PART 1

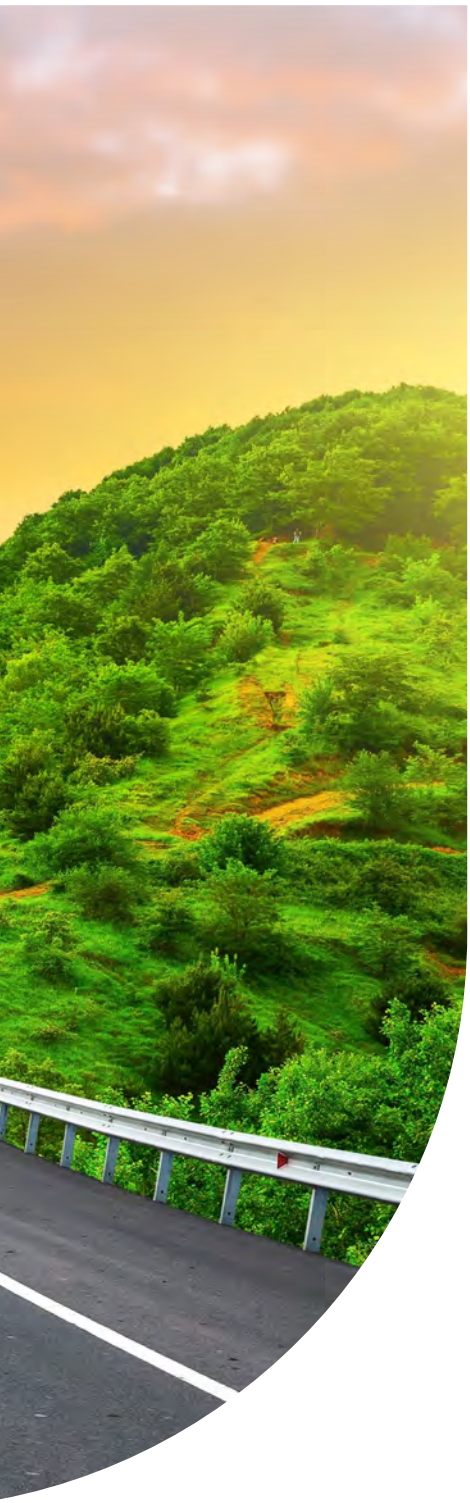
Making Auto Insurance Sustainable

How to build a connected insurance program that engages drivers with fuel saving and carbon footprint reduction

Developing Connected Insurance Value Propositions in Europe

2023-2024

CAMBRIDGE MOBILE TELEMATICS



Preface

Why does sustainability in insurance suddenly matter, and what does it mean?

In recent months, we have witnessed devastating floods in Italy, droughts in Spain, and forest fires in France and Greece, among other extreme weather events. These dramatic events incur billions in losses for insurers, and their frequency and cost are on the rise. Today, losses from extreme weather-related events are 18 times higher than those caused by human activities.

Regulators in Europe are now asking more companies to monitor how their investments and activities impact the environment across a range of factors, but they have not mandated change yet. With the global carbon budget forecast to reach 1.5°C depleted by 2029, the urgency will move from monitoring to actively reducing emissions.

Insurance customers know this. At Cambridge Mobile Telematics (CMT), we surveyed 2,500 people in Europe and found that 78% of the population is concerned or very concerned by the rising temperatures. Over half of them have already started to change behaviour to reduce their carbon footprint. Up to a quarter are unsure what they can do.

In this report, we aim to provide you with the tools and models to create sustainable motor insurance products with telematics. This means insurance that is profitable for the underwriter, attractive to the drivers, and differentiated from the competition.

Thomas Hallauer
Director of Marketing, Europe

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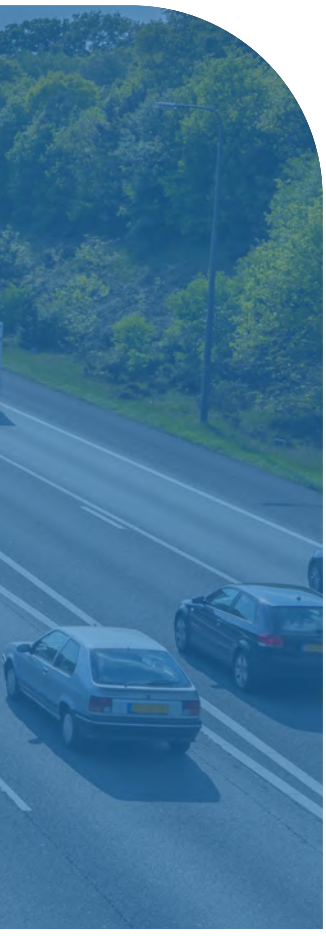


Executive Summary

78% of drivers in Europe are "concerned" or "very concerned" about changing global temperatures.

Drivers understand fuel savings, but they **need more context** to understand CO_2 emissions savings.

21% want to reduce their carbon footprint, but do not know how.

77% say they are likely or very likely to download an insurance app that helps them reduce their carbon footprint.[1]

[1]Average responses from 2500 drivers in 5 countries

25% of Europeans' carbon footprint comes from driving.

By January 2025, over **60,000** companies in Europe must report their environmental impact or face penalties. The reporting can include drivers' carbon footprint.

There are three models to consider for sustainable motor insurance:

Carbon Avoidance, Carbon Optimisation, and Carbon Removal.

Each model has its benefits and can be targeted to specific audience segments.

Telematics technology is the **core** enabler of sustainable insurance products.

Sustainable insurance programs have proven to increase engagement, reduce emissions and save fuel. Top drivers cut emissions by **30%** and save an average of €440 on fuel yearly.

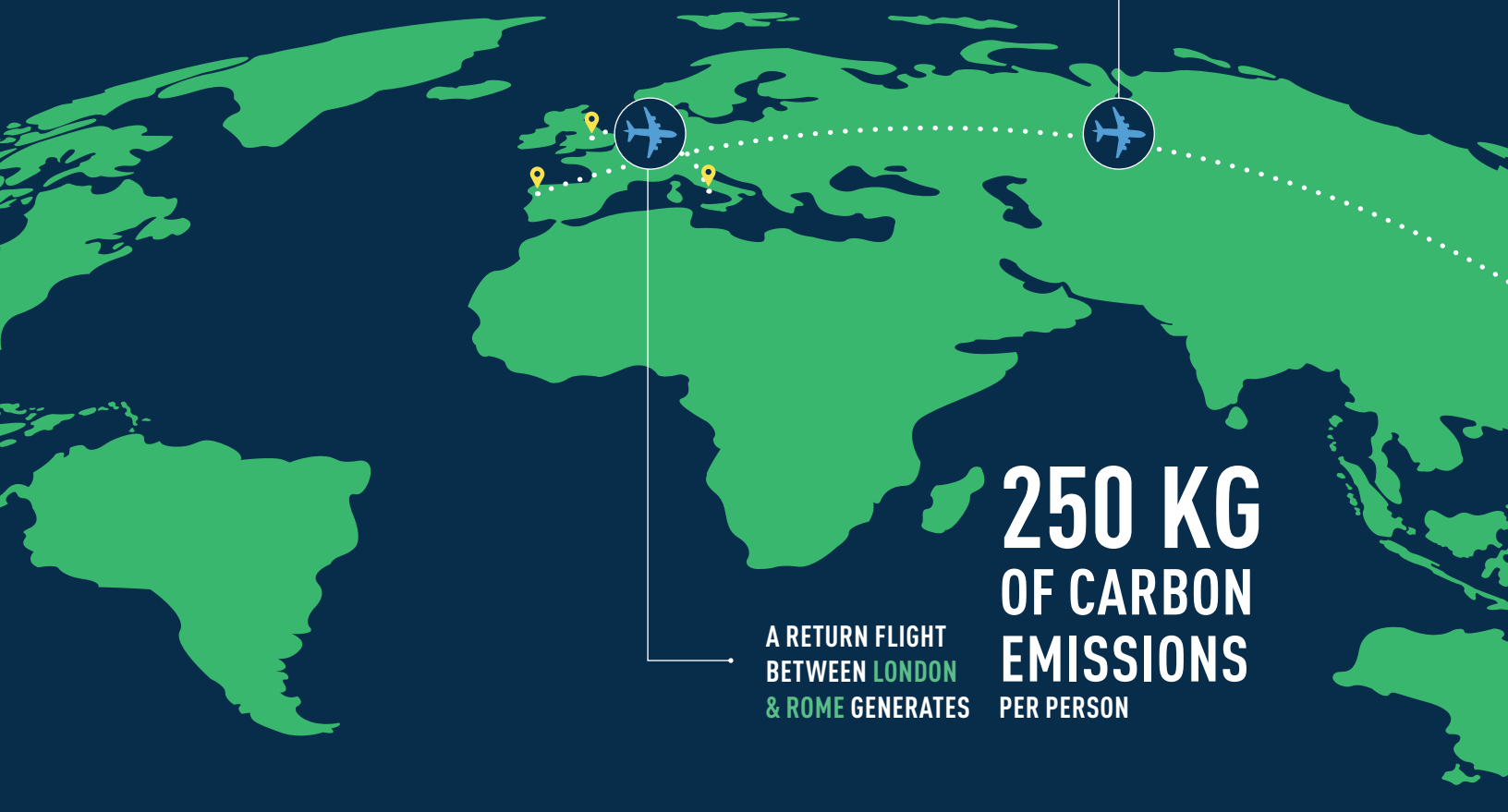
CMT's Eco Score gives drivers **meaningful insight** on fuel efficiency and carbon footprint.

Key concepts and definitions

In this report, we will discuss how insurers can convey a positive and engaging message around reducing drivers' individual carbon footprint. While the effects of climate change are in the news every day, the terminologies and concepts around what drivers can change needs to be communicated simply and more often.

In this section, we propose several visual ways to approach the issue and give drivers a sense of ownership and control over their footprint reduction target.

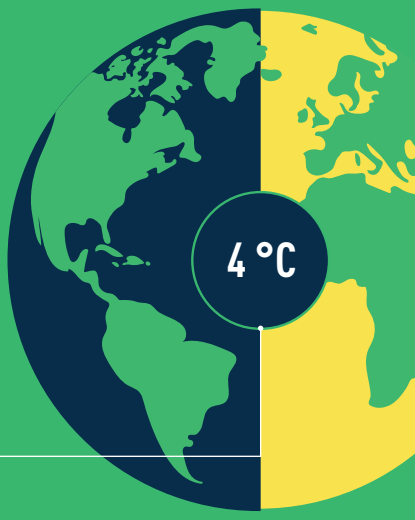
Visualising CO_2 emissions



What does +1.5 °C in global temperature **really** mean?

Nobody knows the full impact a warming of 1.5°C will have on our everyday lives. Climatologists estimate this will happen in about 5 years.

We do know what a 4°C difference means. The Ice Age had global temperatures 4°C cooler than today.



IN THE LAST 11,500 YEARS

THE EARTH HAS WARMED BY ONLY

1 TONNE OF CO_2 FITS IN A HOT AIR BALLOON

OR AN 11 METRES SPHERE

200 TREES VS 1 PERSON

IT WOULD TAKE ABOUT 200 TREES TO ABSORB THE EMISSION OF A SINGLE EUROPEAN INDIVIDUAL FOR A YEAR

How much emissions do drivers produce?

A driver's carbon footprint is the calculation of their total emission of greenhouse gases (GHG) as a result of their activities for a year. GHG emissions are often measured in carbon dioxide equivalent (CO_2e). To increase awareness and understanding, insurers need to make CO_2 tangible. It is also important to give proportions and guidelines for drivers to understand their progress.

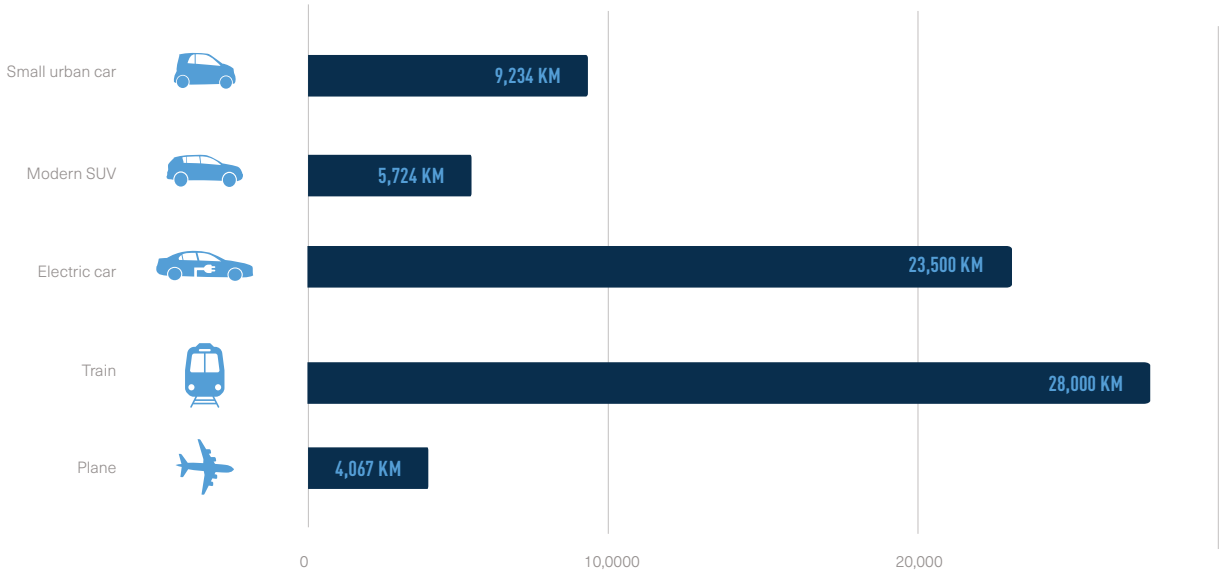
An easy way to picture a tonne of CO_2 is by imagining a sphere 11 metres high. Or a cube as big as an average house.

A tonne of CO_2 is considered the result of energy spending. In terms of energy, it is equivalent to the electricity consumption of an average flat for a year or the gas consumption of the average person in Europe for 6 months.

CO_2 emissions are most often linked to fossil fuel consumption. In terms of transport, the energy related to 1 tonne of CO_2 can be used more or less efficiently, as shown in the chart below.

DISTANCE TRAVELLED WITH 1 TONNE OF CO_2 ENERGY EQUIVALENT

Source: EMSmastery



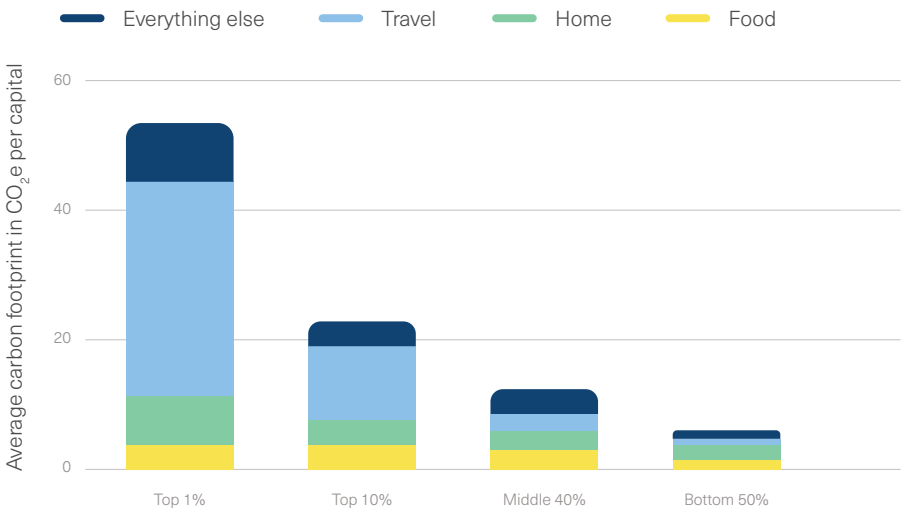
Calculating individual emissions is more complex because there are many definitions. As an illustration, greenhouse gas emissions that are released within the UK (known as "territorial emissions") account for 6 tonnes per person per year. Once imports and exports are included, this rises to 10 tonnes. Once aviation is included, it goes up to 13 tonnes.

It is also important to consider that individual wealth has a disproportionate effect on emissions. A person in the top 10% wealthiest segment can emit over 3 times more than someone from the middle 40%. The chart to the right illustrates this for Europe.

The reasons why CO_2 emissions rise exponentially with individual income levels are complex. A simplified explanation is that the world's entire manufacturing process depends on fossil fuels. The more we earn, the more we buy, the more we consume products, the more we generate emissions.

CARBON FOOTPRINT DISTRIBUTION BY CONSUMPTION CATEGORY IN THE EU

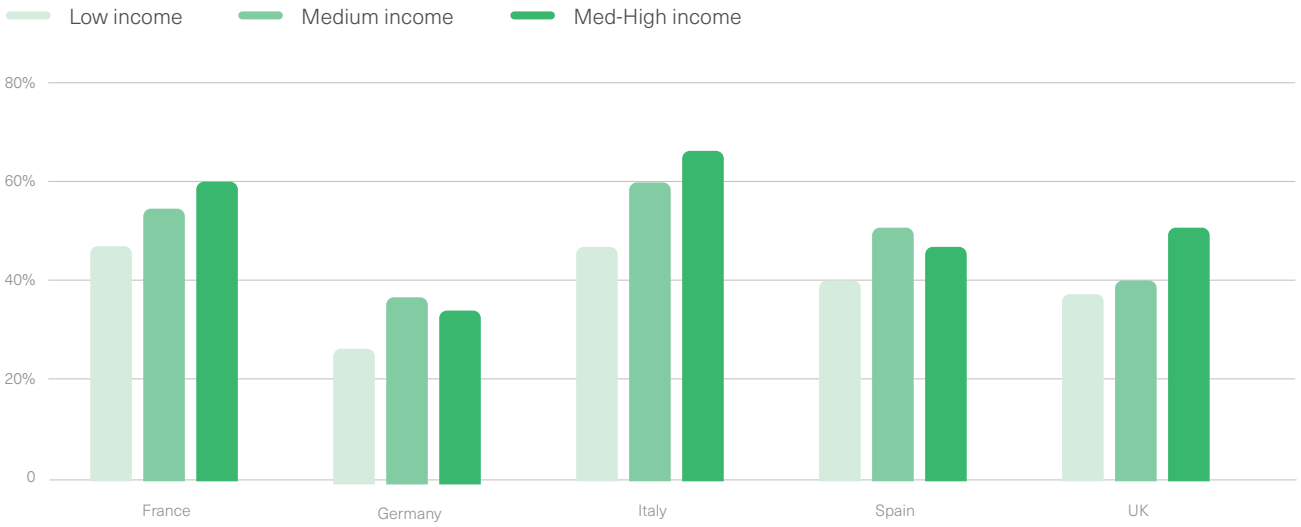
Source: Diana Ivanova and Richard Wood (2020)



This segmentation is important because our survey data shows that high earners are more concerned about climate change while low earners are more concerned with fuel costs. There's also clear segmentation between distance travelled: Lower mileage drivers tend to be more concerned about their emissions. Higher mileage drivers tend to be more concerned about fuel efficiency and costs.

SHARE OF RESPONDENTS THAT ARE EXTREMELY OR VERY CONCERNED ABOUT RISING GLOBAL TEMPERATURES

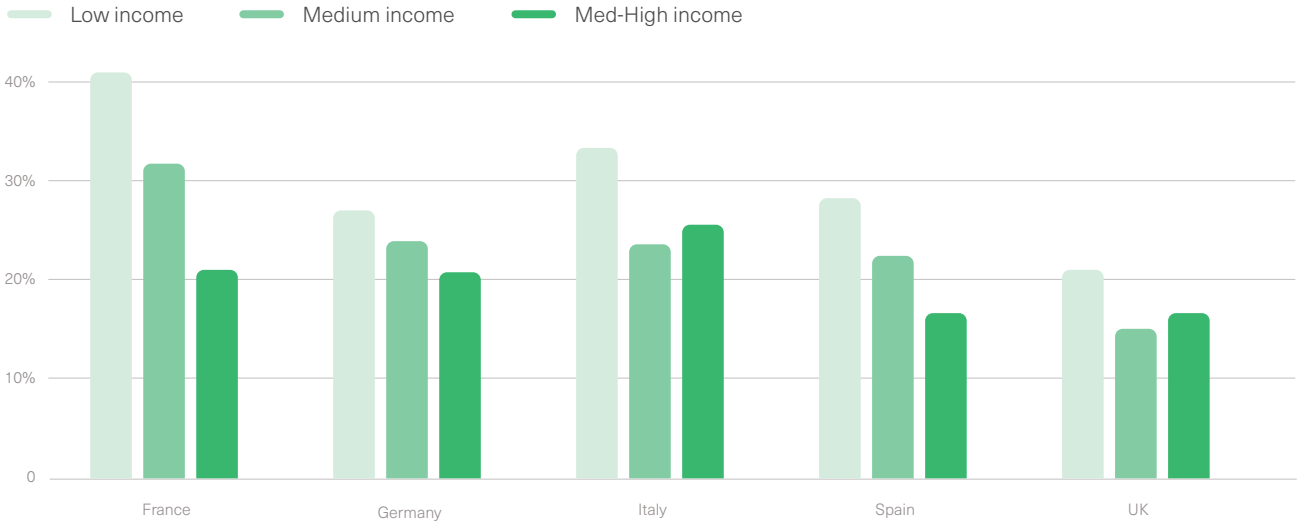
Source: CMT



This segmentation between high earners and low earners and their interests holds true across the five countries — more affluent respondents are more worried about rising temperatures and climate change than fuel prices. High earners were also 7% more likely to change their behaviour to reduce their carbon footprint than low earners.

SHARE OF RESPONDENTS THAT ARE EXTREMELY OR VERY CONCERNED ABOUT FUEL PRICES

Source: CMT



The opposite is also true across the five countries. Low earners are more concerned about fuel prices. They are also less likely to change their behaviours to reduce their carbon footprint. In the UK, high earners were 12% more likely to download an app to reduce their carbon footprint.

DRIVERS IN HIGHER INCOME BANDS ARE MORE LIKELY TO CHANGE BEHAVIOUR

Source: CMT

What is a simple emission reduction target to communicate on?

In order to limit global warming to 1.5°C or less as outlined in the Paris Agreement, the United Nations suggests that emissions must be cut by 45% by 2030 and brought to net zero by 2050.

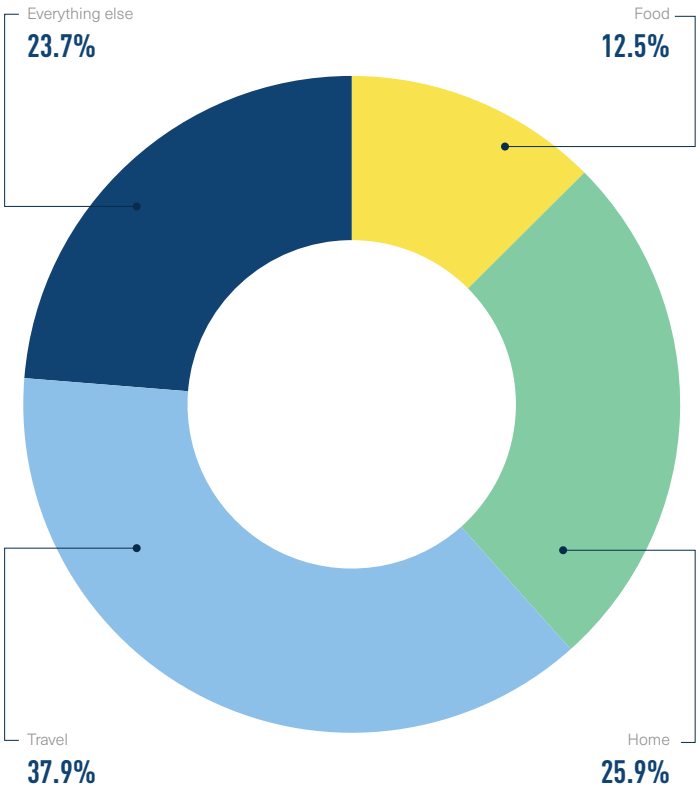
To establish an individual target for drivers for the 1.5°C range, the Intergovernmental Panel on Climate Change (IPCC) recommends dividing the remaining carbon budget by the global population. The result is a recommendation of 2 tonnes per year.

Finally, to reduce their own carbon footprint, drivers need to understand where it comes from.

A person's carbon footprint can be split into four categories: food, home, travel and everything else we buy. Driving and flying together make up the biggest share of our individual emissions at 38%. Out of that segment, 25% is linked to driving. The graph on the right shows the split for an average driver in Europe.

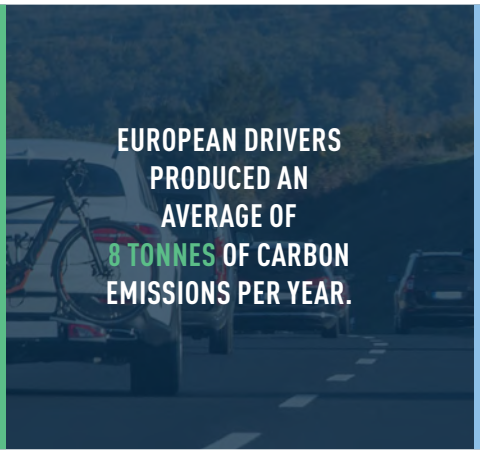
OVERALL SPLIT IN EMISSION SOURCES

Source: Diana Ivanova and Richard Wood (2020)



KEY FIGURES TO CONVEY TO EVERY MOTORIST ›

REDUCING YOUR CARBON FOOTPRINT TO 2 TONNES PER YEAR IS THE BEST CHANCE TO AVOID A 2°C RISE IN GLOBAL TEMPERATURES.



A QUARTER OF EUROPEANS' CARBON FOOTPRINT IS CONNECTED TO DRIVING.

Will drivers buy a sustainability message?

CMT surveyed 2,500 drivers across five European countries in August 2023. We asked respondents about their concerns regarding global temperature increases and fuel prices.

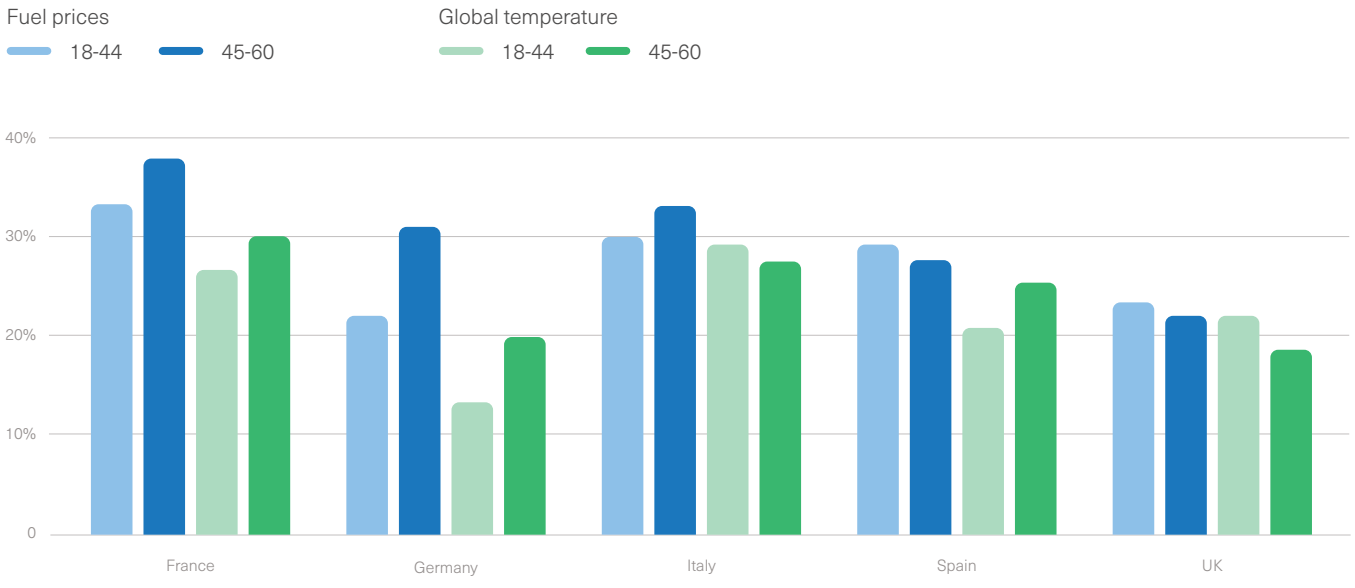
The two issues are interconnected in many ways, but comparing them gives a truer understanding of drivers' sensitivities. This is because respondents had to think about a tangible change in fuel prices alongside a less immediate change in the climate.

The results illustrated in the chart below demonstrate that:

- On average, 23% of respondents were very or extremely concerned with rising temperatures.
- Younger drivers were less worried about rising temperatures.
- Younger drivers rated the importance of rising temperature at the same level as fuel prices (29%).

LEVELS OF CONCERNS AROUND FUEL PRICES

Source: CMT



When including the segment of "concerned" respondents, a bigger picture emerges:

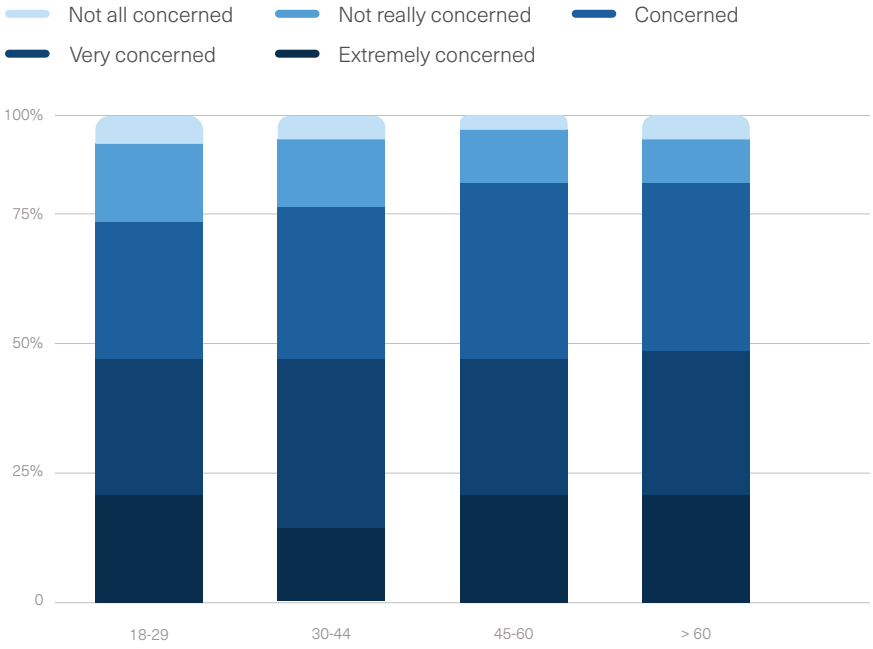
The vast majority of respondents are concerned in fairly equal part about the two topics. Even with fuel prices varying by 35% between the cheapest (in the UK) to the most expensive (in France and Italy).

The variation between the five countries we surveyed is slim, but noticeable. We conducted the survey in August, during the hottest part of the year. Southern European countries like Italy and Spain were going through heat waves and had seen wildfires. It's possible these events influenced our survey respondents.

The survey also shows that low-mileage drivers in many countries can be more sensitive to both fuel prices and global temperature increases, (up to 9 percentage points in Italy). This suggests that low-mileage drivers are a good segment for insurers to target for sustainable insurance products.

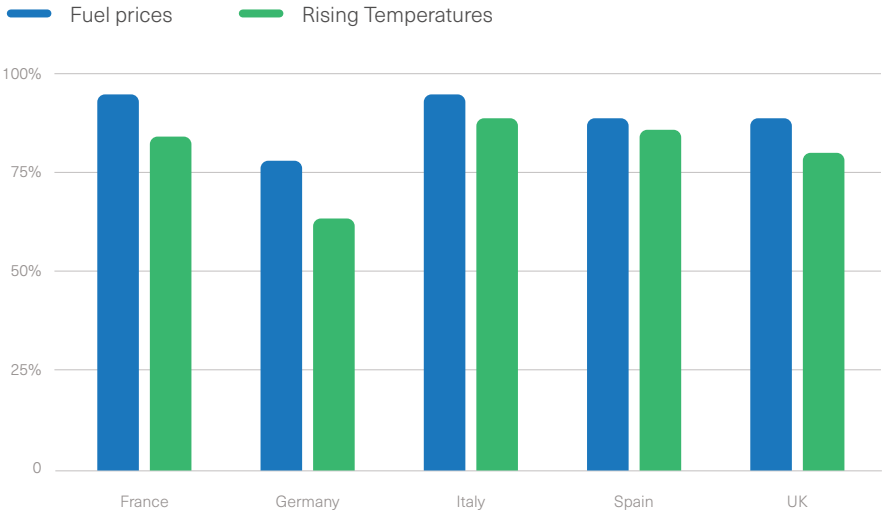
ENVIRONMENTAL SENSITIVITY PER AGE BAND (AVERAGE EUROPE)

Source: Diana Ivanova and Richard Wood (2020)



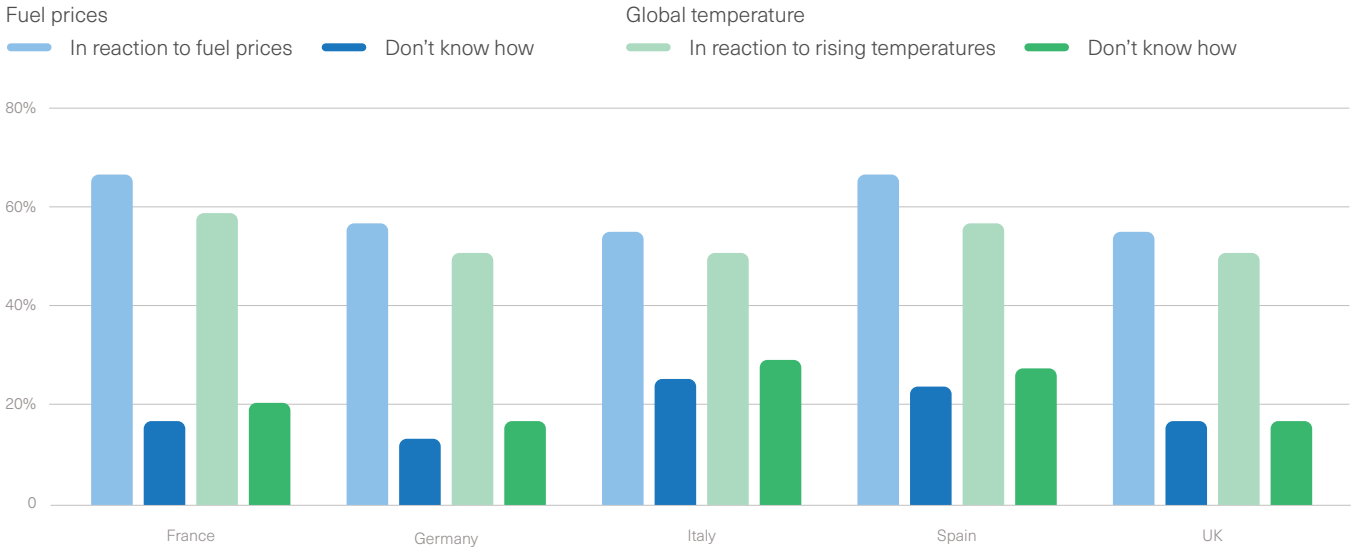
SHARE OF RESPONDENTS BEING "CONCERNED", "VERY" OR "EXTREMELY" CONCERNED ABOUT FUEL PRICES AND TEMPERATURE INCREASE

Source: CMT



SHARE OF RESPONDENTS THAT HAVE CHANGED BEHAVIOUR

Source: CMT



The survey shows that 54% of respondents have already taken steps to change behaviour to reduce emissions and slow rising global temperatures. Up to 25% want to change behaviour, but do not know how.

To put this in perspective, 6% fewer people changed their behaviour to reduce their carbon footprint than to reduce their fuel bill. However, 2% more people wanted to change their footprint, but did not know how.

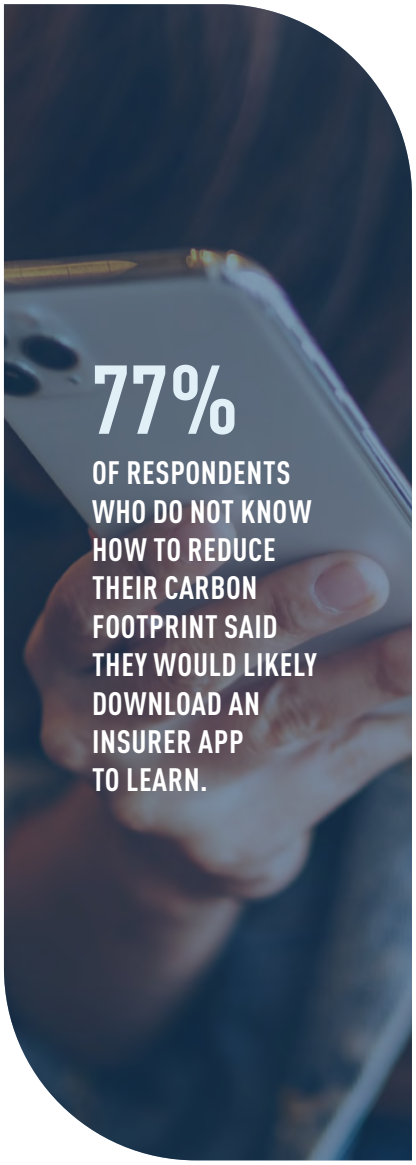
THE RESULTS OF THIS SURVEY ALIGN WITH OTHER SURVEYS CONDUCTED AT A NATIONAL LEVEL.

THE UK'S ONS SURVEY FOUND 75% OF DRIVERS WOULD CHANGE THEIR LIFESTYLE TO HELP TACKLE CLIMATE CHANGE.

Drivers' responses about their level of understanding of how their driving impacts fuel consumption and carbon emissions show the need for education.

For instance, in the UK, 35% of respondents were unaware of the connection between safe driving and CO_2 emissions. Insurers have a great opportunity to communicate positively on the topic, overall half of the respondents are interested in learning more.

To learn more about how their behaviours impact fuel consumption and CO_2 emissions, respondents said their insurer's app was the best tool.



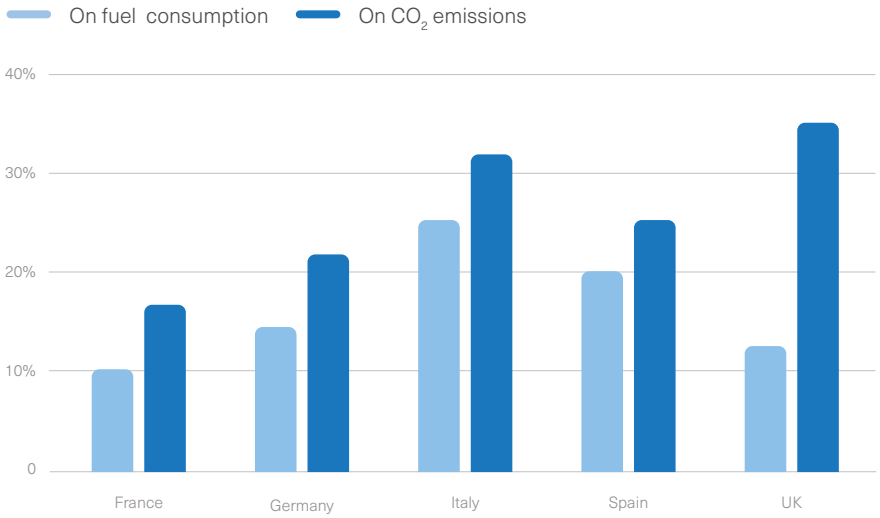
Across the five nations surveyed, 78% of respondents indicated their willingness to download an app offered by their insurer to save fuel and/or lower their carbon footprint.

This percentage increases slightly among the countries, particularly among high-mileage drivers.

The results for using their insurer's app to control or reduce fuel consumption were similar.

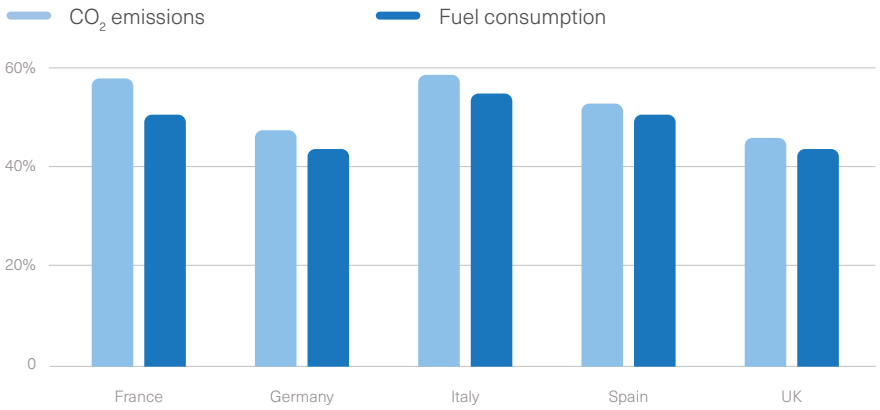
DRIVERS DO NOT REALISE THE IMPACT OF THEIR DRIVING BEHAVIOUR

Source: CMT



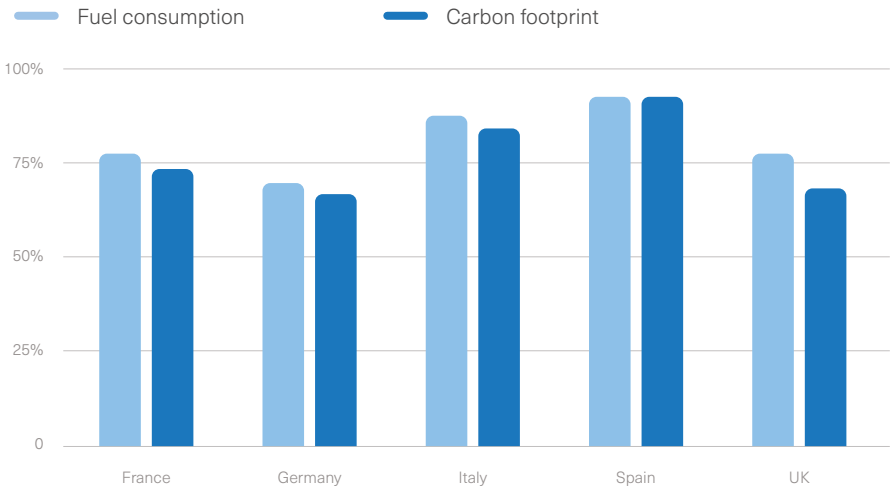
DRIVER INTEREST IN LEARNING ABOUT THEIR IMPACT

Source: CMT



WILLINGNESS TO USE AN INSURANCE APP TO REDUCE

Source: CMT



Move first or be pushed: A sustainability regulation overview

While the insurance sector alone cannot prevent climate catastrophes, there are extensive regulations compelling insurers to change on multiple levels. These regulations came first from a national level. Now they are becoming regional.

National regulations & reporting frameworks

Various European countries have established distinct national frameworks and prerequisites for corporate emissions reporting. A notable example is the United Kingdom's Streamlined Energy and Carbon Reporting (SECR) policy, mandating organisations to disclose energy consumption and carbon emissions data within their annual reports, effective from 2019. Similarly, Swiss authorities have taken parallel measures with the Federal Act on the Reduction of CO_2 Emissions (CO_2 Act), operational since 2013, serving as a pivotal Swiss federal law governing carbon dioxide emissions, forming the foundation of Switzerland's climate policy initiatives. As other European nations develop similar regulations and frameworks, the unified drive for transparent emission reporting extends across borders.

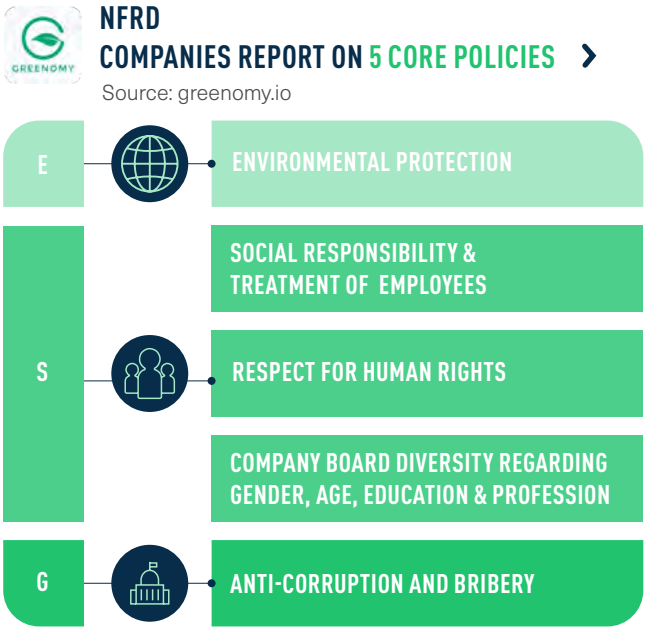
Europe's new reporting regulation

Since 2017, large companies in Europe have had to report on a number of criteria following the NFRD regulation. The reporting initially focused on Environment and Social Governance (ESG).

In January 2021, the European Union mandated that both large corporations and all publicly listed companies provide comprehensive disclosures and issue periodic reports on the social and environmental risks and opportunities they face and how their actions impact societal welfare and the environment.

This legal stipulation, recognised as the Corporate Sustainability Reporting Directive (CSRD), officially took effect on the 5th of January, 2023.

As stated by the European Parliament, the CSRD aims to increase transparency in sustainability reporting across Europe and end greenwashing. The goal is to establish standardised and easily accessible sustainability data for investors and customers, allowing them to evaluate how sustainable companies are.



Which insurers need to report on corporate sustainability?

The CSRD not only broadens the scope of reporting requirements but also extends the NFRD's reach to encompass a larger number of companies subject to compliance. Its implementation follows this timeline:

FROM 1 JANUARY 2024

Large public-interest companies (with over 500 employees), which are already subject to the NFRD, except for listed micro companies, will come under its jurisdiction. These entities are expected to submit their reports in the year 2025.

FROM 1 JANUARY 2025

Large companies that are either EU companies or that serve as EU subsidiaries of non-EU companies that are not presently subject to the NFRD will be brought under the new regulations. This applies specifically to those entities meeting at least two of the three following criteria:

- Employing more than 250 employees during the financial year
- Generating a turnover of €40 million
- Holding total assets of €20 million in total assets

FROM 1 JANUARY 2026

The first reports for these companies will be due in 2026. Listed SMEs and other undertakings will be required to adhere to the new reporting framework, with corresponding reports due in 2027.

In effect, the CSRD will force 49,000 organisations in Europe and an additional 10,300 non-EU companies to disclose their environmental impact.

What are the reporting requirements?

The CSRD report will have to be audited and integrated into the company's management report, meaning financial and sustainability annual information will be published simultaneously.

All companies involved will follow the same framework and report according to the European Sustainability Reporting Standards (ESRS). The ESRS framework outline requirements across four broad categories:

- **Cross-cutting standards:** General requirements, general disclosures
- **Environment:** Climate, pollution, water and marine resources, biodiversity and ecosystems, resource use and circular economy
- **Social:** The company's own workforce, workers in the value chain, affected communities, consumers and end-users
- **Governance:** Business conduct

The reporting of CO_2 emissions will be structured around three distinct scopes of emissions.

SCOPE 1

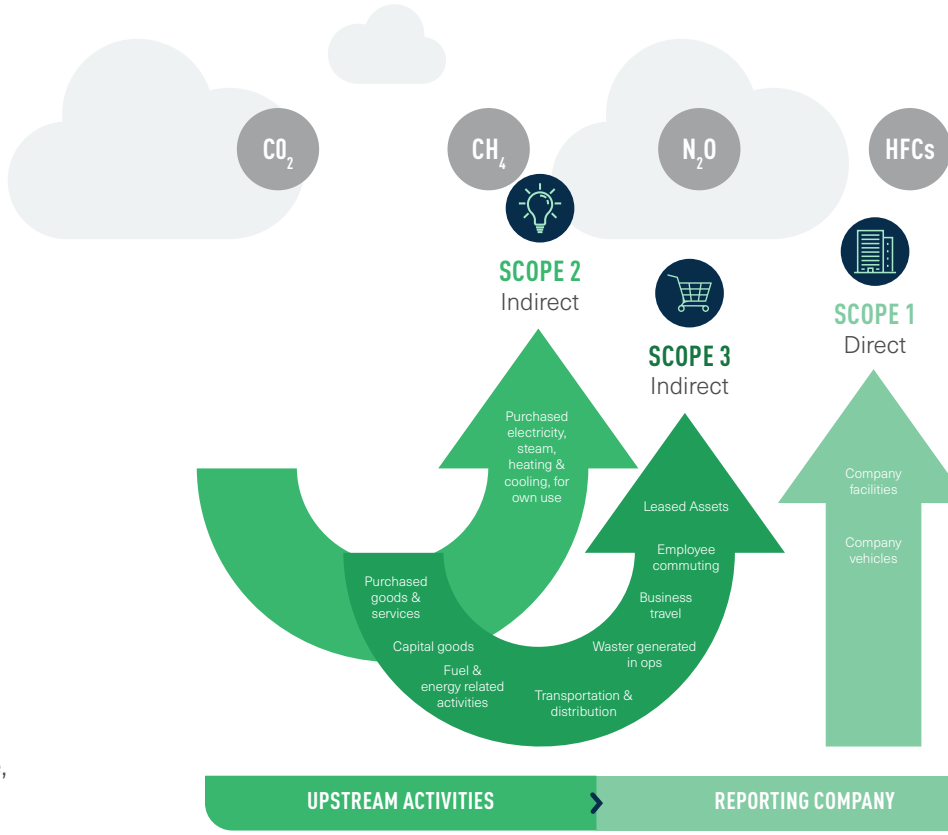
Includes the emissions from sources owned or directly controlled by the company. For example, fuel burned by companies' vehicles or fleets.

SCOPE 2

Includes emissions the company creates indirectly through the energy generation necessary for its operations. If we take EV fleets as an example, the emission from generating the electricity they are powered by would fall into this category.

SCOPE 3

Includes indirect emissions created by production. These are the emissions embedded in the value chain and "in" the product. This is where accounting for the emissions of your customers fit in. For example, emissions, or savings, generated by driving with your car insurance product.



Source: climatecamp.io

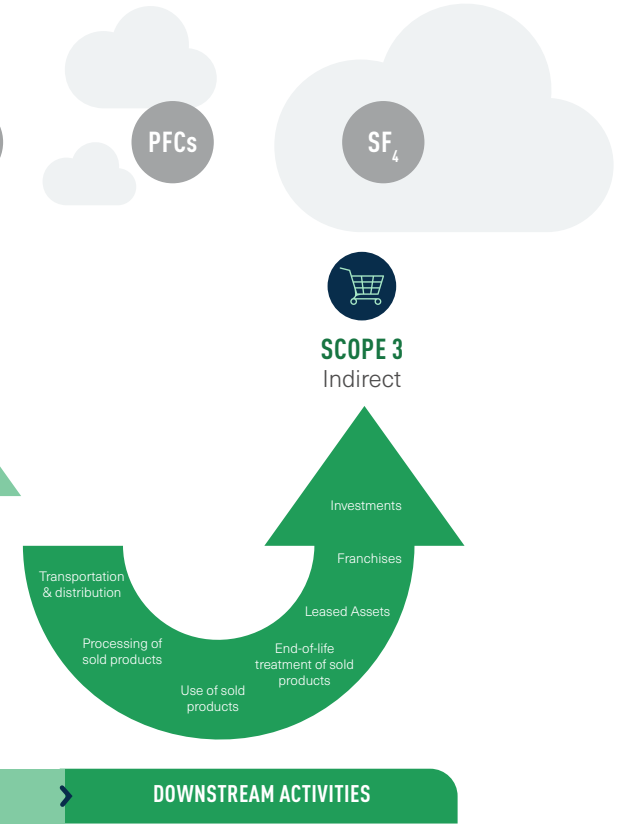
Reporting is mandatory. Companies found in non-compliance with CSRD will face regulatory consequences. The nature of the sanctions and the amount of the fines will depend on each member state's regulations. The CSRD regulation requires member states to enact the following administrative measures:

- A public declaration describing the infraction and identifying the guilty person/entity
- A cease-and-desist order against the accountable person/entity
- Administrative pecuniary penalties against the responsible person/entity

As an illustration, if German businesses don't report compliance to the German version of the Non-Financial Reporting Directive (the directive being amended with the CSRD) they face fines of whatever is higher:

- €10M
- 5% of the total annual turnover of the company
- Twice the amount of the profits gained or losses avoided because of the breach

E. What are the benefits for insurers?



Insurers should not see sustainability reporting solely as a cost factor and challenging mandatory task. Instead, it's an opportunity to promote a change in thinking.

By integrating sustainability as a business strategy, they can benefit in the long-term with an improvement in reputation and sustainability ranking, gain access to new capital through investors, reduce costs, and reduce environmental and financial risks.

Additionally, disclosing innovative products, sustainable investments, and progress in reducing their CO_2 footprint can be a distinguishing feature for clients and investors.

Reporting impacts the insurance sector in particular because insurers need to consider two perspectives when assessing their own sustainability: the financial materiality and the impact materiality.

Financial materiality can cover climate-related risks to insured properties or health risks associated with pandemics.

Impact materiality can refer to the carbon footprint of the company's products, like motor insurance, or from its investments.

This comprehensive approach helps insurance companies make informed decisions that benefit both themselves and the larger community, including their customers.

Developing and deploying sustainable motor insurance

Defining the sustainable insurance target segments

As part of the questionnaire CMT sent to 2,500 drivers, we defined four different personas based on their interest and sensibility towards climate change.

The sceptics

This group does not believe and/or is not interested in conversations related to the environment. They are not concerned with the changing climate, and do not believe individual behaviour change can make a difference. Critics among them do not believe in the link between our behaviour and its impact on global temperatures. On average, critics represent 12% of the audience.

The sympathetic bystanders

This segment of the population focuses primarily on their own well-being with little regard or understanding of global warming. Despite their awareness and concern regarding the incidents of floods and fires, they do not connect these events to the broader climate crisis and, consequently, do not feel compelled to take personal action.

Instead, they operate under the assumption that the resolution of these issues lies in the hands of others. This group constitutes approximately 29% of the respondents, highlighting a significant portion of the population that is empathetic to the consequences of climate change but remains passive and reliant on external intervention.

The solution seekers

This demographic is characterised by a pronounced awareness of and concern for climate change, yet lacks the knowledge or resources to take impactful action. Driven by a sense of responsibility and guilt for their perceived inadequacy in contributing to solutions, they are actively engaged in seeking out ways to mitigate their environmental impact and alleviate their eco-anxiety. Representing approximately 33% of survey respondents, this group highlights the need for accessible, user-friendly guidance on sustainable practices and behaviours.

The climate crusaders

This final group is extremely concerned about the climate breakdown. They read and research the topic actively and are engaged in making a difference on an individual level. They represent 26% of the audience.

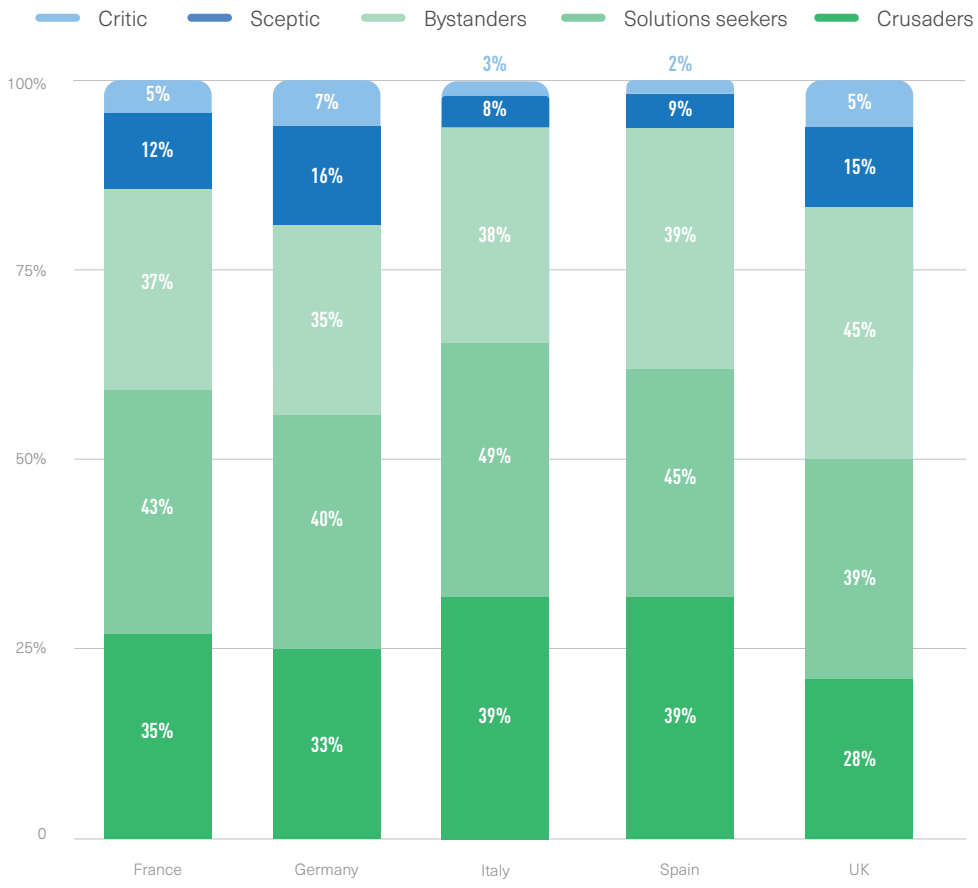
Following this segmentation, we isolated specific groups of respondents based on their concerns, their interest or belief in the link between our behaviour and the climate, as well as their readiness to download an app to help them monitor and change their carbon footprint.

The results illustrated in the chart to the right suggests:

- The split between segments is fairly homogeneous between the five countries we surveyed.
- Only a third of the respondents are aware enough of the climate breakdown to the point of doing something about it.
- The majority either feels guilty or curious about the climate breakdown.
- 70% of respondents are ready to download an app to actively change.
- The sceptics are a small segment. They vary from 8% to 16% of respondents in each market.

ENVIRONMENTAL SENSITIVITY SEGMENTS IN EUROPE

Source: CMT



Our initial research suggests that the sympathetic bystanders and the solution seekers are prime targets for a sustainable insurance product because it answers their need to take action without needing to do or learn too much.

The climate crusaders may need stricter requirements and outcomes for an insurance value proposition. For example, the product would need to offer the appropriate rewards and offsetting schemes.

The 3 core models of a sustainable insurance value proposition

The first step of any net-zero strategy is to reduce the amount of energy consumed. For example, insurers should use as much low-carbon or carbon-free energy as possible.

The second step is to increase efficiency, using the least amount of energy to conduct operations. Then they should use as much low-carbon or carbon-free energy as possible

The third step is then to offset the remaining energy — whether directly purchased or embedded in other purchases.

For auto insurers, there are three strategies:

1

Carbon Avoidance
Help your drivers reduce how much they drive

2

Carbon Optimisation
Help your drivers increase driving efficiency

3

Carbon Removal
Offset your drivers' emissions

Insurers may not think they have a critical role to play in reducing their drivers' emissions or steering them towards driving an electric car, but they can still make a big difference.

For example, a distance-based program can reward drivers every month based on their ability to reduce their driving, lowering their risk, carbon emissions, and fuel costs. An insurer app can provide tips and incentives to use public transport. This is Carbon Avoidance.

Its impact on the insurer's exposure is immediate. To reward drivers, telematics technology can provide precise car journey mileage and identify non-car journeys.

At the same time, an insurer can use telematics data from the app to give feedback on how users drive and help them to identify trends. This Carbon Optimisation approach can use either risk or eco scores, each providing different results and benefits.

The clear advantage for the drivers is that the measured carbon footprint can be translated into fuel efficiency and given a monetary amount. For the insurer, this model helps them understand precise risk information and provide a better user experience.

The same app can motivate and reward drivers for specific behaviours by compensating their driving emissions using carbon offsetting partners. This is the Carbon Removal model used by many insurers, including Vitality Drive in the UK.

Insurers leverage telematics technology to calculate drivers' emissions.

We've analysed the 3 models below, how they fit a customer persona, and their implications for drivers and insurers.

	MODELS		
	CARBON AVOIDANCE	CARBON OPTIMISATION	CARBON REMOVAL
IDEAL SEGMENT	Climate crusaders	Solution seekers	Sympathetic bystanders
PERCEIVED BENEFITS	› Sense of accomplishment › Rewards	› Fuel savings/ rewards › Guidance	› Improved self perception
KEY INSURER BENEFITS	› Lower exposure › Higher engagement	› Risk profiling pricing › Much higher engagement › Emission reporting	› Branding- positive association › Higher conversion
KEY TELEMATICS TECHNOLOGY	› Non-car trip detection › Public transport mode identifier	› Eco score › Idling statistics › Fuel spending	› Emission calculation

What is an eco score, and why is it necessary?

Telematics programs generally have three goals:

- Reduce risk by providing drivers with feedback via an app to make them safer
- Identify individual risk profiles to price more effectively
- Attract new drivers using rewards and discounts

This strategy for telematics has been effective in markets such as the US where claims frequency is high and road deaths have soared. In Europe, the conversation around safe driving turns rapidly towards data privacy.

With fuel efficiency and CO_2 emissions, insurers have an opportunity to offer a new experience and benefit to customers while maintaining high-quality data.

Insurers can adopt a carbon avoidance strategy, focused on reducing miles driven per year while including recommendations for making those miles more efficient.

At this stage, it is crucial to recognize that responsible driving practices, such as avoiding harsh acceleration and braking, and maintaining appropriate speeds can significantly increase fuel efficiency and reduce emissions.

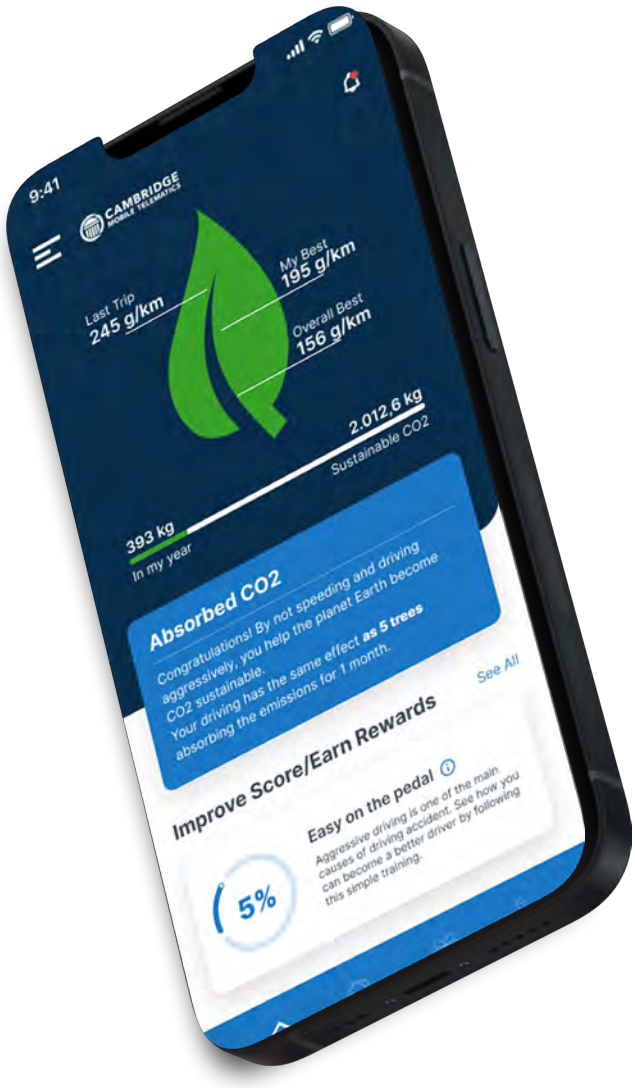
SAFE DRIVING = SUSTAINABLE DRIVING

Telematics technology allows insurers to accurately measure customers' emissions and provide feedback on emission-reduction strategies. Transportation-related activities typically contribute to approximately 25% of an individual's carbon footprint, making motor insurers well-positioned to assist in emissions reduction efforts.

An eco score can illustrate how driving behaviour directly impacts fuel consumption and emissions. It inspires conversations about emissions reduction, accompanied by incentives.

Today, CMT's Eco Score focuses on how drivers can become more efficient and reduce emissions. Irrespective of the vehicle being driven, the Eco Score demonstrates how improved driving leads to reduced emissions.

The Eco Score is also the key technology needed to calculate the carbon credits required in a Carbon Removal model. It can include measuring non-car trips with CMT's transportation mode identifier.



How does CMT's Eco Score operate?

The score utilises CMT's extensive database of miles driven and claims to assess risky driving based on actuarial validation of claims frequency. Additionally, the Eco Score considers vehicle data and trip information to evaluate emissions for each trip in a risk-predictive manner.

CMT's score relies on the vehicle's data and driver behaviours like speeding, harsh braking or idling, and trip specifics like duration and road types. The app can provide both fuel savings in euros and CO_2 emission in KG or g/km. Drivers see their own progress after a trip and are incentivized through challenges that address individual driving characteristics to provide rewards.

CMT's approach incorporates data from both the vehicle and the driver, ensuring reliability even in situations with missing data sets. CMT requires only the VIN of the car, which can be provided by the insurer.

CMT leverages the VIN of the car, which is typically provided by the auto insurer. If the VIN is unavailable, we use other data points to maintain the score's reliability.

This means that CMT's Eco Score will be available for all vehicle types — internal combustion engines, hybrids, and EVs. It will have the ability to display results with higher accuracy based on user input and vehicle parameters captured. It would also meet customer and regulatory needs for personal cars and fleets.

CMT's Eco Score is already being used by drivers in many countries, giving us real user feedback and showing the impact of these programs.

Eco Score benefits and results

As insurers started to implement sustainable insurance products, they realised the need to satisfy multiple customers' needs and expectations. The ultimate value proposition needed to touch on different drivers' pain points to be successful. However, in all programs, drivers' engagement has been the primary engine of success.

This is why insurers have been using three engagement tools in their value proposition:

- Promoting behaviour change to help drivers make decisions that reduce their emissions using challenges and badges
- Rewarding safe drivers with sustainable gifts
- Reinvesting part of the premium into carbon sequestrations schemes that neutralise the drivers' footprint

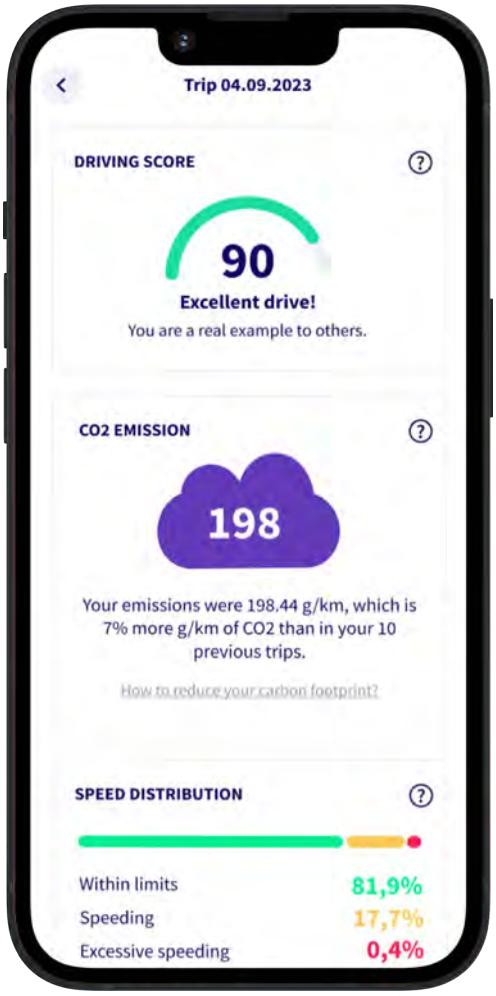
LAQO: Eco Score in Croatia

LAQO launched a successful insurance product using CO_2 emission measurement in March 2021 in Croatia.

LAQO wanted to attract new drivers. At the same time, it wanted to generate high engagement in its app. It also wanted to use the app to improve driving behaviours.

Using telematics data, LAQO distributed an app now used by 70% of its portfolio, with an optional set of challenges and contests.

Besides providing a driving score used to determine what challenges each driver receives, LAQO's app offers a way to measure the emissions of each trip. By comparing them to previous trips, the app generates badges that drivers must collect in order to access rewards.



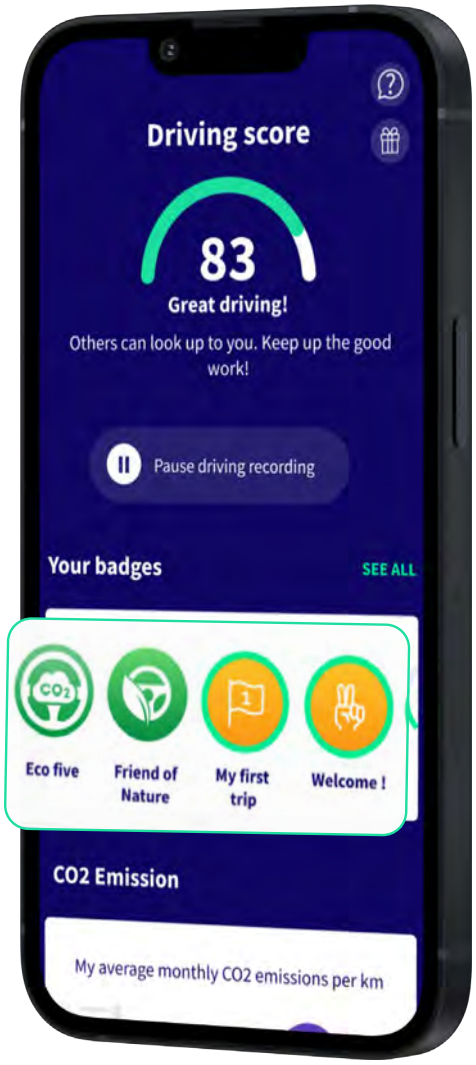
Achievements — badges

Badges are a simple customer engagement mechanism, defined by a set of requirements that a user must meet to unlock. The requirements are based on individual user trips or user driving behaviour. In this instance, drivers have to record 15 trips longer than five kilometres, with CO_2 emissions of less than 200g/km to get the first badge.

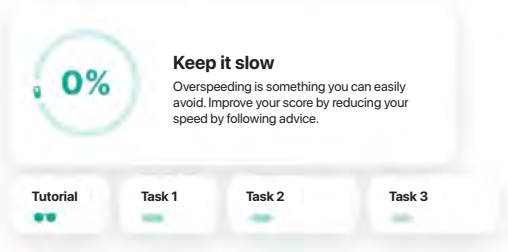
To get the second badge, drivers have to show continuous improvement: Record five trips with at least 10% lower emissions than the average of the last 10 trips.

The program uses a reward contest mechanism to link obtaining a badge and receiving a reward.

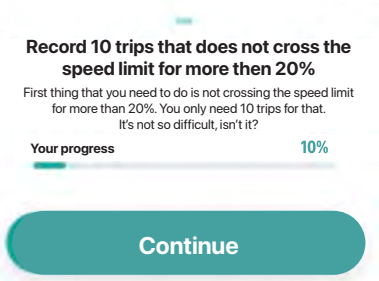
Apps that feature CMT's Eco Score are also capable of defining the areas of improvement of each driver. It also includes when the program launches a contest period — usually monthly — with a challenge targeted for where each driver needs to improve.



Personal feedback



Unique challenge to improve



In-market results for Eco Score

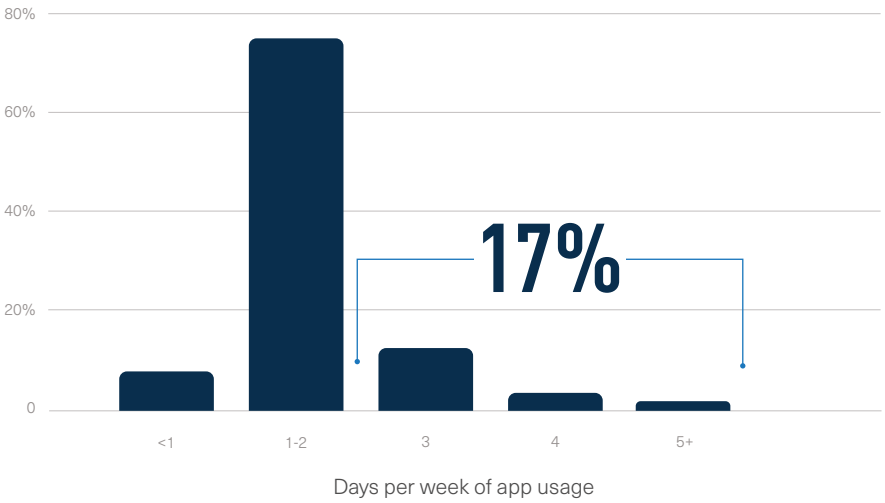
CMT runs usage-based insurance programmes using an Eco Score around the world. We've aggregated numbers from some of these programmes to provide an illustrative perspective on their results.

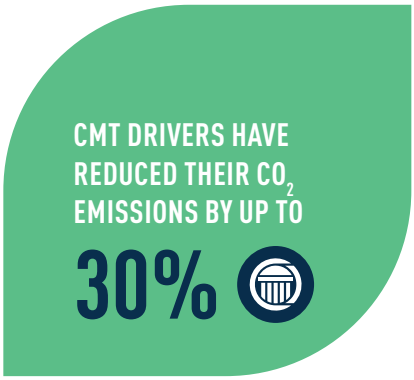
The analysis is based on 10,000 drivers and a reward-based value proposition focused on reducing carbon footprint. The programmes' challenges drove users to the app up to 7 times a week throughout the period of the contest. The top 10% of users went on the app 2.5 per week. The top 20% went at least two times per week.

These engagement metrics last for the policy term.

17% OF THE USER BASE VISITS THE APP MORE THAN TWICE A WEEK

Source: CMT

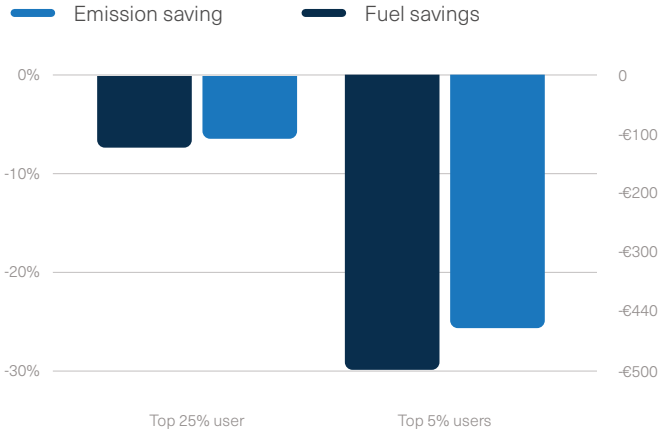




Based on about half a million trips collected in the past year across multiple programmes, CMT found that the top 5% of drivers reduced their emissions by 30%. The top 25% drivers reduced emissions by 7%. Many of these drivers are high performers from the start, making these reductions even more impressive.

EMISSIONS AND FUEL SAVINGS FROM ECO SCORE PROGRAMMES

Source: CMT



The most sustainable drivers save over €440 per year in fuel per year

We calculated the amount of CO_2 saved from driving behaviour improvement and turned it into fuel saving equivalent over nine months from over 4 million km in Europe. The calculation included the delta and average between all drivers, from their first to their last drive. Specifically, the analysis used a metric for emissions of grams that users emit per one kilometre of driving (g/km).

The top 25% of users reduce emissions by 7%, while the top 5% of users reduce CO_2 emissions by more than 30%. Put into fuel savings using an average fuel price of 1.4€/l, we found that the top 25% drivers saved about €100 per year in fuel. The top 5% saved €440.

Conclusion

The global conversation on the climate breakdown has sharply amplified in recent years. Our survey suggests a quarter of the European population is acutely worried about the current environmental dilemma. Many more are aware, and, while uncertain of the steps forward, they are eager to take action. To do so, they require straightforward guidance and insight into their own carbon footprint. To these individuals, an eco score product becomes pivotal, resonating with their need to make a tangible, positive difference, and boosts their self-esteem.

Forced in part by the groundswell of popular concern, regulations are swiftly catching up. Environmental and Social Governance criteria are now critical factors that investors employ to value business financial sustainability. In January 2025, the European CSRD regulation is poised to usher in a new era of corporate transparency. This will compel over 60,000 companies, even those with headquarters outside the EU, to detail their environmental impact or face stringent penalties.

Historically limited as a risk mitigator, motor insurance is evolving to become a tool for positive change. Sustainable insurance isn't just about foreseeing hazards. It's about propelling drivers towards reducing fuel consumption and emissions. It's about tangible benefits — fuel savings, footprint reduction — rather than just reducing risks.

There are three models to provide sustainable motor insurance: carbon avoidance, carbon optimisation, and carbon removal. To attract the majority of consumers, insurers need to first communicate on carbon avoidance, then provide ways to optimise or reduce emissions when driving, and then consider carbon removal as a reward.

Engagement and the willingness to change are inextricably intertwined. Both hinge upon drivers buying into the value proposition. In the marketplace, sustainable insurance programmes have elicited significant engagement. Early advances made by CMT partners show that over 90% of drivers visit the Eco Score app at least weekly. Additionally, the top 5% of drivers cut their emissions by up to 30% and fuel expenses by €440 annually.

These engagement levels revolve around clear and simple communication with the right level of education. Insurers must provide the carbon value of each trip, offer trends and motivate drivers to help them improve.

Saving litres of fuel per journey is a metric any driver can easily grasp. The same cannot be said for grams of CO_2 saved in a trip. It's crucial, therefore, that the app brings context for drivers to understand the difference they are making.

The path towards a future with fewer carbon emissions from driving demands a collective effort. As Europe's drivers display an overwhelming readiness to reduce their carbon emissions, it's crucial for industries, especially insurers, to lead, guide, and inspire.

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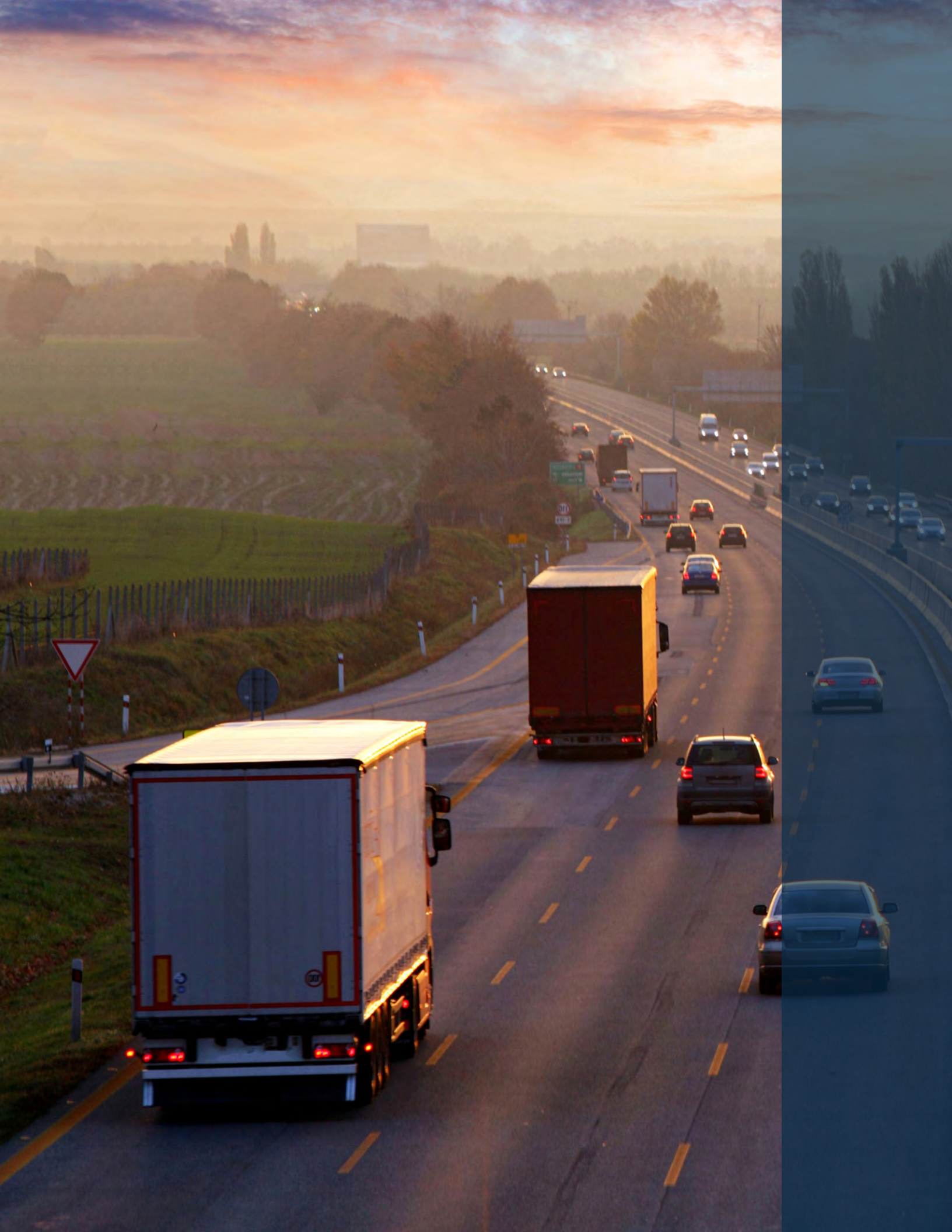

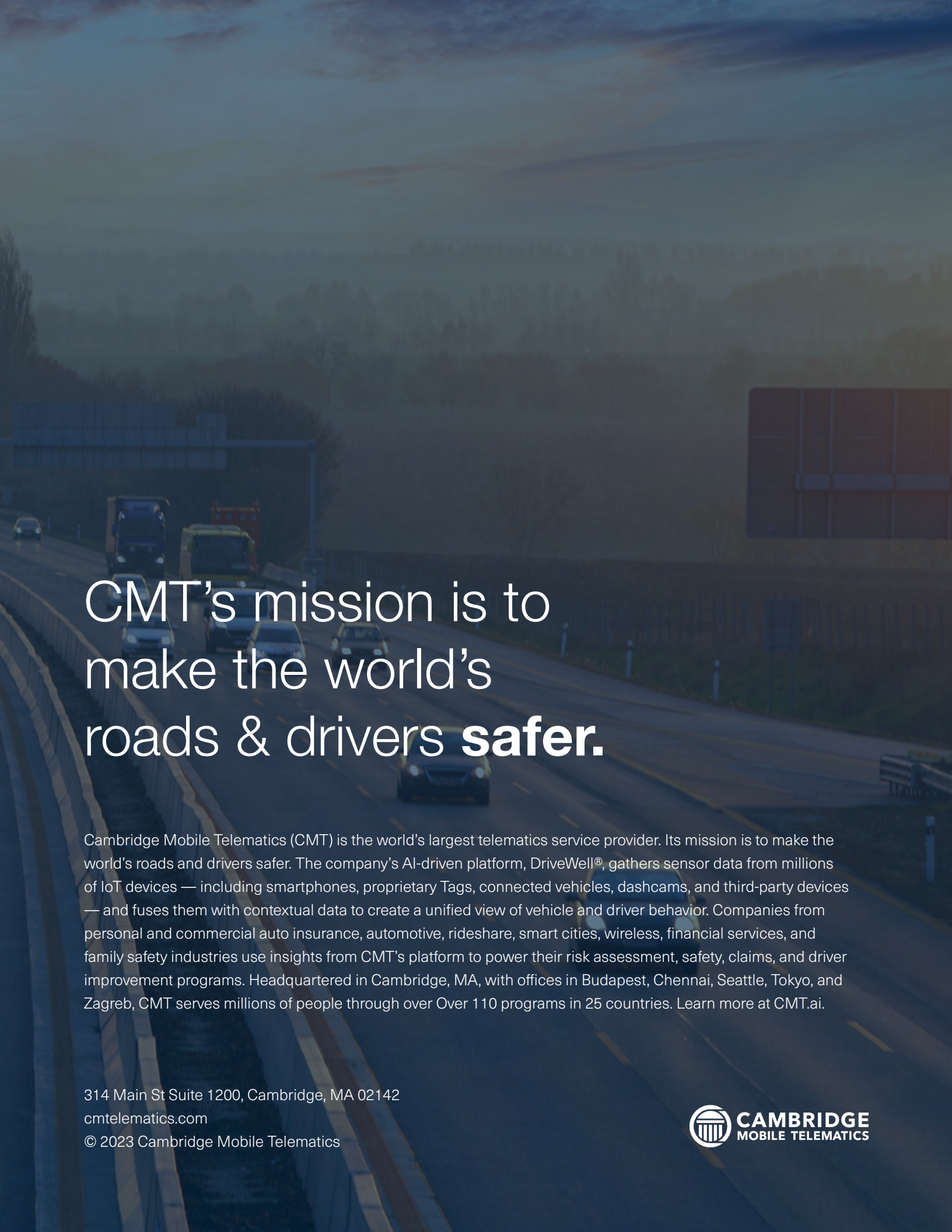

CMT's mission is to make the world's roads & drivers **safer.**

Cambridge Mobile Telematics (CMT) is the world's largest telematics service provider. Its mission is to make the world's roads and drivers safer. The company's AI-driven platform, DriveWell®, gathers sensor data from millions of IoT devices — including smartphones, proprietary Tags, connected vehicles, dashcams, and third-party devices — and fuses them with contextual data to create a unified view of vehicle and driver behavior. Companies from personal and commercial auto insurance, automotive, rideshare, smart cities, wireless, financial services, and family safety industries use insights from CMT's platform to power their risk assessment, safety, claims, and driver improvement programs. Headquartered in Cambridge, MA, with offices in Budapest, Chennai, Seattle, Tokyo, and Zagreb, CMT serves millions of people through over Over 110 programs in 25 countries. Learn more at CMT.ai.

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