T&E 2022 ANNUAL REPORT

2022: TACKLING EUROPE'S ADDICTION TO OIL

'Tumultuous' is the word that best describes energy in 2022 as Putin's war on Ukraine and the subsequent energy crisis revealed the true cost of our dependence on oil. With transport the main consumer of oil, T&E's work has never seemed so crucial: for our energy security and for our geopolitical security.

This was also the year that Europe started turning the corner in tackling our addiction.

Making the direct link between Russian oil sales to the EU and military spending, just days after Putin's invasion T&E called for an embargo on Russian oil - or rather an import tariff. Such was Europe's addiction to Russian oil that this seemed unthinkable at the time. Yet, on December 5th, it was enacted. Thanks to concerted US, EU and UK action, Russian oil now trades under a price cap.

But the structural knockout punch to Putin and his fellow petro-dictators was a different one. Cars guzzle up most of Europe's oil. In 2022, the EU decided to end oil guzzling car and van sales.

Ten years ago, the thought that Europe could regulate the combustion engine to extinction was unthinkable. Back in the mid-2000s a top car lobbyist dismissed the very idea we'd one day regulate car CO2 emissions. Well it did happen, and despite last minute political interference that may yet create loopholes for e-fuels, most carmakers now accept the only future is a zero emission one. This marks the biggest single win in the history of T&E.

But it's not just cars and vans that guzzle oil. Trucks, ships and planes account for the other half of EU oil demand in the transport sector.

In 2022, we saw decisive progress in each of those sectors. Shipping's emissions are now in Europe's cap and trade system, a global first, and aviation will be subjected to the world's most advanced clean fuel mandate, and there's hope something similar is achievable for shipping.

We are still a long way from freeing ourselves from our oil dependency, with powerful fossil fuel interests seeking to slow down and undermine the clean transport revolution. But if this year has shown us anything, it is that we cannot afford to lose.

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VEHICLES

The electric future of Europe's auto industry is all but confirmed. Now attention turns to charging and cleaner batteries.

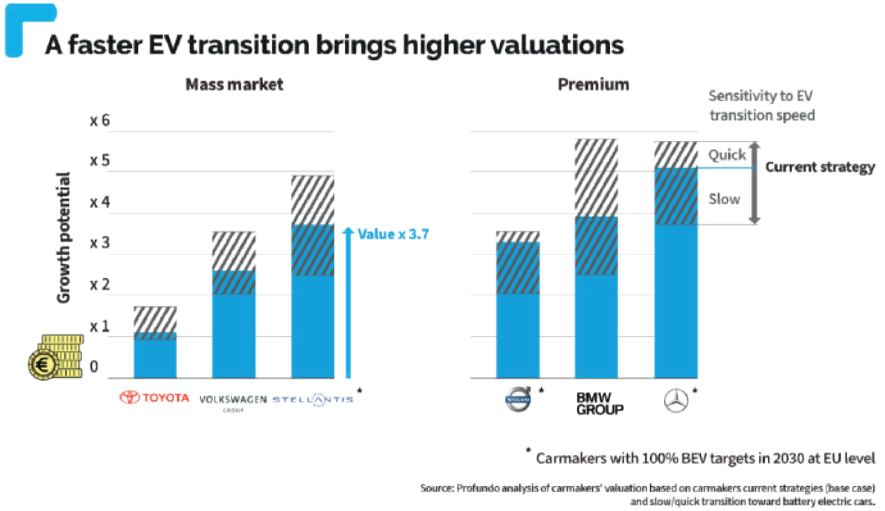
End game for the switch to electric vehicles in Europe

2022 will go down in history as the year Europe locked in its trajectory to reach 100% zero emission cars and van sales by 2035. The decision was the culmination of years of evidence-based campaigning by T&E, but the organisation's biggest push came in the months leading up to the historic votes in the European Parliament and Council.

Industry support was always going to be crucial to winning over politicians fearful about jobs. T&E worked with EV100 and a broad coalition of 28 companies – including Ford of Europe and Volvo Cars – to appeal publicly to lawmakers for a 2035 deadline for cars and vans to go zero emissions. While 15 car brands had already voluntarily pledged to only sell electric cars in Europe in the next decade, the signatories wanted EU decision makers to mirror this in firm vehicle regulation and provide planning certainty for their industry. Other parts of the coalition needed the target to provide certainty for the EV and battery supply chains. Many of the companies were outside the automotive sector but were concerned about the lack of supply of electric vehicles to decarbonise their own vehicle fleets.

Leaving no stone unturned ahead of the big vote in Parliament, T&E harnessed the collective voice of 51 NGOs from 12 countries to shore up support from progressive MEPs. The civil society groups struck a different note from industry by highlighting the need to wean Europe off its oil habit (as the consequences of that dependency were once against laid bare by the Russian aggression in Ukraine) and transition towards an affordable emission-free mobility – with all the additional benefits that will bring for the environment, drivers, and public health.

The final move prior to the vote was a hard-headed financial analysis that laid out the stark reality of slow transition to electric for carmakers. It found that car manufacturers stand to increase their market value by €800 billion by switching to electric vehicles faster than they currently plan. But opting for a slow phase-out of combustion engines would be financial suicide for the companies. The results run counter to the industry narrative that Europe's drive to sell only zero-emissions cars in 2035 would hit profitability and cost jobs.



The efforts paid off on 8 June when MEPs voted, by a majority of 90, for a 2035 deadline for zero-emissions cars and vans. T&E called it a significant step forward for climate action, air quality and the affordability of electric vehicles.

But changing an EU law is a marathon and not a sprint. Thankfully T&E had plenty of charge in its batteries to continue its campaign. As the crunch moment for Environment Ministers approached, a row broke out within the German government as the liberal FDP party attempted to reopen Germany's support for the 2035 phase-out. They wanted an exemption for cars running on e-fuels. T&E had prepared for this eventuality and published a lifecycle analysis that showed e-fuels cars would be far less environmentally friendly than electric vehicles. The efficiency argument also proved decisive for the German debate: our reports showed a battery-electric Volkswagen ID.3 gets five times further on the same amount of renewable energy than a VW Golf running on e-fuel. The analysis spread like wildfire in German media as reporters covering the government row sought out information about this mysterious fuel.

After a day and night of drama in Luxembourg, Environment Ministers backed the phase-out. But the e-fuels issue would rear its head again in the final negotiations between the Council and Parliament. As expected, lawmakers reached a deal on a 55% CO2 reduction target for carmakers in 2030 before reaching a 100% CO2 cut five years later. The deal also asked the European Commission to find a role for e-fuels in vehicles that are outside the scope of the regulation, though this was non-binding. The law was also scheduled to be reviewed in 2026. There would be more e-fuels-related drama to come in 2023, but the die has been cast: the future of European carmakers is increasingly electric, and the 2035 target has given unstoppable momentum to zero-emissions vehicles. Anything else is a diversion.

Plug-in hybrids not the answer

While the EU car CO2 law was getting all the attention, T&E was working away in the background on legislation which will also have a big impact on the vehicles on our roads. New rules on the way carbon emissions from plug-in hybrids are calculated were finally agreed.

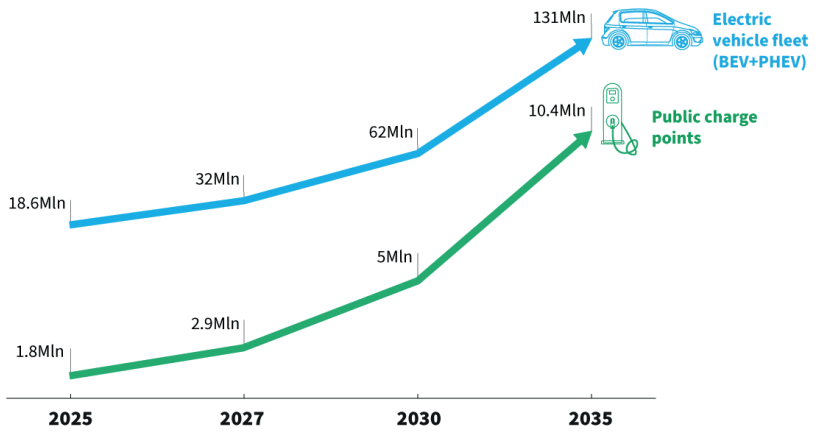
Getting lawmakers to treat PHEVs based on their actual emissions had long been a priority for T&E. The real-world emissions of plug-in hybrids are, on average, three times what's officially declared today. This means that drivers pay a lot more for fuel than they should, while artificially low CO2 models help carmakers meet the EU emissions targets. But the new rules, kicking in from 2025, will mean the official CO2 ratings of plug-in models will be closer to how they are driven in the real world. That means drivers will have real data on how much they will spend on fuel, and carmakers will not be able to use them as a compliance trick anymore.

Tackling charging anxiety

Range anxiety has been replaced by charging anxiety, and the issue has threatened to slow down the drive towards zero-emissions mobility. It's why T&E maintained its focus on the EU's draft infrastructure law. Currently there are around 340,000 public chargers in place, but the EU Commission and governments acknowledge that a lot more will be needed. The proposed law will require EU countries to ensure that their national networks keep pace with the number of electric vehicles on the road. In an optimistic sales scenario, there could be 10.4 million public charging points installed across Europe by 2035. T&E says that will be enough to meet the needs of the expanded electric car fleet while also ensuring the network is financially viable. The law will be finalised in 2023.

Europe's public charging will keep pace with electric cars

Up to 10m chargers by 2035 if EU increases ambition of Commission's proposed car CO_2 targets



Source: T&E modeling based on BloombergNEF (2021), European Commission (2021c)

Better batteries

Europe is also catching up with the other major challenge of the electric revolution; the need to provide cleaner batteries. Just before Christmas lawmakers reached an agreement on the sustainable battery regulation. This will be a game changer for the sourcing, production and recycling of batteries for electric cars, which are already far better for the planet than burning oil. The new "battery passport" will ensure that only clean, ethical and circular batteries are sold in Europe regardless of where they are produced, making it a blueprint for battery regulations worldwide.

Maybe it was the last sting of a dying wasp, but the combustion engine industry fought back later in 2022 and succeeded in watering down the European Commission's long awaited air pollution limits. The Commission rejected its own expert advice on new rules for non-CO2 car emissions – Euro 7 – which were aimed at slashing deadly pollution from cars. It instead sided with car lobbyists in a move that could greenwash 100 million heavily polluting cars sold in the decade up to 2035. It's now critical that the European Parliament strengthens these shockingly weak standards or simply rejects them in 2023. T&E will be fighting this fight in the coming year.

AVIATION

A pathway to clean aviation exists. But will European legislators allow it to happen?

Climate neutral aviation in Europe is possible

Europe's aviation industry can be brought to net zero. This is what we showed in our Roadmap to climate neutral aviation.

We need to act urgently to prevent a rapid increase in aviation emissions post-pandemic. An end to airport expansion in Europe, which has driven much of the growth in emissions, is a first step. Then, we need to maintain reduced levels of corporate travel to 50% of pre-Covid levels. That reduction in corporate travel can cut CO2 emissions by as much as 32.6 MtCO2 by 2030.

Demand reduction won't by itself be enough to get us to climate neutral aviation by 2050. Technological improvements will play a fundamental role. Revolutionary aircraft concepts, like Airbus' hydrogen aircraft, have attracted much attention. The emission reduction potential is strong with hydrogen aircraft, but with them challenges abound, both technological and economic. With "traditional" jet engines set to continue to be in operation for decades to come, we need policies to switch from fossil jet fuel to sustainable aviation fuels (SAFs). However, our Roadmap confirms that scaling up new fuels is no easy task. Biobased alternatives either compete with food and forestry, or have limited feedstocks. More promising is the use of e-kerosene, produced from green hydrogen, with additional renewable electricity and with CO2 captured from ambient air.

As new technologies for aviation will take time to scale up, we must seriously look at better pricing of aviation emissions. The sector's outrageous tax exemptions must come to an end. There are plenty of policies which can rectify the under-pricing of aviation, including fossil jet fuel taxation, carbon pricing, ticket taxes and minimum pricing.

Scaling up green fuels

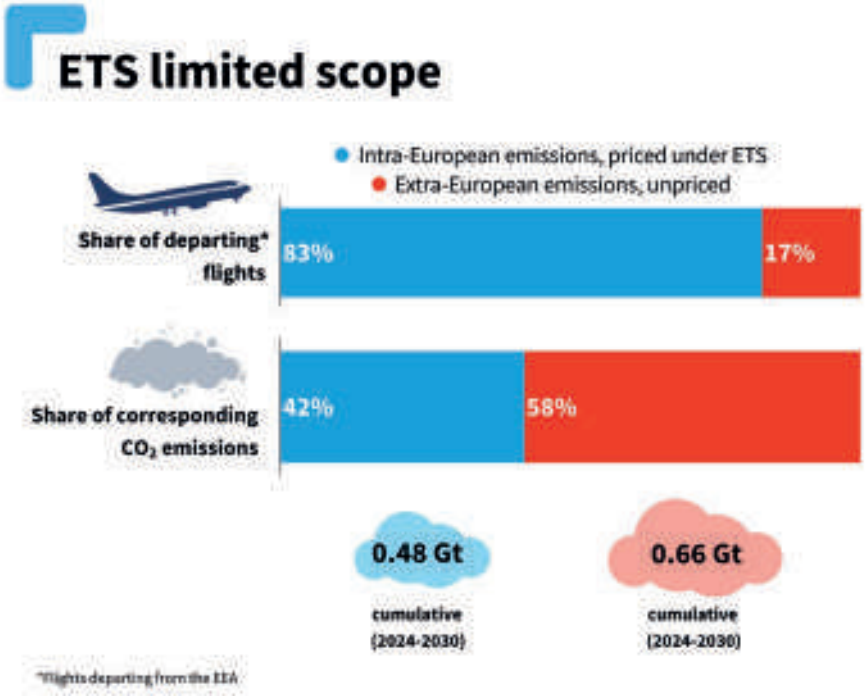
Green fuels will be key to decarbonise aviation. One key law in Europe seeks to scale them up – the ReFuelEU package. Thanks to this law, airlines will increasingly have to start fueling their engines with SAFs – at first very little, but by 2050 it could be up the whole tank.

But first, lawmakers needed to determine what counts as a green fuel. T&E fought hard in 2022 to maintain a strict list of feedstocks to be used in our planes. The law should exclude crop-based biofuels, as they can have disastrous impacts on our climate and biodiversity. Ahead of a key vote in the European Parliament, T&E joined forces with easyJet to draw attention to the issues with harmful biofuels for our planes. Instead, it must prioritise advanced biofuels (fuels made from wastes and residues) and synthetic fuels, such as e-kerosene.

T&E also showed that Europe could become a leader on e-kerosene production. This is why European legislators should endorse the only type of green fuel that can sustainably be scaled up to meet aviation's needs.

The bulk of aviation emissions remain unpriced

The largest chunk of aviation emissions come from long-haul flights. For the EU, these represent a whopping 60% of all aviation emissions. But they remain unpriced and unregulated. In December 2022, EU negotiators voted on the carbon market for aviation (the EU ETS). Ahead of this vote, our executive director sat together with Ryanair's CEO Michael O'Leary to call upon lawmakers to extend the carbon market to all flights departing the EU. In vain. The outcome fell short of what was needed to address aviation's full climate impact. The carbon market will remain limited to intra-EEA flights. As a result, the largest chunk of Europe's aviation CO2 emissions will remain unaccounted for.



Instead long-haul flights will be regulated by the UN aviation body ICAO. These flights will fall under an offsetting scheme called CORSIA. CORSIA is a cheap and dubious scheme that has failed to effectively deal with aviation emissions. Our analysis shows that you would only have to pay an extra €2 to offset your flight to New York. European lawmakers should leave CORSIA to one side and stick to mechanisms that truly reduce emissions.

The elephant in the room: non-CO2 emissions of aviation

The impact of flying extends further than CO2 emissions. On top of carbon dioxide, aircraft engines emit other gases – nitrous oxides, sulfur dioxide and water – and particulate matter (soot). These emissions have a climate impact, commonly referred to as non-CO2 effects, estimated to account for two-thirds of the climate impact of flying.

At the beginning of the year, T&E gathered scientists, policy makers and the industry in its first ever non-CO2 summit, to discuss policy measures and mitigation strategies.

And at the end of the year we celebrated a small success when non-CO2 effects were for the first time included in a legislative package. In the deal struck on the carbon market for aviation (the EU ETS), a non-CO2 reporting provision was agreed upon. Airlines will have to disclose the non-CO2 emissions associated with their flights in the next years.

Will people fly less?

Demand management for aviation has always been a controversial topic. But in 2022, the taboo was broken. It started with private jets. This summer, Kylie Jenner's 17-minute flight on board a private jet caused uproar. T&E's report on the climate impact of private jets went around the world, cited in hundreds of articles. And since, regulating the use of private jets has been discussed at EU level and proposed for legislation in France and Belgium.

Then came the decision to ban three short-haul routes in France. The move in itself is pioneering. Three years ago, a flight ban was unthinkable. Now it is law. The real impact on emissions will be miniscule, but a precedent has been set. The short haul ban in France will only affect three routes. Calculations by T&E show that those three routes represent 0.3% of emissions from flights departing from mainland France.

T&E is positioning itself at the forefront of the debate on demand management, with its campaign on corporate travel. During the pandemic, businesses successfully adapted to new ways of working. The ease with which many employees and customers adjusted to flying less revealed that those long-held ideas of the need to fly for work no longer stand.

The Travel Smart campaign launched in May 2022, with its ranking of 230 companies and their targets to reduce corporate travel emissions. The ranking finds that too few companies pledge to reduce business flying emissions. Yet, when we surveyed employees from five key countries, we saw that the majority of employees expect top executives to set corporate flying reduction targets.

The Travel Smart campaign now includes 20 national partners and has engaged with over 50 key companies in Europe and the United States to work towards reducing their corporate travel emissions. The campaign played a strong role in helping to secure a requirement for companies to report their business travel emissions within the EU Corporate Sustainability Reporting Directive, adopted in November 2022.

How will we ever get to net zero

The year 2022 showed that focusing on the big issues will help us get to zero. A flight ban on three routes in France is a symbolic first step but will only ever have limited emissions reduction potential. We need to reduce the bigger chunk of aviation emissions from corporate travel. And when demand cannot be reduced, green technologies must be scaled up. A higher mandate for green fuels will be key.

SHIPPING

An unregulated sector gets regulated

Imagine asking random people on the street what is the most obscure, corrupt and yet profitable industry in the world? Most would probably say the banking sector, or perhaps the oil and gas industry. What would likely be missing on the list is the shipping industry. That's why 2022 was so notable. An unregulated sector finally got regulated.

The polluter will pay

Three years after the European Commission announced its plan to extend its emissions trading system (ETS) to cover maritime transport, 2022 saw a final decision on what form it would take. Despite years of lobbying from the industry to water the proposal down, the final result was a strong backing of the polluter pays principle. Starting in 2024, shipping companies will be required to pay for emissions from both domestic and international voyages to and from the EU.

While the system will initially cover only CO2, methane and nitrous oxide emissions will quickly be introduced into the system in the following years. Unlike any other sector, shipping companies will be given no free pollution permits.

Years of T&E campaigning has led to this and with the decision in the balance, it was vital that we kept the pressure up. Early in the year T&E published a ranking of emissions associated with ports, as well as an analysis showing that loopholes would mean that some 25.8 million tonnes of CO2 would not fall under the ETS.

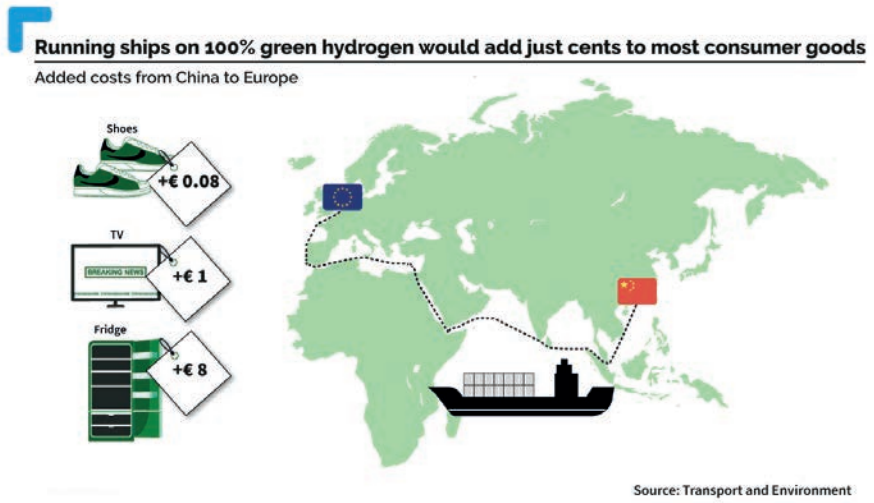
In April T&E, along with Dutch and Swedish shipowners, wrote to the European Parliament and Council to express support for the Commission's legislative package for decarbonising the shipping sector and to suggest improvements to the proposal.

These efforts helped to prevent watering down of the original proposal and even led to a commitment to extend the scheme to cover smaller vessels during the upcoming review of the legislation.

Green shipping fuels a reality

But simply pricing pollution is not enough on its own to decarbonise the sector. We need green alternatives. 2022 saw the first major step in this direction.

To debunk claims that shifting to green shipping fuels would be expensive, T&E published an analysis to show that it would add just 8 cents to the price of a pair of sneakers. T&E also led a broad coalition of energy providers, shipping companies and NGOs, calling on the EU to introduce a minimum quota of sustainable and scalable hydrogen fuels by 2030.



This set the groundwork for the European Parliament to introduce a 2% mandate for green hydrogen(-based) marine fuels by 2030. If this makes it through the trilogues currently under negotiation, it will provide the investment certainty fuel suppliers need to scale up production of hydrogen-based shipping fuels.

LNG not the answer

If we are to decarbonise the shipping industry, we must not fall into a gas trap. LNG is being promoted as the low-carbon transitional alternative to heavy fuel oil, but this is misguided. Ships running on LNG leak significant amounts of methane from their engines – a potent gas that is over 80 times more warming than CO2. T&E set to work at undermining greenwashed LNG in shipping. It started with a report showing that a quarter of Europe's shipping will be powered by LNG by 2030, locking in fossil fuels for decades.

T&E followed that up with an investigative documentary which showed methane leaking from ships. T&E's footage was originally published in Bloomberg and has been used in subsequent television documentaries, including in ARTE, France 2, France 5 and the Italian channel RAI3. Watch out for more in 2023.

FREIGHT

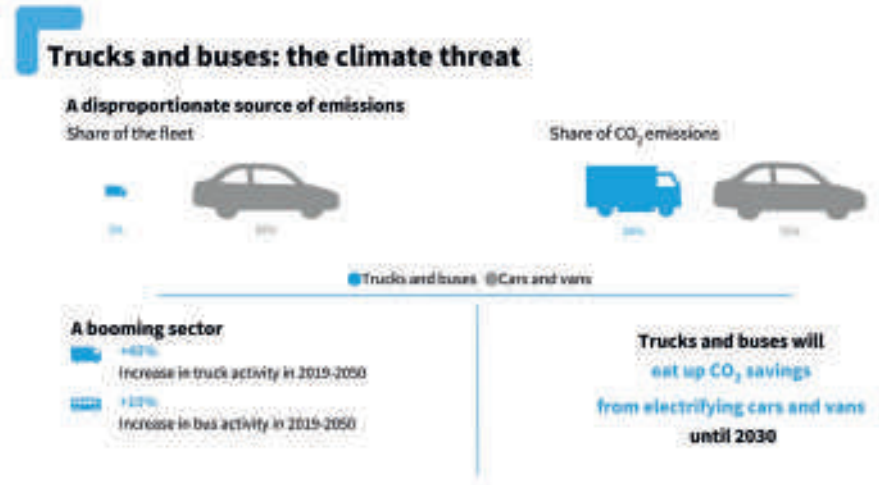
Europe's trucking dominance under threat

Trucks and buses are responsible for more than a quarter of road transport emissions, and pressure has been building on the EU to overhaul its climate targets for the sector, which have been in place since 2019. The continent's leadership in commercial vehicle technology is also being squeezed: in the US the landmark Inflation Reduction Act provides muscular support for American batteries and electric vehicle-making. This includes a $40,000 credit for big electric trucks. This will radically bring forward their cost parity with diesel rigs. Some analysts project that electric trucks will make up more than 60% of new US truck sales by 2030.

The international mood is also radically different from 2019: at the COP climate summit in Sharm El Sheik, the US committed in a 'Global Memorandum of Understanding' (MoU) to sell only zero emission trucks from 2040. California is even considering bringing that forward to 2036. 10 EU countries also signed on to the MoU. Brussels was looking increasingly behind the times.

If Europe doesn't introduce an ambitious trucks package of its own, it will get left behind. Its world leading truckmakers risk going down the same path of their car brethren, struggling to keep up with Chinese and Californian competition.

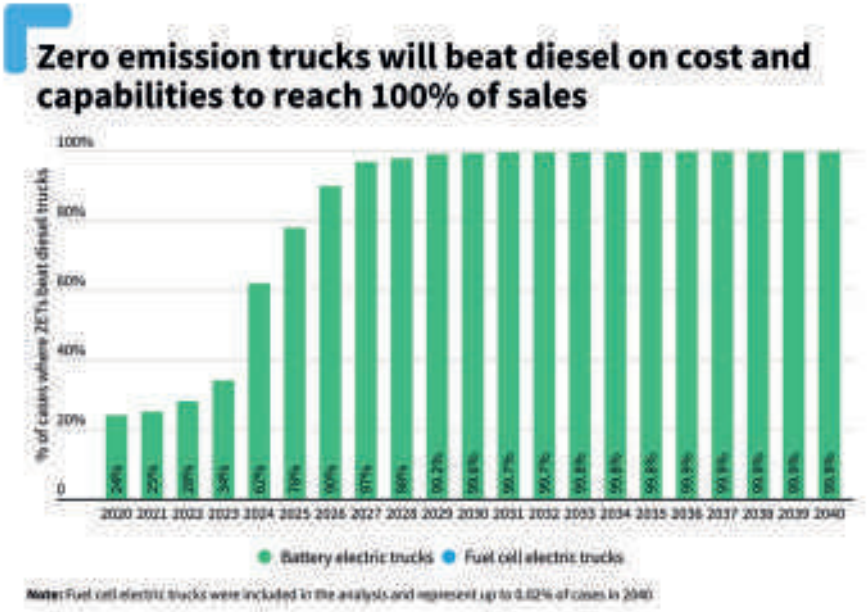
2022 was the year that T&E stepped up the pressure on EU lawmakers to radically overhaul climate rules for trucks. Our climate modelling, published in September, showed that the last polluting heavy goods vehicles will need to be sold by 2035 if polluting vehicles are to be off the road by 2050 – in line with the bloc's net-zero emissions commitment. The report found that even without further action, trucks and buses would undo the entire emissions savings from cars and vans expected by 2030. This is being driven by increasing activity. CO2 emissions from heavy-duty vehicles increased by more than one-quarter between 1990 and 2019. Truck activity is expected to further increase by 44% between 2020 and 2050 and bus activity by 11%.



Electric trucks cheaper

But, as always, T&E also presented lawmakers with the solution. A new study by independent experts TNO and published by T&E showed that by 2035 virtually all new electric freight trucks will be cheaper to run than diesel trucks while driving as far and carrying as much. Published in October, the report was timed to answer doubts in the EU Commission over whether electric trucks can match diesel on cost and operational capability.

By 2035, 99.8% of new electric freight trucks will be cheaper to own and run than diesel trucks, while carrying the same weight of goods over the same distance and journey time, according to the study. In most cases, electric trucks will beat diesel trucks on the total cost of ownership even sooner. The tiny gap to 100% can be easily bridged by a handful of trucks making an extra stop, beyond what is legally required, to charge. Even with that additional stop, they would still be cheaper to buy and run.



Weeks later, and just before the EU Commission was expected to publish its draft new truck standards, a business coalition of 44 companies publicly called on the EU to show leadership for the sake of the climate and the bloc's future competitiveness. In a letter, it said that lawmakers should ensure all new freight trucks are zero-emissions from 2035. The letter was signed by globally recognised brands including Siemens, Maersk, Unilever and PepsiCo, which said that the 2035 deadline is not just feasible but necessary to fully replace the fossil-powered truck fleet in time for the EU to reach climate neutrality by 2050. The pressure was on for ambitious new truck CO2 standards to be published in 2023.

Buses & vans

Buses would also be covered by the new heavy-duty vehicle standards, and T&E worked with cities – some of the most important customers for bus-makers – to appeal for a zero emissions target by 2027. In a letter to EU lawmakers, 11 cities, including Paris, Hamburg, Barcelona and Milan, and civil society groups said an EU sales target for urban buses is needed to ensure a supply of green vehicles for cities and towns trying. "Without action at EU level, demand for zero emission urban buses will not be matched by supply," they wrote. "This would jeopardise the commitments of leading cities and expose EU citizens to air pollution for longer." Zero-emissions vehicles accounted for 23% of new urban buses registered in the EU in 2021, up from 16% in 2020. But manufacturers are not meeting the high demand for battery electric and hydrogen buses with the scale of supply that's needed. T&E sees the new heavy-duty vehicle standards as key to fixing the supply shortage.

T&E was a lone voice in another battle to clean up vehicles last year. In 2022, we argued for electric vans. A T&E study demonstrated to lawmakers that e-vans are cheaper overall than diesel vehicles – in terms of their total cost to buy and operate. But the supply of e-van models is lacking, which is why they account for only 3% of sales – lagging far behind battery electric cars (9%). Our quiet advocacy paid off and by October lawmakers had signed off on a deal that would end sales of combustion engine vans in Europe by 2035. This will send a clear message to van-makers to ramp up production of electric vehicles.

Eurovignette

But CO2 standards are not T&E's only approach to slashing truck emissions. In 2022 our long campaign for greener road tolls came to fruition. EU member states will have until 2024 to implement a new system of road tolls which give big incentives for zero-emissions trucks. T&E hailed the updated Eurovignette law as a watershed for green trucking which will benefit the climate, air quality and hauliers. By early 2024, hauliers operating zero-emissions trucks – battery electric or hydrogen – must be given discounts of at least 50% on distance-based road tolls. Member states could opt to levy extra CO2-based charges on fossil fuel lorries instead, or implement both measures. With road tolls costing hauliers up to €25,000 a year per truck annually, switching to zero-emissions vehicles will cut their overheads considerably.

ELECTRIC FLEETS

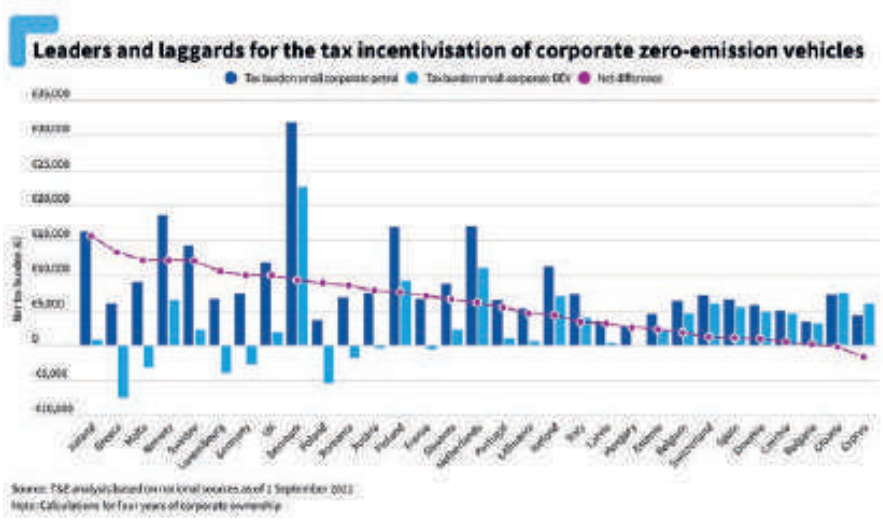
How can company car taxation accelerate Europe's transition to electric cars? Can it have an impact on a social green transition?

Company car taxation – the low hanging fruit of electrification

If car transport is to become a sector that plays its part in reducing emissions, rather than increasing them, all tools for change must be explored, including taxation.

In national policy, taxation has proven itself to be a powerful and versatile tool. Car taxation is no exception, with several examples of the steering effect of taxation. Purchase grants for zero-emission cars clearly shift their popularity and even have strong ripple effects in the second-hand market, as evidenced in Germany. Transport taxation is both a powerful tool and an underused one.

This is why we set out to write The Good Tax Guide. The report was the first ever comparison of systems of car taxation across European countries. The comparisons covered 31 countries, seven forms of taxation, and two registration types (private and corporate).



The Guide also made clear who are the leaders and laggards on car taxation in Europe. By calculating the different taxes that are levied on the same car in each country, a total tax burden can be compared across countries. The higher the tax burden for dirty cars, the better. And vice-versa, low tax burden for clean cars is key.

There are social benefits to the electrification of fleets and car taxation: corporate vehicles enter the used car market quicker than private ones, so a continuous influx of cheaper zero emission vehicles will be available to private buyers on the 2nd hand market. The team is working hard to democratize EVs in their countries.

Car taxes are favoring the wrong types of cars

In certain countries in Europe, the wrong types of cars are being incentivized through taxes. Tax grants are too generous for plug-in-hybrids (PHEVs) – which emit just as much as petrol and diesel cars. In Germany for example, tax breaks for plug-in hybrid company cars will cost the state 1.2 billion euros over the next two years.

Another analysis of company car taxation in Germany revealed that tax breaks for polluting company cars (emitting more than 180 g CO2/km) would cost the state 1.6 billion euros. These large tax incentives for company cars with combustion engines send the wrong signal, while electrification in the company car market is still very low. A reform of company car taxation for these highly polluting vehicles alone would finance yearly rail tickets for 10 million people. This analysis showed that our work on company car taxes also has social benefits.

Faulty taxation is slowing down the electrification of fleets

In 2022, T&E published briefings about car taxation in four countries. These point to the necessity of reforming certain aspects of national policies to ensure quicker uptake of BEVs in the countries.

In France, the existing tax on company cars, although indexed to the vehicle's CO2 emissions, misses its target. Only a very marginal part of the fleet – i.e. very polluting cars emitting more than 130g CO2/km – falls under the tax. For popular models like Renault Clio or Peugeot 208, very low tax rates are imposed. We put forward a gradual reform of this tax, asking that it be applied increasingly to all combustion vehicles. In time, electric cars will come out on top. According to our modeling, the reform of this tax would enable the sale of an additional 402,000 battery electric vehicles by 2030.

In Germany, electrification in the corporate sector is lagging behind private households. In 2021, only 11 percent of new company cars were fully electric, compared to 22 percent of new private cars. We put forward several tax proposals that would heighten the tax burden on internal combustion engines and remove tax incentives for plug-ins. These included a gradual phase-out of tax write-offs for petrol and diesel cars and PHEVs, whilst accelerating them for BEVs. We also called for BEV targets for company cars.

In Italy, our recommendations on taxation would add an extra 600,000 electric vehicles to the road and also raise over a billion in revenue to the state. It would simultaneously reduce CO2 emissions from the sector by almost a third. T&E put forward three tax reforms. First, we called for a registration tax based on vehicle cost and CO2 emissions. Then, we argued that taxes on fringe benefits should be revised and support employees who opt for low emitting cars. Finally, companies opting for a zero-emission fleet should be favored with tax rebates on the purchase of electric vehicles.

Finally, in Spain, our briefing showed that the corporate fleet is responsible for more than two thirds of new vehicle emissions. Together with the Spanish NGO Ecodes we proposed a phasing out of the depreciation for combustion vehicles and a phase out of VAT deductions for combustion vehicles. To help put more BEVs on the road, we called for a reduction of the benefit in kind for employees who opt for a battery electric vehicle (BEV) as a company car.

Teaming up with new players

In 2022, we teamed up with several new allies to help us spread the word. T&E Germany worked together with the German association of the power sector and charging infrastructure industry (BDEW), organising a joint media briefing on the topic of company car electrification and charging infrastructure.

The Berlin team also paired up with Greenpeace this summer to advocate for a reform of company car taxation, in order to subsidize rail tickets across the country.

In the UK, we have been engaging with other NGO partners, such as Green Alliance and Climate Group, as well as continuing to engage with industry groups, such as BVRLA (British Vehicle Rental and Leasing Association) and REA (Renewable Energy Association), to understand the barriers facing fleets with regards to charging infrastructure.

ENERGY

The fight against oil and for food over fuel, as well as uncovering Coldplay greenwashing

‘Tumultuous’ is the word that best describes energy in 2022 as Putin’s war on Ukraine and the subsequent energy crisis revealed the true cost of our dependence on oil. With transport the main consumer of oil, T&E had to step up its efforts to break the cycle of dependence.

Fighting against oil is in T&E’s DNA and we quickly adapted our work to address this new uncertain reality. T&E published data that showed that European oil receipts were boosting Putin’s war chest by $285m a day.

We showed that a combination of ambitious measures could help the EU to reduce its oil consumption by one third by 2030. This helped to lay the groundwork for an eventual price cap on Russian oil at the end of the year.In the middle of the crisis, there was also the collective realisation of an unfair energy system, where oil majors make tremendous profits out of high prices, while Europe’s citizens suffer.

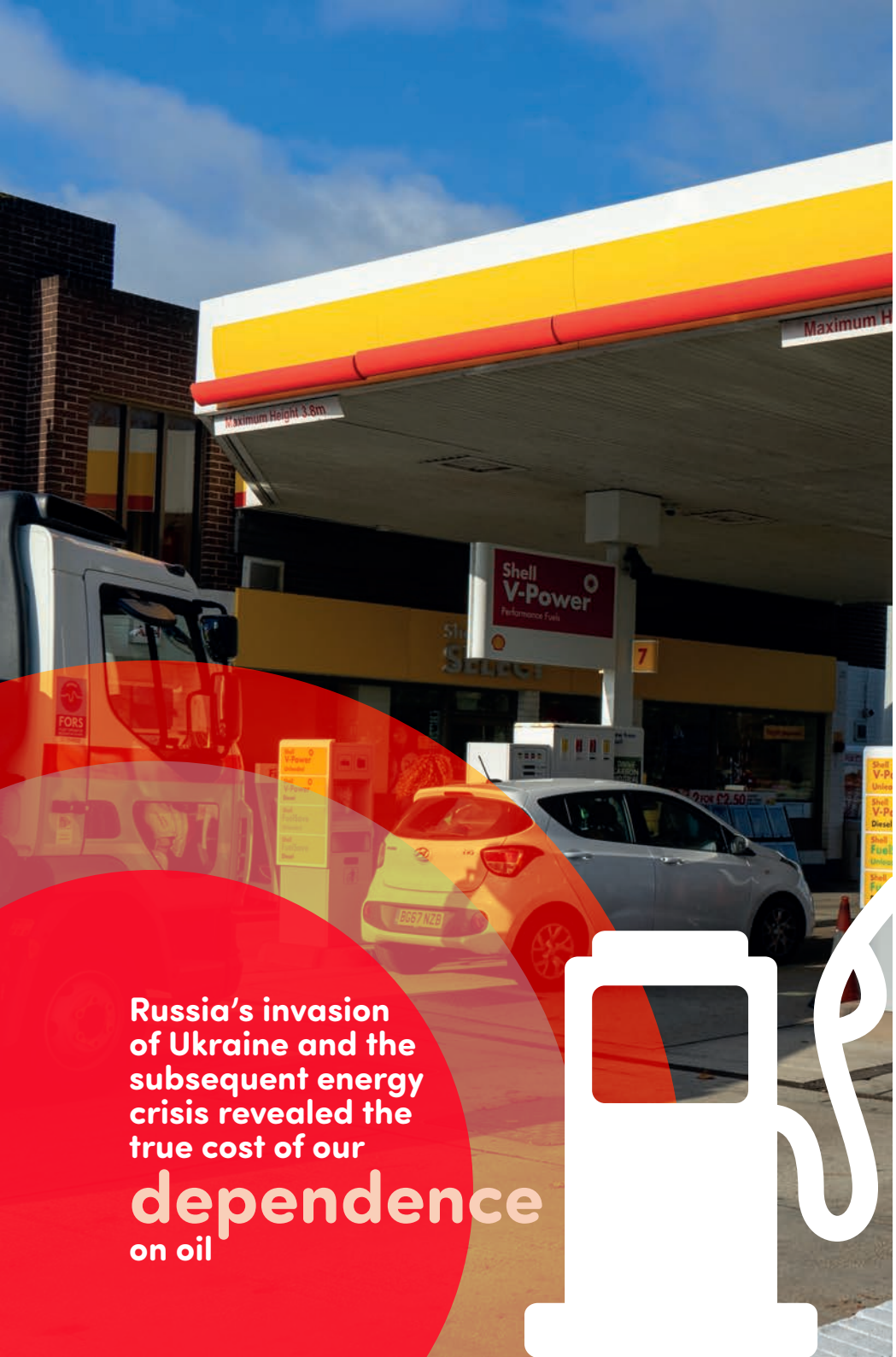
Putin’s invasion didn’t just wreak havoc on energy markets. Grain and other food commodities trapped in Ukraine – Europe’s breadbasket – put further pressure on already inflated food prices, plunging the world into a global food crisis.

T&E published a study showing that Europe burns the equivalent of 15 million loaves of bread every day in its cars. This was followed by a study showing how much vegetable oil Europeans were putting in their cars while supermarkets across the continent were rationing the likes of rapeseed and sunflower oil.

T&E teamed up with NGOs including Oxfam, Deutsche Umwelthilfe for its #FoodNotFuel campaign which culminated in a demonstration outside of the European Parliament ahead of the EU’s legislative body’s vote on an update of the Renewable Energy Directive. The coalition found itself up against a biofuels lobby pushing for more biofuels to replace imports of oil.

Our campaigning helped to stop any further increase in support for crop biofuels use. However, an end to all crop biofuels remains elusive, despite a growing understanding that burning food for fuel is a terrible idea.

In 2022, T&E was able to secure a big win on soy with the European Parliament voting to effectively remove soy biofuels from the RED. This was helped by T&E and Rainforest Foundation Norway organising a visit of Brazilian community leaders to Brussels. The battle continues in the trilogues with the Commission pushing against the decision.



Another positive development in 2022 has been greater support for renewable electricity as a transport fuel under the RED, as part of a push to boost clean alternatives and reduce oil dependence. Following a Commission proposal, electricity will now have to be credited like any other transport fuel to meet renewables targets in each EU country – not just biofuels as it is today.The final RED trilogues should rubber stamp the new system in 2023, finally moving away from liquid fuels towards electrons.

The year also saw the EU up its hydrogen ambition, announcing a hydrogen bank and increasing targets for renewable hydrogen production. But without additional renewables, more hydrogen has the potential to push up electricity prices and make the grid dirtier. T&E teamed up with the consumer group BEUC to demand that consumers' electricity bills should not be used to finance the production of hydrogen, calling for any additional hydrogen to be met by additional renewables. Hydrogen and e-fuels will have a key role to play in decarbonising sectors like aviation and shipping when produced sustainably.

Last but not least, T&E found itself in unknown territory when its story on Coldplay teaming up with Neste to greenwash its global tour went around the world. We even found ourselves in the iconic Rolling Stones magazine. Pretty rock'n'roll.

CLIMATE

In 2022, did the EU finally crack down on road transport emissions?

Countries will have to clean up their transport

In 2022, T&E worked on big climate files, covering a large percentage of Europe's emissions. The Effort Sharing Regulation (ESR) sets national targets for emission reductions from road transport, buildings, agriculture, small industrial installations and waste management.

The ESR is key in the EU climate strategy as it covers more than half of the EU's total emissions. But the ESR will only work if the targets are strong and the compliance measures are stringent. Ahead of a key European meeting, T&E joined forces with 14 NGOs to call upon EU ministers to safeguard national climate targets.

The final deal confirmed the 2030 national climate targets for the ESR sectors – a huge step forward for Europe's climate goals. But the end of year outcome was not as strong as hoped. The deal has many loopholes that would exempt member states from around half of the emission cuts that they are supposed to deliver on the basis of the emissions reduction trajectory. On top of that, legislators refused to include the right for citizens to bring their governments to court if they miss their targets.

What will this mean for transport? Through the new 2030 ESR targets, countries receive a strong push to significantly reduce transport emissions. This means they will have to adopt rapid measures such as higher electric car targets to achieve their goals by the end of the decade.

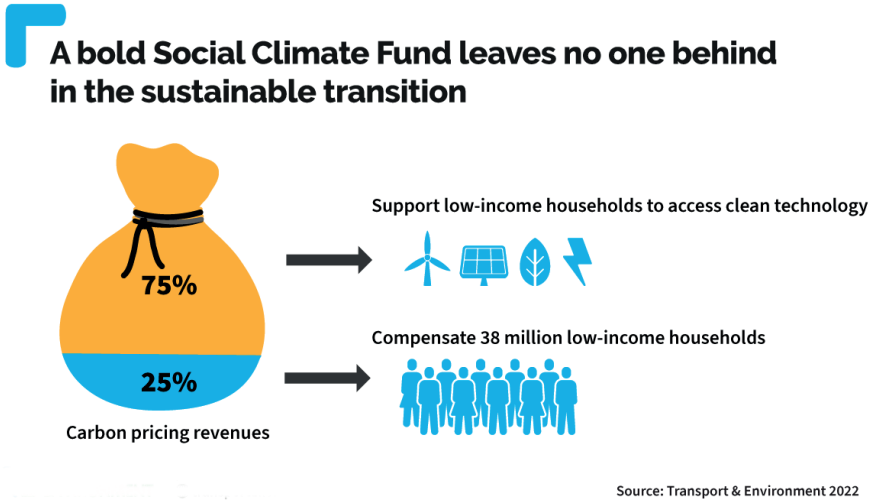
EU cracked down on pollution of buildings and cars

Just as the year was coming to a close, the EU voted into law the world's largest carbon market. Whilst our aviation and shipping teams worked on their separate jurisdictions, the climate team fought hard to get road transport and buildings included in the so called ETS2.

The ETS2 will cover all emissions of buildings (heating) and road transport and run in parallel to the existing ETS which prices CO2 pollution from the power sector and industry. Whilst the ESR sets targets to reduce emissions, the ETS2 will impose a price on the emissions generated by road transport to boost decarbonisation in that sector. The two mechanisms will go hand in hand to clean up Europe's transport.

Social and climate justice are interlinked

This new carbon market for road transport and buildings made possible the creation of the Social Climate Fund. This Fund was very important for T&E and its partners. We argued that revenues generated by the carbon market should be channeled towards low income households and transport users, to help them transition to cleaner cars and heating solutions. With the Fund the EU was addressing the social and climate crises with a single instrument for the very first time.



Ahead of a trilogue on the carbon market and social fund, T&E joined a coalition of 38 climate and social NGOs, trade unions and renewable energy producers to call for a bigger Social Climate Fund to help low-income households and transport users in the climate transition. As a result the Fund will be of €81 billion.

The fight against big oil

In 2022, the climate team also strengthened its work on Big Oil. After the outbreak of the war, we published a study on the true cost of Big Oil's profits.

We showed that Europe's five biggest oil majors (BP, Eni, Repsol, Shell, and TotalEnergies) pocketed €47 billion – mostly in profit for shareholders and management – in 2021 taking their total profits to €850 billion since 1993. The five oil giants are responsible for huge societal costs through pollution, deteriorating public health and carbon emissions, totalling a whopping €13 trillion. But they have paid back a mere 5% of this in corporate taxes, the study reveals, leaving a mountain of unpaid costs at the door of society.

But whilst these oil giants were pocketting trillions in profits, nothing was being done about them helping lower income households in the transition to clean technologies. A legal analysis showed that within the context of the ETS2, the EU should pass on part of the carbon price for cars and homes to fuel suppliers rather than European households. We argued that if the climate transition has any hope of working, the EU should ensure that big polluters – not the small households – pay the bulk of the carbon price.

But in the vote on the carbon market in December 2022, negotiators disagreed on a provision that would require Big Oil to pay part of the carbon price, instead of passing it on fully to consumers. In essence, the EU failed to crack down on big polluters.

CLEAN CITIES

In 2022 the Clean Cities Campaign (CCC) went from strength to strength, establishing itself as a leading voice in the debates around urban transport in Europe.

Over the course of the year the campaign grew from a small core team of three to 19 urban mobility experts leading a networked coalition of 74 partners across 15 countries. The campaign expanded within the UK to Manchester, as well as to Poland in Eastern Europe and we've been selected to participate in the EU Commission's new Expert Group on Urban Mobility, allowing us to directly influence the EU's urban mobility agenda. Here are some of the highlights from the year.

Benchmarking cities in their progress towards zero emission mobility

Early in 2022 the CCC published its flagship research piece, the "City Ranking" report, the aim of which was to benchmark 36 major European cities in the race towards zero emission mobility. The research covered a broad range of indicators, ranging from public space allocation and road safety to public transport services, charging infrastructure and air quality. The ranking placed the CCC firmly on the map of city level decision makers and has opened many doors to CCC local coordinators to advocate directly for better urban mobility policies in the cities where we are present. It also proved very popular with the media, with 217 articles including on Bloomberg, Politico and Belgium's Le Soir.

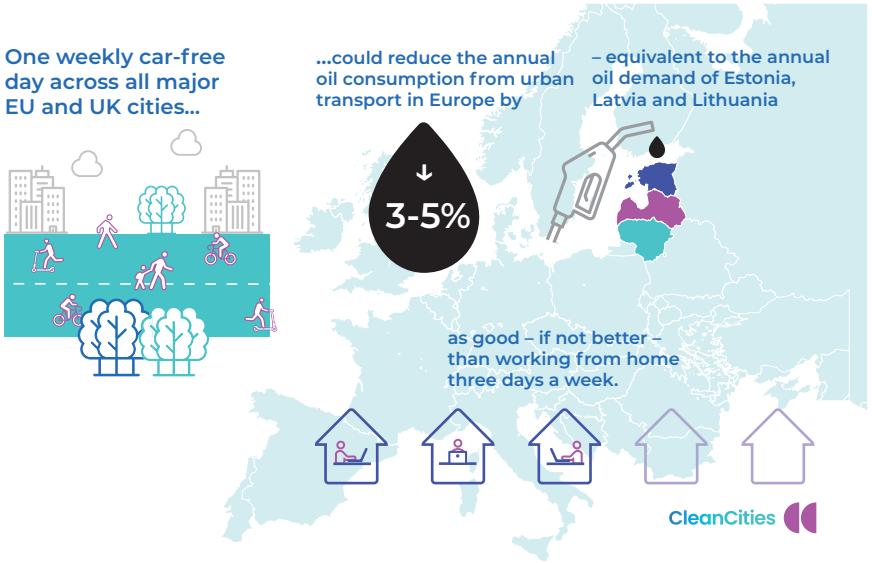
Pushing for more Low and Zero Emission Zones

In July, we published The Development Trends of Low- and Zero-Emission Zones in Europe, which aimed to quantify the significant rise in the number of schemes across the continent: there are now 325 active LEZs, a 40% increase since 2019. Our research was picked up by a wide variety of media and helped establish Clean Cities as a go-to voice on Low-Emission Zones in Europe. At the same time, we also published a helpful guide to decision makers: The 7 steps to create effective low-emission zones, which has opened doors and constructive dialogues with decision makers in several cities and countries, including in Italy, Poland and Spain.

Cities' role in reducing the continent's dependence on (Russian) oil

As a response to the war in Ukraine and the unfolding energy crisis, we launched a series of pieces to provide context to the media debate around the role that cities can play in reducing Euopre's dependence on oil. We published a series of blogs on the topic and quantified in our piece Effective and affordable alternatives to fuel tax cuts what clean transport alternatives could the money that governments spend on fuel subsidies be spent on.

In addition, we also quantified the potential impact of car-free days on Europe's oil consumption. Our briefing, Car-free days: A proven and popular measure to reduce oil demand, concluded that one car-free day a week implemented in major European cities could reduce the annual oil consumption from urban transport in Europe by around 3 to 5%. The report was featured in a variety of media publications, and appeared on the website of the European Mobility Week. **The European Commission later published advice on car-free days that was aligned with the CCC's demands.**



SUSTAINABLE FINANCE

A gas-scam Taxonomy but improvements in transparency

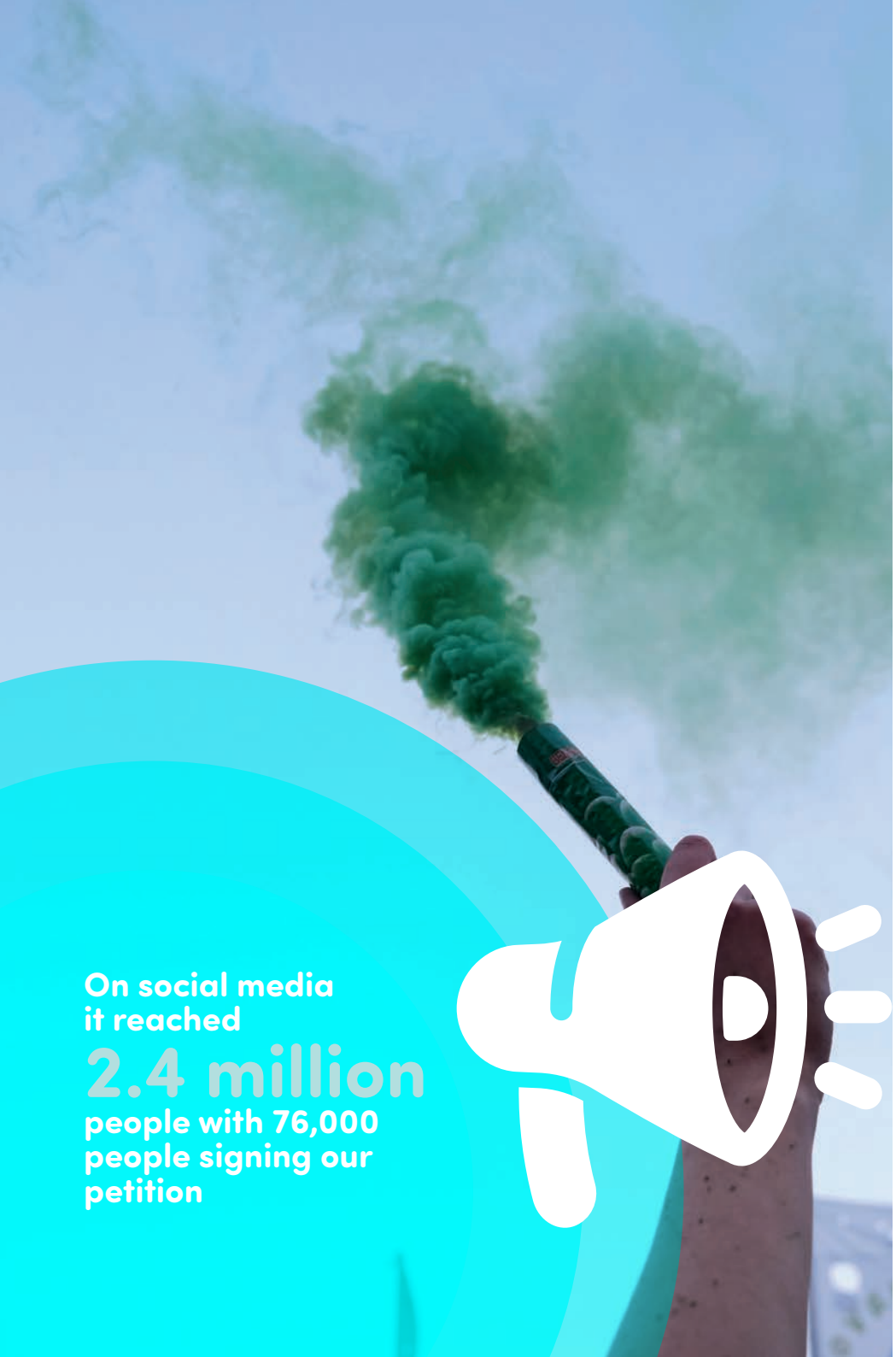
When it comes to sustainable finance in Europe, there was one word on everyone's lips in 2022: 'Taxonomy'. The EU's labelling of 'green' investments was supposed to provide investors with clarity. Instead it turned out to be a farce. Under political pressure from the French and the Germans, the EU chose to label gas and nuclear as green. Any faith in the Taxonomy was lost.

But it was not for want of trying. T&E alongside NGOs such as CAN, Greenpeace, WWF and WeMove put up the fight of our lives in an attempt to get the European Parliament to dump the act. Coordination amongst NGOs was incredible. At the national level T&E members Legambiente, Ecologistas and MilieuDefensie activated their networks to raise awareness in governments and amongst MEPs. The groups also organised busloads of activists from around Europe to Strasbourg for the last effort of a huge campaign.

The campaign had a strong digital presence. On social media it reached 2.4 million people with 76,000 people signing our petition and joining our email actions.

We managed to flip a number of MEPs, but it wasn't enough. Fossil gas was labelled green in what T&E dubbed the 'biggest act of greenwashing in history.' You can't win them all.

But on reflection, significant progress was made in 2022 to improve Europe's sustainable finance infrastructure.



At the beginning of 2023 the Corporate Sustainability Reporting Directive became law. T&E advocated for the law to be as ambitious as possible. T&E continues to be heavily involved in the expert group that advises the European Commission.

So far, we managed to include Scope 3 (life-cycle emissions) as mandatory for all corporate disclosures. This will hit transport polluters particularly hard as the majority of a car, truck, plane or ship's emissions come from its use, not in making it.

In 2022, T&E also exposed the fundamental issues with ESG ratings. In a study published in September T&E exposed the fact that lifetime CO2 emissions (a pretty important metric), represent less than 1% of a carmakers' final ESG score and that carmakers are massively underreporting the lifetime emissions of their vehicles. T&E's report appeared in newspapers from London to Seoul.

NATIONAL OFFICES

T&E is having an increased impact on the transition to sustainable transport in key European countries.

T&E is now a well established expert group on transport in France, Germany, Italy, Spain, Poland and the UK, where our national offices are based. We have had an impact on key legislative files, especially in the field of road transport. This year we actively strengthened our relationship with members in all countries, helping us to build stronger national coalitions and secure some major legislative battles.

In 2022, the main priority for our national teams was road transport, especially securing support for the car CO2 standard in EU member states. Ahead of a key vote in the European Parliament, the national offices organised the European Car Climate Summit in Madrid, with speakers such as the German State Secretary, Christiane Rohleder, Italy's Minister for Sustainable Transport and Infrastructure, Enrico Giovannini, and Joan Groizard, Director General of the Spanish Institute for Energy Diversification and Savings.

We added a new programme on the electrification of fleets to our portfolio, recruiting a new director to lead the programme alongside national leads in each country. The aim of the programme is to secure the electrification of the company car fleet. The new team is an example of how T&E is reinforcing its expertise on national policy. Indeed, the leads in France, Spain, Italy and Germany each produced reports on national fleet electrification and taxation. These national reports were followed by the Good Tax Guide, the first ever report comparing systems of car taxation across European countries. The report was drafted by our analysts based in Brussels, in collaboration with partners across Europe.

Alongside road transport, the national offices supported T&E's agenda on sustainable batteries for electric cars and road infrastructure. We also increased our capacity on shipping in France, the UK and Spain, and aviation in Germany, France, Spain and the UK.

2022 was a turning point for the growth of T&E's national offices, as 10 new staff joined in our six European hubs. Although we said goodbye to two of our directors, we have welcomed two new ones to replace them.

All national offices have an established office space, meaning that our staff can host meetings and events, and perform advocacy very close to key decision makers. The UK, France and Italy teams all moved into new physical offices.

COMMUNICATIONS OUTPUT

215
Press releases

57
Opinion pieces

11
Bulletins

64
Email alerts

166
Publications

888
Tweets

212
LinkedIn posts

45
Social media videos

19
events

COMMUNICATIONS IMPACT

19,646
↑29%
Media hits

1,572,786,723
↑20%
Estimated media views

129
↑8%
Countries

47
↑12%
Languages

6,574
↑13%
Bulletin subscribers

10,201
↑16%
Email alert subscribers

31,296
↑10%
Twitter followers

20,060
↑47%
LinkedIn followers

13,035
↑2%
Facebook followers

1,320
↑57%
Instagram followers

35,123
↑28%
Twitter engagements

15,052
↑60%
LinkedIn engagements

2,739,475
↑153%
Twitter impressions

1,131,839
↑50%
LinkedIn impressions

4,599
↑43%
Event attendees

459,347
↓40%*
Website visits

320,127
↓44%*
Website users

* This change is assumed to stem from implementing a more strict cookies policy. An estimate based on Google search results indicates that the actual number of website visits could be up by 49%.

OUR PEOPLE

EXECUTIVE TEAM

William Todts
Executive Director

Aleksandra Ivanchei
Personal Assistant to Executive Director

ROAD

Julia Poliscanova,
Senior Director, Vehicles and Emobility

CLEAN VEHICLES

Tiziana Frongia
Vehicles Project Director

Anna Krajinska
Manager, Vehicle Emissions and Air Quality

Cecilia Mattea
Batteries and Supply Chains Policy Manager

Yoann Gimbert
E-Mobility Analyst

Alex Keynes
Manager, Clean Vehicles

Fabien Sperka
Vehicles Policy Manager

Alina Racu
Batteries _ Metals Analysis Manager

FREIGHT

Sofie Defour
Freight Director

Fedor Unterlohner
Manager, Freight

Fedor Unterlohner
Manager, Freight

Nadine Mingers
Clean Trucks Officer

Lucien Mathieu
on sabbatical

NON ROAD

Carlos Calvo Ambel
Senior Director, Non Road and Analysis

AVIATION

Jo Dardenne
Director, Aviation

Carlos López de la Osa
Aviation Technical Manager

Erin Vera
Corporate Travel Campaigner

Denise Auclair
Corporate Travel Campaign Manager

Matteo Mirolo
Aviation Policy Manager

Roman Mauroschat
Aviation policy officer

SHIPPING

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Jacob Armstrong
Sustainable Shipping Officer

Chiara Mingozzi
Junior Shipping Analyst

Delphine Gozillon
Sustainable Shipping Officer

Constance Dijkstra
Shipping Campaigner – LNG _ Biofuels

ENERGY

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Agathe Bounfour
Oil Program Lead

Barbara Smailagic
Fuels Policy Officer

Geert De Cock
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Maik Marahrens
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TRENDS AND ANALYSIS

Thomas Earl
Director, Modelling and Data Analysis

Juliette Egal
Data Analyst

Alex Springer
Sustainable Shipping Analyst

Simon Suzan
Transport Energy and Data Analyst

Valentin Simon
Data Analyst

Max Molliere
Emobility Data Analyst

Luca Poggi
Data Analyst

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Climate Officer

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Xavier Sol
Sustainable Finance Manager

Giorgia Ranzato
Sustainable Finance Officer

Jessye Mouangue
Sustainable Finance Officer

CLEAN CITIES

Barbara Stroll
Director,
Clean Cities
Campaign

Celeste Hicks
Communications
Media Manager

Lauren Reid
International
Project
Manager

Sophie Bauer
Digital
Engagement
Manager

Claudio Magliulo
Head of Italy
Campaign

Jens Müller
Policy _
Research Lead

Nina Bak
Clean Cities
Campaign
Poland
Coordinator

Oliver Lord
Clean Cities
Campaign UK
Coordinator

Sarah Rowe
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Manchester

Sylvain Delavergne
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Campaign
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Streets

Martin Baierl
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Zachary Azdad
Research
Assistant

COMMUNICATIONS

Paul Bell
Senior Director, Communications and Campaigns

Eoin Bannon
Media Manager

Nele Pärje
Web and Digital Communications Manager

Diane Vitry
Communications Officer

Sam Hargreaves
Communications Officer

Nicolas Ruffin
Communications and Media Officer, France

Megan Corsano
Social Media Officer

Sofia Alexandridou
Graphic Designer

Chris Bowers
T&E bulletin

Katharina Dirr
Communications and media manager, Germany

NATIONAL OFFICES

Nora Christiansen
Senior Director, National Offices

Diane Strauss
Director, France

Isabell Büschel
Director, Spain

Richard Hebditch
Director, UK

Sebastian Bock
Director, Germany

Veronica Aneris
Director, Italy

Stef Cornelis
Director, Electric Fleets

Andrea Boraschi
Clean Mobility Manager, Italy

Fanny Pointet
Sustainable Shipping Manager, France

Jon Hood
Manager, UK Sustainable Shipping

Léo Larivière
E-mobility Manager, France

Marie Chéron
Vehicles Policy Manager, France

Matt Finch
Policy Manager, UK

Rafal Bajczuk
Senior Policy Analyst, Poland

Carlos Bravo
Policy Expert, Spain

Elena Lake
Electric Fleets National Lead, Italy

Arnau Oliver Antich
Electric Vehicles _ Fleets Analyst

Carlo Tritto
Policy Officer, Italy

Carlos Rico
Policy Officer, Spain

Friederike Piper
Policy Officer, E-Mobility, Germany

Griffin Carpenter
Company Cars Analyst

Morgan Jones
Data Analyst, UK

Oscar Pulido
Fleet Electrification Officer, Spain

Benedikt Heyl
Data Analyst, Germany

Ralph Palmer
UK Electric Vehicles _ Fleets Officer

OPERATIONS TEAM

Dale Chadwick
Senior Director of Operations

Marc Schuurmans
Finance Director

Mathias Claeys Bouuaert
Head, People and Culture

Michaël Dumont
Fundraising and Grants Manager

Sandra Barata
HR, Payroll and Benefits Manager

Tina Cenyte
IT and Facilities Manager

Zixin Li
HR Officer

Zsigmond Kovacs
IT Officer

BOARD

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Christian Hochfeld
Board Member

Jeppe Juul
Board Member

Neil Makaroff
Board Member

Frances Sprei
Board Member

Edoardo Zanchini
Board Member

OUR MEMBERS AND SUPPORTERS

MEMBERS

Austria	Belgium	Belgium	Belgium	Belgium	Bosnia
Bosnia	Croatia	Denmark	Denmark	France	France
France	Germany	Germany	Germany	Germany	Greece
Hungary	Ireland	Ireland	Italy	Italy	Italy

Lithuania

Lithuania

Netherlands

Netherlands

Norway

Poland

Poland

Poland

Poland

Portugal

Portugal

Portugal

Romania

Romania

Slovenia

Spain

Spain

Spain

Sweden

Sweden

Switzerland

Switzerland

United Kingdom

United Kingdom

United Kingdom

United Kingdom

Ukraine

Ukraine

SUPPORTERS

BELLONA

ecodes
tiempo de actuar

ECF
EUROPEAN CYCLISTS' FEDERATION

FONDAZIONE PER LO SVILUPPO SOSTENIBILE
Sustainable Development Foundation

GENITORI ANTISMOG

HACAN

SEI Stockholm Environment Institute

uecna
European Union Against Aircraft Nuisances

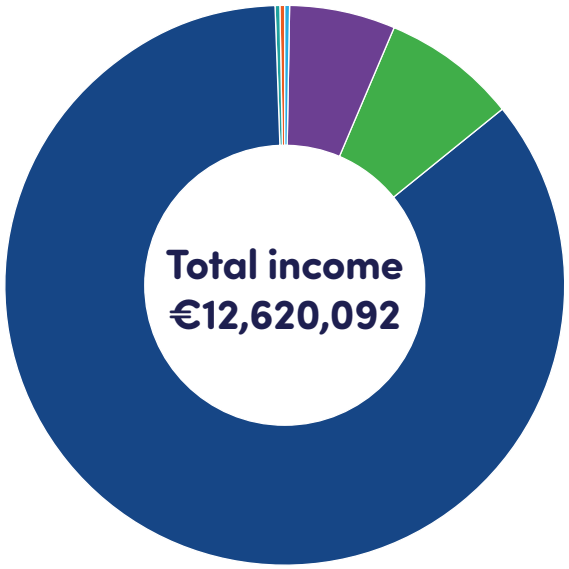
WWF

OUR FUNDERS AND FINANCES

OUR FUNDERS

> € 1,000,000	€ 500,000 < € 1,000,000	€ 250,000 < € 500,000	€ 25,000 < € 100,000	< € 25,000
Climate Imperative Foundation	European Commission	Breakthrough Energy	Clean Air Fund	T&E members and support fees
ClimateWorks Foundation	National Philantropic Trust	Hewlett Foundation	Global Maritime Forum Foundation	FIA Foundation
European Climate Foundation	Oak Foundation	KR Foundation		Öko-Institut
Schwab Charitable Fund	Quadrature Climate Foundation			Seas at Risk
	Rockefeller Philanthropy Advisors			
	Sequoia Climate Foundation			
	The Norwegian Agency for Development Cooperation			

INCOME AND EXPENDITURE 2022 (€)



69,950 Membership fees

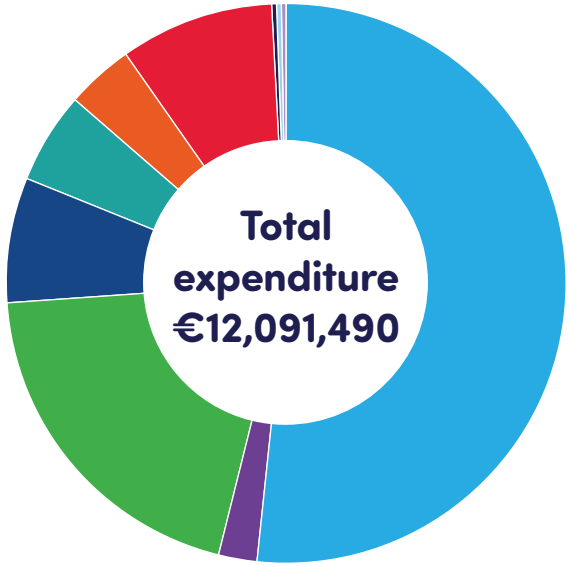
753,652 EC Grants

982,072 Governments

10,780,603 Private – Foundations

4,404 Financial income

33,502 Other misc. Income



6,276,422 Personnel

270,053 Travel and subsistence

2,400,024 Research and consultancy

872,349 Transfer to T&E members

653,759 Subcontracting

456,763 Direct project costs

1,066,847 Office costs

51,804 Depreciation and provisions

43,412 Financial costs

58 Income taxes

Who we are and what we stand for

Established in 1990, Transport & Environment (T&E) is Europe's leading NGO campaigning for cleaner, safer transport. Our job is to research, debate and campaign with the facts available.

Our goal is simple but hard: to minimise transport's harmful impacts on the environment and health, while maximising efficiency of resources, including energy and land, without forgetting to guarantee safety and sufficent access for all.

TRANSPORT & ENVIRONMENT

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