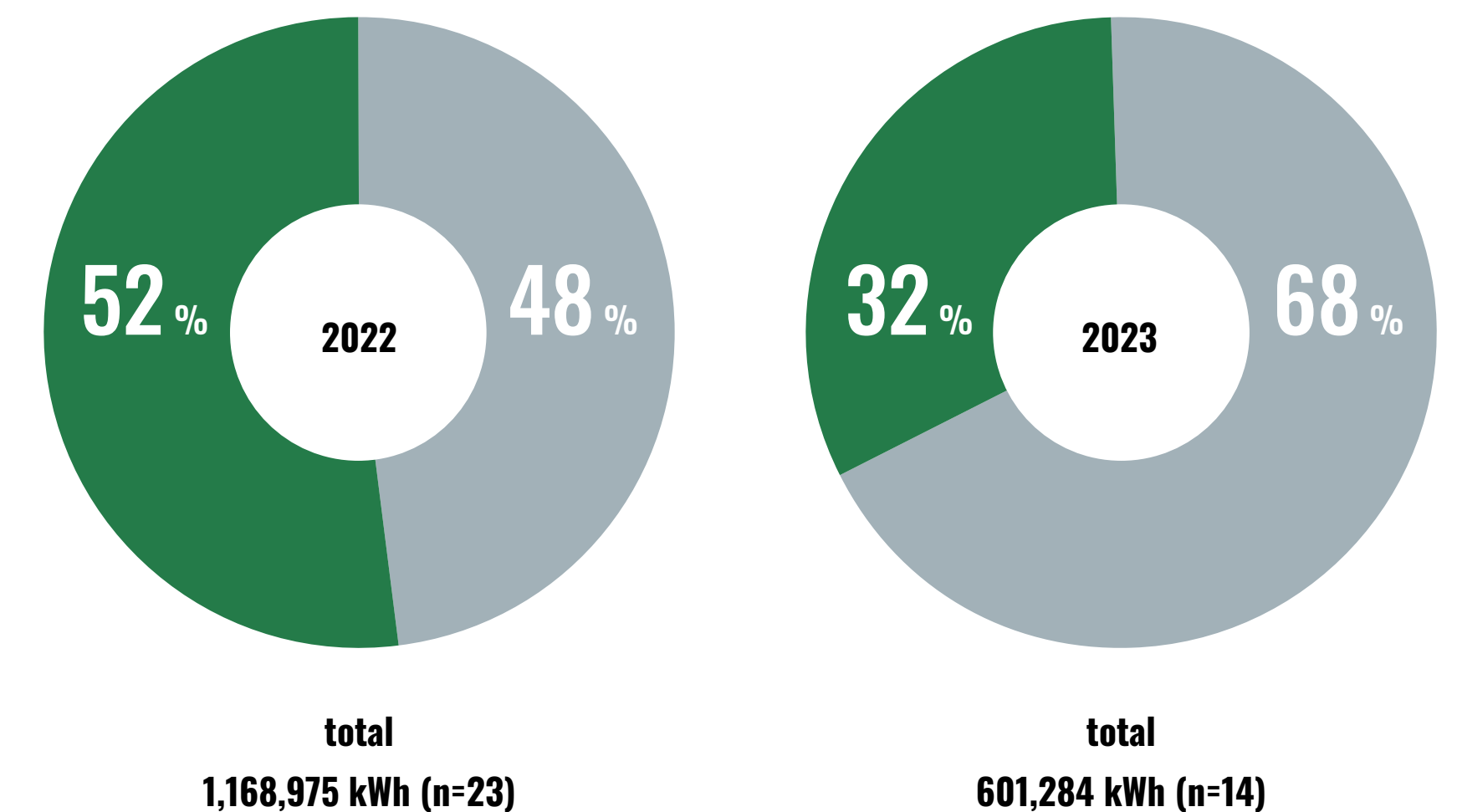
Shooting ratio	Material shot	Final length
1:5	7.5 h	1.5 h
1:50	75 h	1.5 h
1:100	150 h	1.5 h
1:240	480 h	2 h

Currently, material is stored on hard drives, personal servers, or outsourced to cloud services. The electricity consumption of a large server room (800 TB) can be up to 5,000 kWh/year³⁰, which includes both usage and cooling. This equates to approximately €350 (7 cents/kWh) and emissions of 190 kgCO₂e/year³¹. Pricing models for cloud services vary greatly and may not always adapt well to the cyclical needs of the audiovisual industry. Using smaller and lighter proxy files during editing facilitates handling high-resolution material and reduces software load.

Using renewable energy is an eco-friendly choice, but costs may be higher, and availability is not always guaranteed for productions. Even if an individual user chooses renewable energy, the energy solutions of cloud service data centers are not always based on renewable sources. New devices are often more energy-efficient, but their manufacturing consumes virgin materials. A sustainable choice is to use devices for a long time and ensure their maintenance and recycling.

One Finnish production consumed an average of 50.8 MWh of electricity¹ in 2022 and 42.9 MWh in 2023.

See sources on page 16.

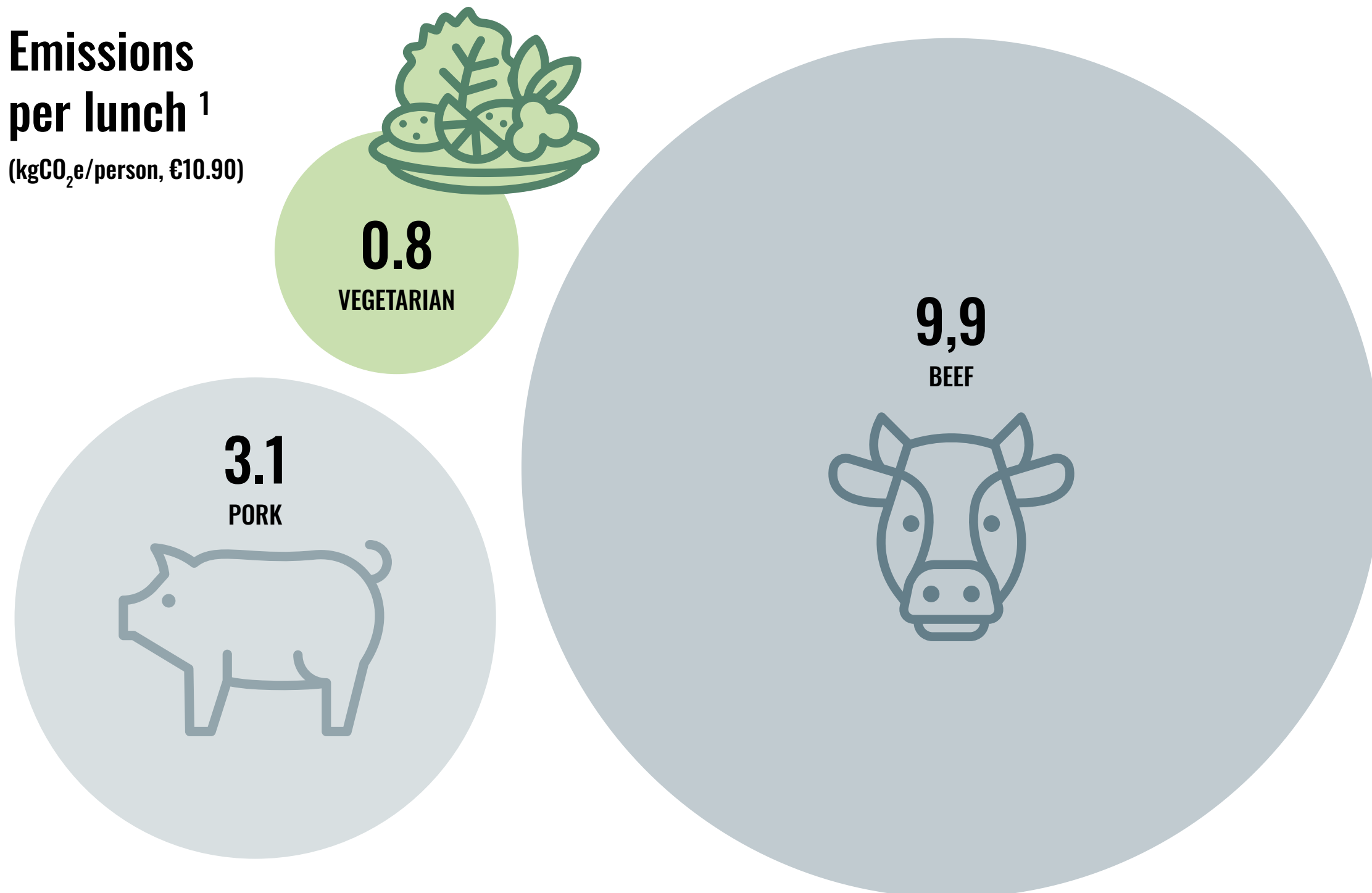


CATERING

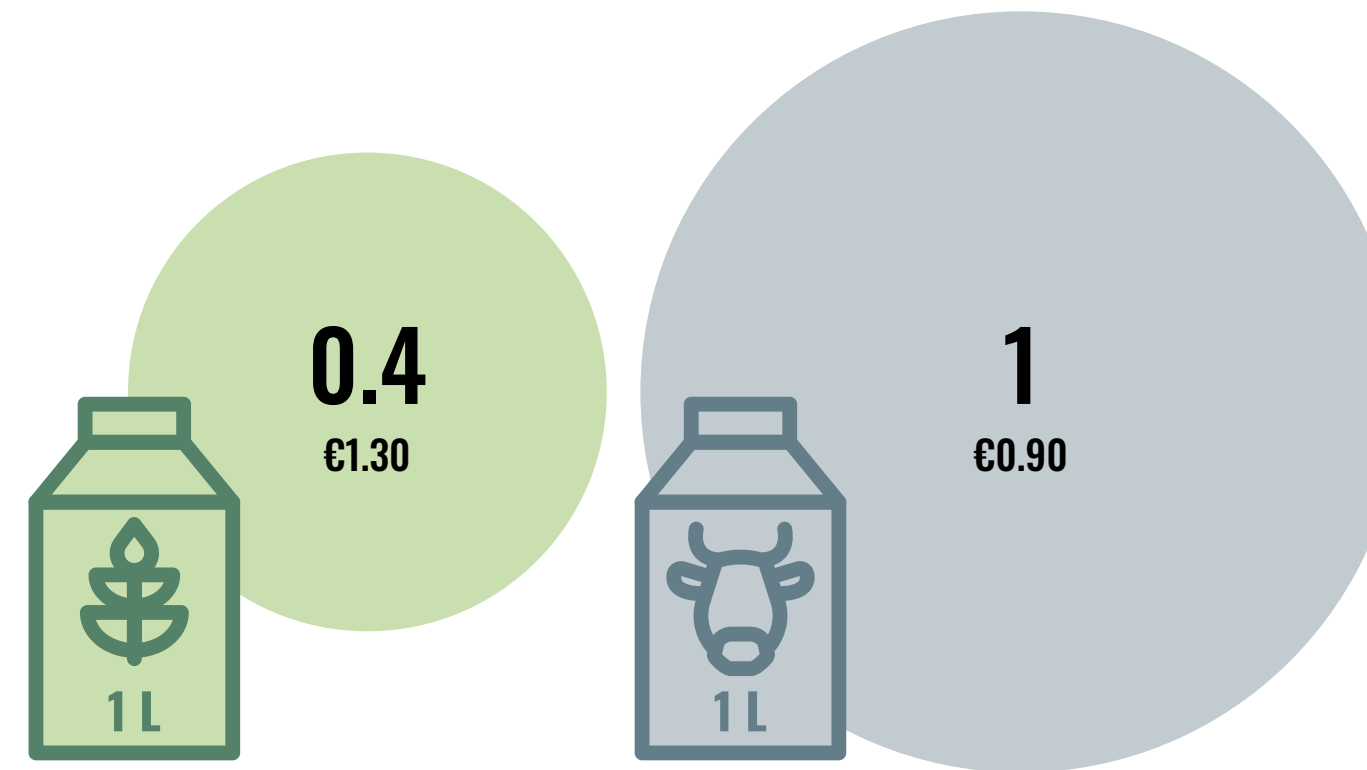
THE MAJORITY of acquisitions made by Finnish productions ³² are food related. Although catering's share of the overall emissions of productions is not significant, it is one of the most visible and tangible environmental actions, allowing the entire crew to participate in eco-friendly work. In Finland, there are no significant price differences between animal-based and plant-based food, even in lunch restaurants. However, the emissions show greater disparities. Plant-based products often have better shelf life than meat options and reducing food waste always translates to budget savings. If a vegetarian diet is not an option, it is still possible to choose a lesser evil, i.e., a lower-emission animal product.

Emissions per lunch ¹

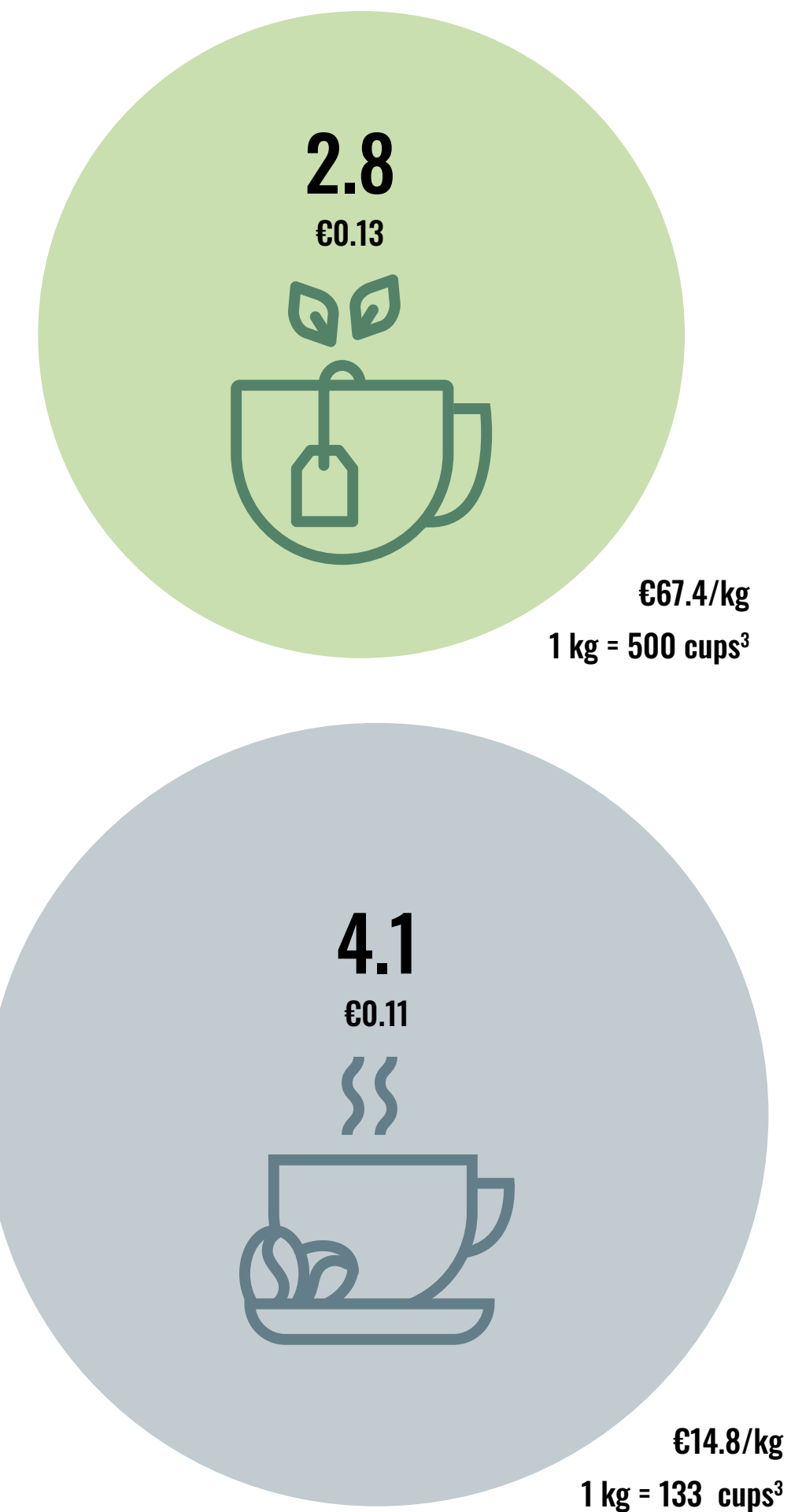
(kgCO₂e/person, €10.90)



Emissions per liter of oat drink vs. cow's milk (kgCO₂e) ²



Emissions per cup of tea vs. coffee (gCO₂e) ²



DID YOU KNOW?

The planetary diet³³ emphasizes optimal solutions for human health and environmental sustainability. It leans towards a vegetarian diet, with animal-based products making up only 1/10 of the total. Finnish dietary recommendations³⁴ also align with this: the amount of vegetables should be increased, and red meat should not exceed 350 grams per week for health reasons.

DRINKING WATER

FINLAND HAS clean and safe tap water by global standards³⁵. Its hygienic properties are significantly better than bottled water—though it's worth checking the water quality in older or vacant buildings.

Tap water³⁶ has been found to have a considerably smaller environmental impact than bottled water³⁷, whose greatest environmental effects arise during the production process. PET plastic³⁸ is the most common material used in bottles, but due to the EU's plastic directive, the share of recycled plastic (rPET) is set to increase. In terms of cost ³⁹ one liter of bottled water equals approximately 1,000 liters of tap water!

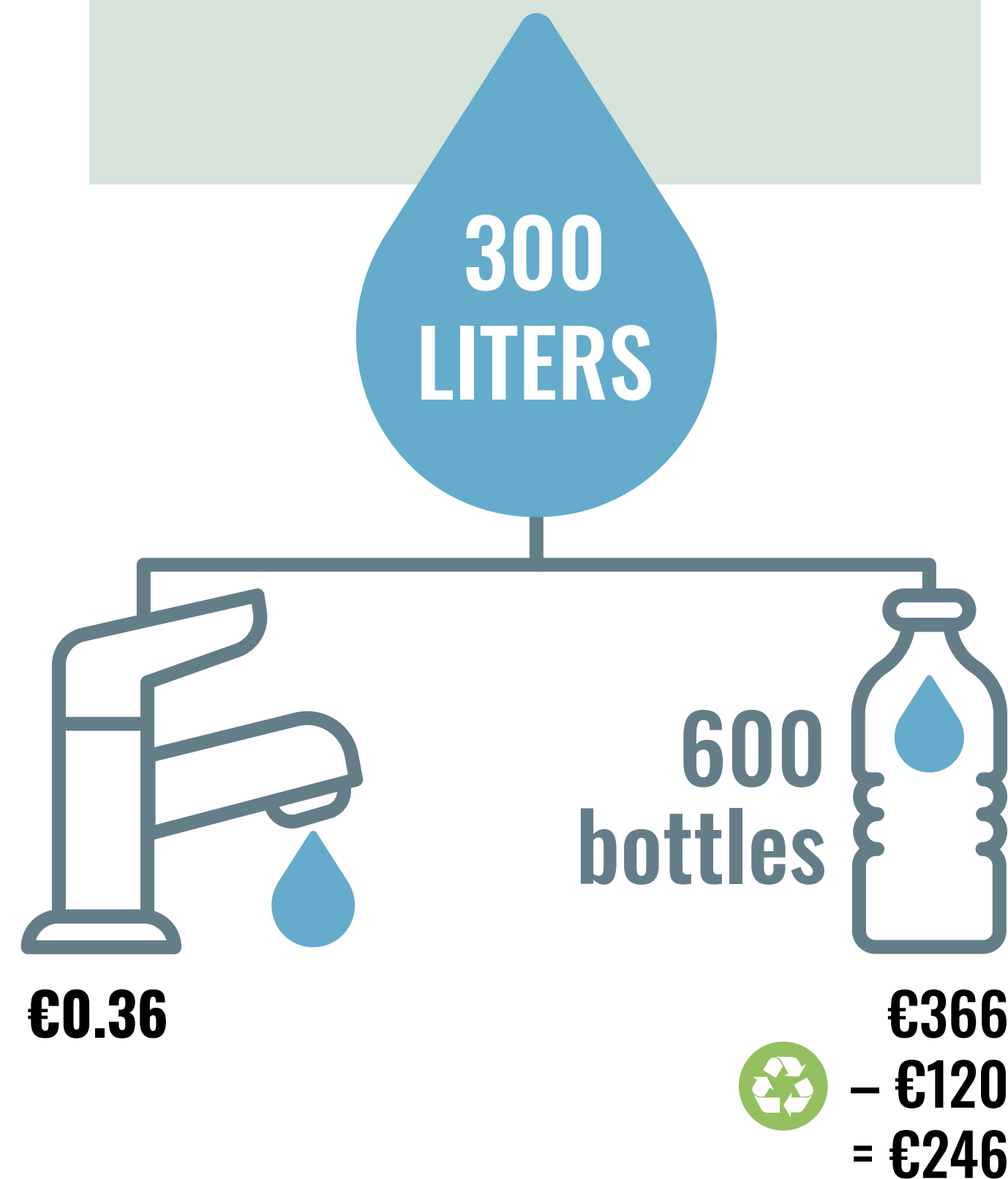


WELL DONE

Finns are world leaders in beverage packaging recycling: the return rate⁴⁰ under the deposit system is over 90%. In 2023, this amounted to 2.2 billion packages! Aluminum cans have the highest return rate (97%).

COMPARISON: The cost of tap water vs. bottled water. For a 30-person crew, providing each with a 0.5-liter bottle per day over 20 shooting days results in a total water consumption of 300 liters.

NOTES: With deposits, €120 can be recovered from the purchase price, but opting for tap water saves over €350.



COFFEE WASTE

THE AVERAGE FINN drinks 3–5 cups⁴¹ of coffee daily and wastes about 4 liters⁴² of coffee annually. Coffee has a significant water footprint, as producing one cup requires 140 liters of water.⁴³



Fair Trade coffee package:
450 g = €7 = 7.5 liters of coffee
= ~60 cups of 1.26 dl each

STUDY: Coffee wasted in monetary terms and water liters. During a 20-day shoot, a 30-person crew drinks 4 cups per person daily, amounting to 15 liters or 41 coffee packages.

NOTES: A 20% coffee waste rate results in nearly €60 and over 67,000 liters of water wasted.

	COST (VAT 0%)	WATER FOOTPRINT ¹ (liters)	20% waste IN EUROS	20% waste IN WATER
4 cups per day 30 people	€14.4	16,800	€2.9	3,360
20 days for 30 people	€288	504,000	€58	67,200

See sources on page 16.

SAVINGS THROUGH RECYCLING

CIRCULAR ECONOMY ⁴⁴ is the opposite of the linear economic model. It is a production and consumption model that minimizes the use of virgin materials, keeping products and materials in circulation for a long time and in safe conditions. This retains their value and reduces waste.⁴⁵ In practice, the circular economy involves⁴⁶ borrowing, renting, reusing, repairing, refurbishing, and recycling products and materials.

The Finnish film and TV industry still lacks an established system and infrastructure to recycle all materials. For instance, built set pieces may end up in dumpsters due to tight schedules. Intellectual property rights also pose challenges: highly recognizable elements cannot be recycled into another production. Planning and executing reuse and recycling require personnel resources, but sorting tends to be cheaper than producing mixed waste. Both the wallet and the environment benefit when production needs are well-planned in advance, avoiding unnecessary acquisitions.

WELL DONE

The Finnish AV industry has little to no commercial merchandise culture—apart from occasional reusable bottles or shirts produced for the crew, which most people don't need. From a sustainability perspective, this is positive: avoiding overconsumption is ecological, cheaper, and prevents the circulation of unethically produced goods.

COST OF SORTING

3000 kg / 8–10 M³ (VAT 0%)



MIXED WASTE CONTAINER RENTAL FOR ONE WEEK:
€580 ¹

COMPARISON: The cost of sorting waste for recycling versus disposing of it in a mixed waste bin. The tables show the prices of various waste types per cubic meter or kilogram. In the Helsinki 10 m³ example, the waste types are evenly divided, bringing the sorting cost to €190. In the Oulu 3,000 kg example, the waste weights are estimated at different percentages, resulting in a cost of €267.

NOTES: Sorting recyclable waste is often free, and in Helsinki, mixed waste is the most expensive type. Compared to a mixed waste, sorting can be less than half the cost.



HELSINKI¹:
€190 / 10 m³

OULU²:
€267 / 3,000 kg

	€ / m ³		€ / kg
free recyclables 2 m ³	0	free recyclables 17%	0
coated wood 2 m ³	8.06	treated wood 30%	0.04
plastic 2 m ³	8.06	plastic 3%	0
non-combustible waste 2 m ³	56.45	non-combustible waste 15% non-recyclable	0.16
combustible waste 2 m ³	22.58	combustible waste 35% construction waste	0.15

See sources on page 16.

SUSTAINABLE ECONOMY CREATES THE FOUNDATION FOR ECOLOGICAL PRACTICES

ECONOMIC SUSTAINABILITY refers to balanced and long-term growth that does not rely on debt accumulation or the over-use of capital, such as natural resources. It is also seen as a foundation for social sustainability. The audiovisual industry is characterized by artistic, cultural, and societal objectives alongside financial interests. Its funding structures and revenue models vary significantly depending on the stakeholders and content involved. The economy plays a decisive role in determining the type of professional content that gets produced, for whom, and under what conditions. Public support for the industry, in particular, is ultimately dependent on political decisions.

A sustainable production model refers to methods of implementing film or TV productions in which social and ecological sustainability are integrated into the process. Key aspects include:

1. Adequate financing relative to the production's scale and content

Ecological practices are a value-based choice that should also be reflected in the budget. Undersized budgets or overly ambitious plans compared to available resources are persistent issues in the industry. These often result in basic operations consuming all available energy and time. Responsibility for implementing sustainable practices cannot rest solely on the operational level as additional work without support; instead, time and resources must be allocated for it. Productions with sufficient financial backing enable better attention to ecological sustainability, which is reflected in higher-quality outcomes.

2. A sustainability plan incorporated into the budget

An early-stage sustainability plan defines the goals for ecological implementation and is updated as production progresses. The plan is integrated into the budget, not as a single line item but spread across multiple categories. The budget serves as the production's "second script," outlining the financial framework and its environmental impact before a single minute of footage is shot. Eco-budgeting requires knowledge of sustainable practices and their financial implications.

3. Sufficient time for planning in pre-production

Ecological practices often lack ready-made routines and processes, and, like productions in general, work on sustainability must always be tailored for the project at hand. "Eco-planning" involves extensive research and communication among production crew, stakeholders, and service providers, who know best the realities of their work and can assess the cost implications. Planning requires a dedicated professional, either an expert or someone from the production crew trained in this area. Overall responsibility lies with the producer.



DID YOU KNOW?

International production incentives may tempt filmmakers to shoot abroad, but it's essential to carefully review the conditions and understand the demands of the local work culture. Equipment and personnel costs may be higher, and crew size requirements can exceed those customary in Finland. As a result, some tax benefits may be offset—and logistical emissions increase.

THE COST OF ECO-WORK

THE LARGER the production and the higher its ecological targets, the greater the need for a sustainability specialist on the crew. An Eco-manager or Head of Sustainability is a role in charge of planning sustainability, and eco-coordinator is comparable to a production coordinator.

An eco-manager's work focuses largely on pre-production, where decisions about implementation and potential emission calculations or certifications are made. The eco-manager leads work on sustainability and helps integrate it throughout the team, especially among those in key creative roles. In eco-conscious productions, it is expected that crew members' workloads may increase as they adapt to new approaches, particularly when such practices are unfamiliar.

Combining roles, such as having the production manager also act as the eco-manager, may seem financially appealing but could impact social sustainability due to increased workload. Since the heaviest workload for both roles occur during pre-production, combining them can be overwhelming. Increased workload leads to additional costs through overtime or longer contracts. Alternatively, tasks may need to be redistributed, requiring hiring extra hands, such as a production assistant. The combined role also demands expertise in both job functions.

COMPARISON: Hiring an eco-manager vs. integrating sustainability work into an existing role. The eco-manager is calculated based on a monthly salary for a part-time role (50%, <8 hours/day) over three months. Comparatively, when the production manager or line producer takes on eco-work, the employment duration extends by 30%. Salaries do not include employer costs, holiday pay, or overtime compensation.

NOTES: Hiring a separate eco-professional is more costly upfront, but integrating the work into an existing role also incurs significant costs. The minimum cost of eco-work is €3,420 when done by the production manager. For a line producer, the cost increases to €4,050 (+€810). The most expensive option is hiring a part-time eco-manager for three months, costing €6,300 (+€2,880). However, to accurately assess the cost of hiring a specialist, the minimum eco-work cost (€3,420) must be noted, meaning the additional cost of an eco-manager is only €2,880. When comparing options, the social responsibility of implementing eco-work should also be considered.

Job title	Monthly salary (work time)	Duration months	Total salary for contract	Extended contract for eco-work	Additional monthly costs for eco-work	Total additional cost for eco-work
Eco-manager	€2,100 (50%)	3	€6,300	-	-	-
Production manager	€3,800 (100%)	3	€11,400	30%	€1,140	€3,420
Line Producer	€4,500 (100%)	3	€13,500	30%	€1,350	€4,050

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APPENDIX

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APPENDIX OF IMAGES

Flying

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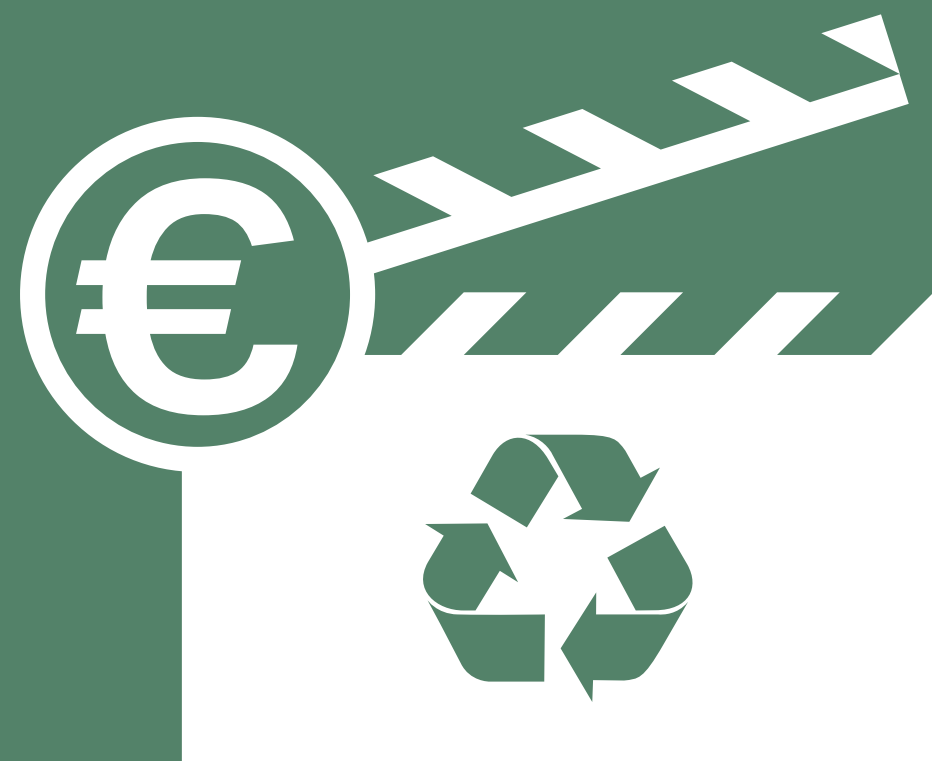
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Ekosetti in Euros

APFI Audiovisual
Producers
Finland

avaus
vastuullinen av-ala

 **Funded by
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Compare the figures and calculations from "E€" to your own production in an excel file, which you can download for free at **ekosetti.fi**