



BRIEFING - June 2024

Making EU Single market work for the Green Deal

How to harmonise EU regulations to accelerate
decarbonisation

Summary

T&E's 10 recommendations below on the simplification and harmonisation needed to accelerate transport decarbonisation.

Summary

As policy-makers and businesses are turning to putting the European Green Deal into practice, scaling clean technologies and their supply chains quickly and sustainably amidst fierce global competition is the EU's next big task as demonstrated by the Letta report on the EU single market. In this paper T&E looks at the key market failures within the transport decarbonisation agenda to see where harmonisation and simplification in the interests of the EU Single Market can accelerate green technologies uptake, cleaner transport modes and help boost wider sustainability.

We propose 10 policy proposals for the next EU Commission and national governments on how the EU can simplify the rules without undermining its decarbonisation or sustainability goals. These are:

1



Merge 12 of the currently standalone national energy and climate plan requirements into the **single National Energy and Climate Plans** (NECPs) to alleviate administrative efforts and ensure consistency across interacting policy measures and impacts.

2



Simplify the **sustainability reporting** under both the CSRD and CSDDD frameworks without undermining its core objectives which are also a competitive advantage of European companies globally. Notably key performance indicators under EU Taxonomy Regulation, the CSRD, and the Sustainable Finance Disclosure Regulation should be harmonised as much as possible.

3



Simplifying the current matrix of EU and national **funding instruments** by creating a single EU rulebook of application procedures, merging pots of money where they focus on the same sector (e.g. batteries or green hydrogen for shipping and aviation) and making funding predictable and output-based. IPCEI's are too complex and should be replaced in favour of more Innovation Fund money.

4



Standardising and simplifying distribution **grid permitting** and connection approval procedures across the member states to accelerate connection of net zero technologies.

5



Building a **recycling single market** by harmonising waste product definitions, creating recycling quality standards, restricting battery exports and simplifying transportation rules to create scale and investment.

6



Empowering the **European Railway Agency** to implement the *Single European Railway Area Directive* and the *TEN-T Regulation* to fast-track the harmonisation and modernisation of the rail network.

7



Harmonising **rail taxation** rules in Europe (VAT and Track Access Charges) to incentivise the creation of international rail connections.

8



Merging the various vehicle material carbon requirements into one single EU **vehicle "ecoscore"** to accelerate green steel and aluminium investments, and standardising car labels across national markets.

9



Help address the discrepancy in the **sales of electric vehicles** across the member states by proposing a Clean Corporate Fleets Regulation to electrify large fleets by 2030 (replacing the Clean Vehicles Directive).

10



Ensure comprehensive implementation of EU **green hydrogen and hydrogen-derived fuels** provisions via a robust carbon footprint methodology (as done for batteries) and clear environmental and human rights due diligence obligations.

The EU governments should rightly turn to the effective implementation of the European Green Deal, including its clear car, truck, as well as aviation and maritime fuel provisions. But this does not mean deregulation; instead closing a number of regulatory gaps - while simplifying some of the reporting frameworks around current laws - can help the Union supercharge its green ambition, scale the new clean industries and boost its Single Market.

1. Introduction

The EU has recently enacted a comprehensive climate package of measures to meet its 2030 climate targets, or the European Green Deal. As the task is turning to putting them into practice, scaling clean technologies and their supply chains quickly and sustainably amidst a fierce global competition. Competitiveness, or competitive sustainability which better describes turning the Green Deal into a successful green industrial strategy across Europe, is top of the agenda.

In this context, many national and European leaders are turning to the forces of the Single Market, looking at better integration, harmonisation and simplification across EU borders to boost green growth and jobs. Enrico Letta recently presented his comprehensive report¹ on the EU's single market with a set of concrete policy proposals on everything from finance, to energy to health. President Macron called for something similar when he talked about completing the Single market at his recent speech in Sorbonne.

In this paper T&E looks at the key market failures within the transport decarbonisation agenda to see where harmonisation and simplification in the interests of the EU Single Market can accelerate green technologies uptake, cleaner transport modes and help boost wider sustainability. We come forward

¹Enrico Letta, (April 2024) "Much more than a market." [link](#)

with 10 concrete policy proposals for the next EU Commission and national governments on how the EU can simplify the rules without undermining its decarbonisation or sustainability goals.

2. 10 areas of transport, energy and climate laws that can be simplified

T&E believes there are a number of areas around climate governance, energy, road transport, recycling and wider sustainability where further EU action to strengthen the Single Market would help boost progress.

2.1 Climate & governance

2.1.1 National climate plans

Between 2018 and 2025, member states have (had) to draw up at least 16 different mandatory plans related to climate and energy policies, and were nudged to submit at least 3 more optional plans (see figure 1 below). Whilst each and every one of these plans was tied to an important new EU law, or the prerequisite to access relevant new EU funding, it is clear that this patchwork creates an excessive effort on the administrative capacities of member states, which could be better spent actually tackling crises rather than drafting yet another plan. It also contributes to the sometimes lack of consistency of planned policies and timelines under different plans, contradicting strategies, or lack of attention to interacting impacts of policies.

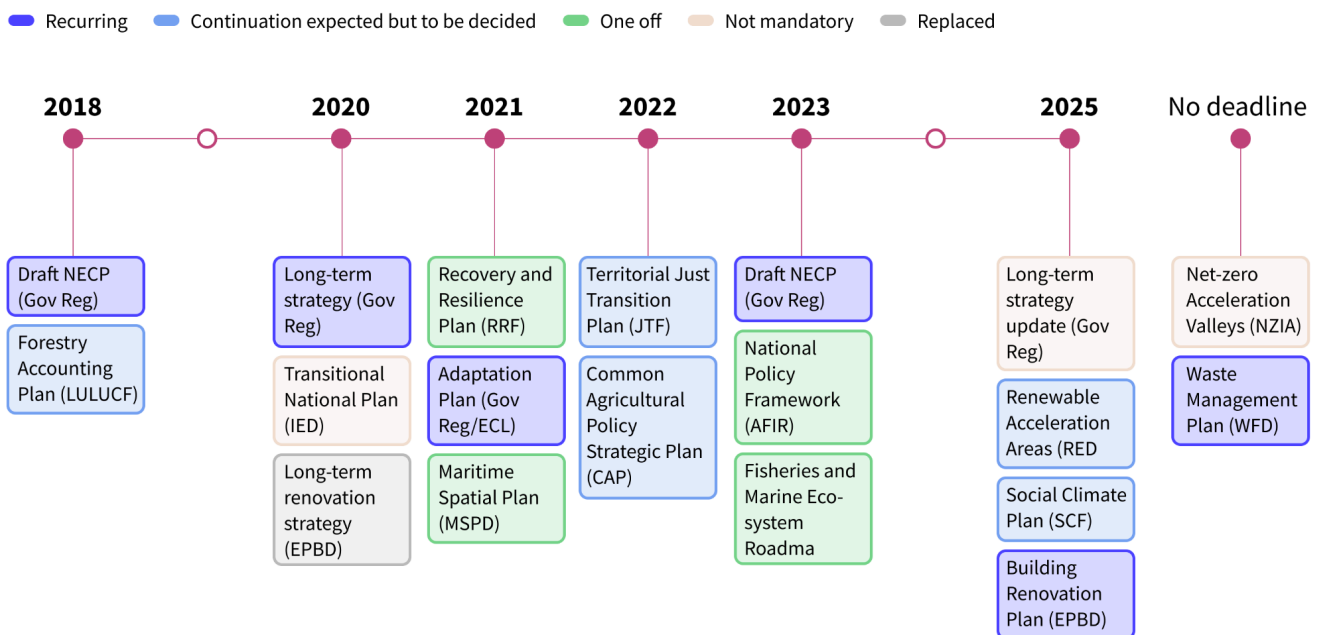


Figure 1: Patchwork of EU-required member states plans

Yet with the National Energy and Climate Plans (NECPs), the EU has the ideal umbrella tool under its disposal to streamline national planmaking for the climate and energy transition. Regrettably the EPDB review presents the only law where this NECP potential was reaped, with the old standalone renovation strategies now integrated into the NECPs. The Green Deal however mostly presents a missed

opportunity to streamline and reduce planmaking requirements on member states. The setting up of standalone Social Climate Plans is the most bleak example, but new and unlinked plans were also introduced under the RED, AFIR and NZIA.

The planned review of the Governance Regulation offers the ideal opportunity for the Commission to integrate these new and existing plans under the NECP template (see figure 2 below), maintaining the mandatory or non-mandatory character of the sub-plans. As part of this exercise, the dimensions of the NECP should be reviewed, and each sector should receive its own section. This merger of plan making will also allow for some of the reporting requirements to be scrapped.

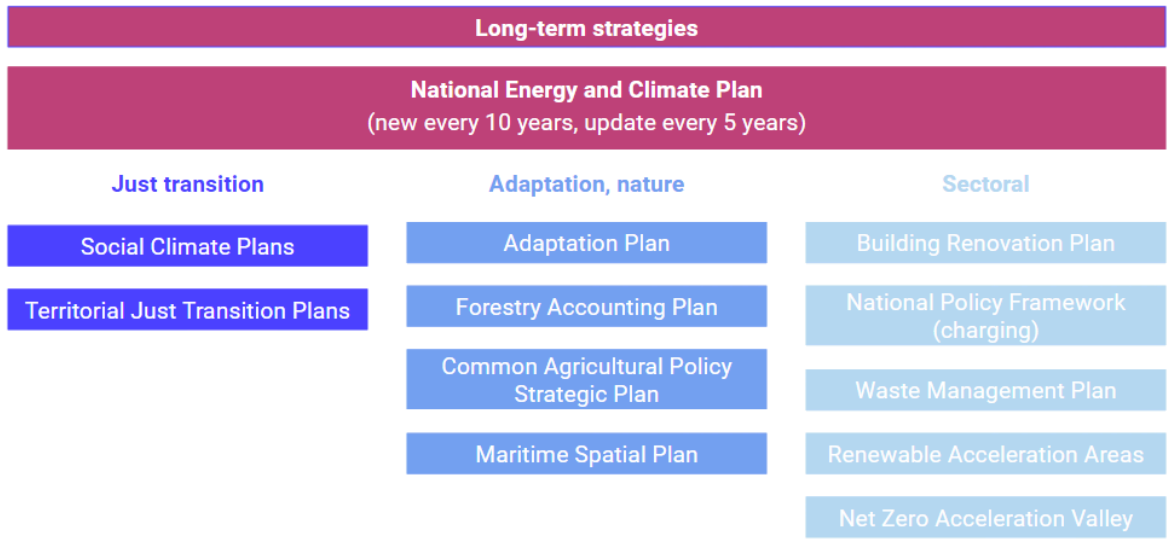


Figure 2: Plans to be integrated into the National Energy and Climate Plans

2.1.2 Sustainability reporting

The Corporate Sustainability Reporting Directive (CSRD) is an important part of the European strategy to finance the transition to a sustainable economy, aimed at shifting private finance towards green investments. Under the European Sustainability Reporting Standards (ESRS), it mandates companies to be transparent on their sustainability performance with the publication of an annual sustainability report including sustainability (ESG) information on the activities they perform.

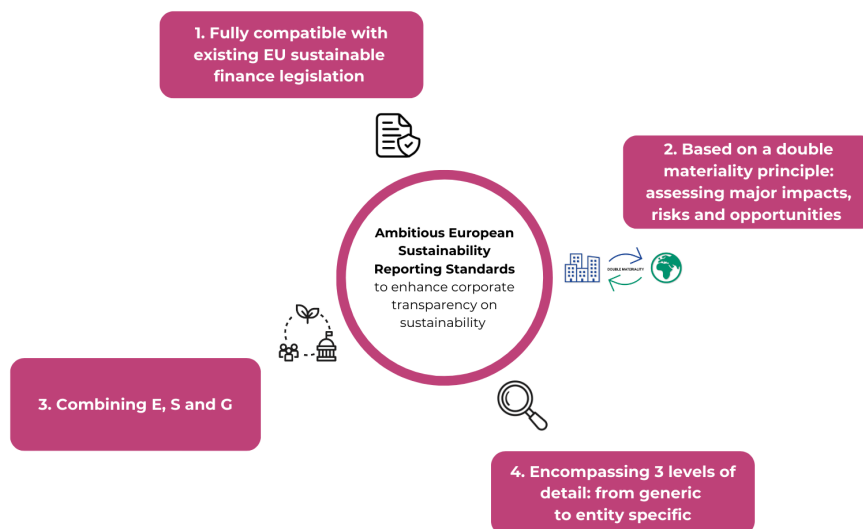


Figure 3. Ambitious European sustainability reporting standards.

The CSRD’s goal is to improve the relevance, comparability and reliability of corporate ESG data. Ultimately it will ensure that investments reward the best performing and more sustainable companies. Together with the ESRS it lays down the foundations to hold companies accountable for their impact on the outside world and make them more transparent. Being based on the “double materiality” principle makes it unique. It creates an indivisible link between the companies’ risks arising from sustainability issues, affecting their performance, position and development (financial materiality) and the companies’ impacts on people and environment (impact materiality).

In addition, and contrary to what certain business associations have recently argued, a [cost-benefit analysis](#), commissioned by the European standard-setter EFRAG in November 2022, has revealed that the implementation of the ESRS would only add marginal costs to the economy², leaving companies with negligible additional costs and very limited additional burden.

However, this critical piece of the EU sustainable finance strategy can be made more practicable and harmonised with other existing legislation (e.g. SFDR, Taxonomy), by:

- Ensuring that the European Sustainability Reporting Standards become the reference legislation for corporate reporting at EU level. Robust sector-specific standards should be swiftly developed and adopted to become a valuable guidance for companies to enhance their transparency and a point of reference for users of sustainability information.
- Implementing a well-functioning and accessible European Single Access Point, by 2027 at the latest.
- Making sure that the identified key performance indicators across different sustainable finance legislations, notably the technical screening criteria in the EU Taxonomy Regulation, the disclosure requirements in the CSRD, and the PAIs in the Sustainable Finance Disclosure Regulation are compatible and harmonised as much as possible.

² The initial cost in the first year of applying the disclosure requirements will represent a small proportion of EU turnover (0.002% in 2024). In 2025, the total costs are expected to increase and reach 0.01% of EU turnover. Finally, by 2028 the one-off and additional recurring costs as share of turnover would be double the initial one-off and additional recurring costs. Overall, EU undertakings would pay about 0.01% of the total turnover on an annual basis after 2028. *Source:* Cost-benefit analysis of the First set of draft European Sustainability Reporting Standards, CEPS, November 2022

2.2 Funding

The landscape of EU funds and instruments is highly fragmented. Different rules and procedures apply to various instruments (from regional funds to grants under the Innovation Fund, loans under InvestEU, etc). This is particularly problematic for small companies, start-ups or energy communities currently facing obstacles to accessing public funding. Developing a simplified and harmonised application and distribution mechanism would make it easier and quicker to access the well-needed EU funding, boosting the competitiveness and business case of EU businesses.

This can also contribute to tackling the low absorption rates under the EU budget. A recent study highlights the considerable challenges related to absorption capacity at national, regional and local level. For the 2014-2020 programming period, just a quarter of the total resources had been paid out at the end of 2018, and by the end of 2020, only 52.5% of the total financial resources available from key instruments had been paid to Member States³.

Similarly, national support schemes under the EU State Aid rules face lengthy and cumbersome application and award processes. This is particularly relevant for Important Projects of Common European Interest schemes (IPCEIs) that are used to support cleantech sectors such as batteries. This sometimes slows down, rather than accelerates, scaling key climate and industrial sectors.

We recommend the following:

- Designing a single EU rulebook of simplified, centralised and harmonised procedures for the EU public finance architecture. Whatever the public fund in question, application criteria and templates should be as similar as possible, with one-stop shops (ideally a single EU application portal) and project development assistance at EU and national levels to support the applicants.
- Wherever possible, avoid fragmented pots of money for the same purpose and combine funding to support critical sectors. E.g. T&E recommends doing away with the complicated IPCEI programme for the battery value chain, and instead merging all the funding into the newly created Battery Fund under the Innovation Fund.
- When it comes to supporting instruments for clean technologies manufacturing (e.g. the EU Innovation Fund), output-based instruments should be favoured as much as possible in the future EU budget, mirroring the simplicity of the US Inflation Reduction Act. The EU should further explore expanding “performance-based instruments” as under the Recovery and Resilience Facility, so that EU funding is directly linked to the achievement of key milestones and sustainable criteria (based on clear Key Performance Indicators - KPIs).
- Further developing the concept of the “sovereignty seal” under the STEP Platform, which should enable best-in-class European projects that meet eligibility and award criteria of one EU funding scheme to be eligible under other funding schemes to crowd in support.
- Allocating a share of the future cohesion funds to the reinforcement of staffing, expertise and skills within public authorities. Every national administration should have trained staff to answer any questions on the application process from companies, as well as to design national funding applications (e.g. just transition plans) effectively to disburse the funding quickly. This will accelerate getting projects and financing off the ground.
- Streamlining and accelerating approvals and disbursements for green projects under the State Aid rules. The “incentive effect rule” should be either completely removed or the burden of proof simplified. The Commission should increasingly focus on linking sound social and environmental

³ Ciffolilli, A., Pompili, M. (2023). *Research for REGI Committee – Absorption rates of Cohesion Policy funds*, [Link](#)

conditions to State Aid operations (e.g. “made in Europe” requirements, employment & reskilling of local staff, etc) and prioritise support to schemes that are fully aligned to the green transition⁴.



Figure 4. Measures needed to simplify the EU funding landscape

2.3 Energy

The Letta report mentions that “establishing a single executive entity to manage EU clean energy funding programmes and incentive schemes would significantly benefit companies and stakeholders.” It suggests to “create a Clean Energy Delivery Agency”. Within those larger brackets of harmonisation, below are two areas that are in urgent need of better standardisation and harmonised implementation.

2.3.1 Grids

The European electricity grids are facing their biggest transformation in decades and the next 15 years will see unprecedented changes to the system. The shift to a zero emission economy will increase the demand of (renewable) electricity by almost 60% to more than 5,200 TWh annually⁵. The main driver is expected to be electrified road transport: cars, vans (450 TWh) as well as trucks and coaches (240 TWh) alone will consume almost 700 TWh of electricity annually in 2040⁶.

A lot will depend on how Transmission- and Distribution System operators (TSOs and DSOs) will be able to reinforce existing lines, (massively) expand the system as a whole while simultaneously connecting a multitude of new pro- and consumers such as high power charging hubs for electric vehicles. Charging infrastructure is mainly connected to the low (for private charging) and medium voltage (for public charging) grid. Some extensive charging hubs might require high voltage grid connections. The vast majority of these grids are operated by DSOs.

⁴ T&E for instance supports more stringent criteria to apply to State Aid support in the aviation sector via sectoral guidelines ([Ryanair State Aid report](#), [Reforming State Aid Guidelines](#)). In addition, Technical Screening Criteria under the EU Taxonomy are currently too loose to properly define sustainable investments in the aviation and shipping sectors (see T&E’s [position](#) from April 2023). State Aid rules should adopt a more science-based and solid approach to mainstream climate considerations under its support schemes.

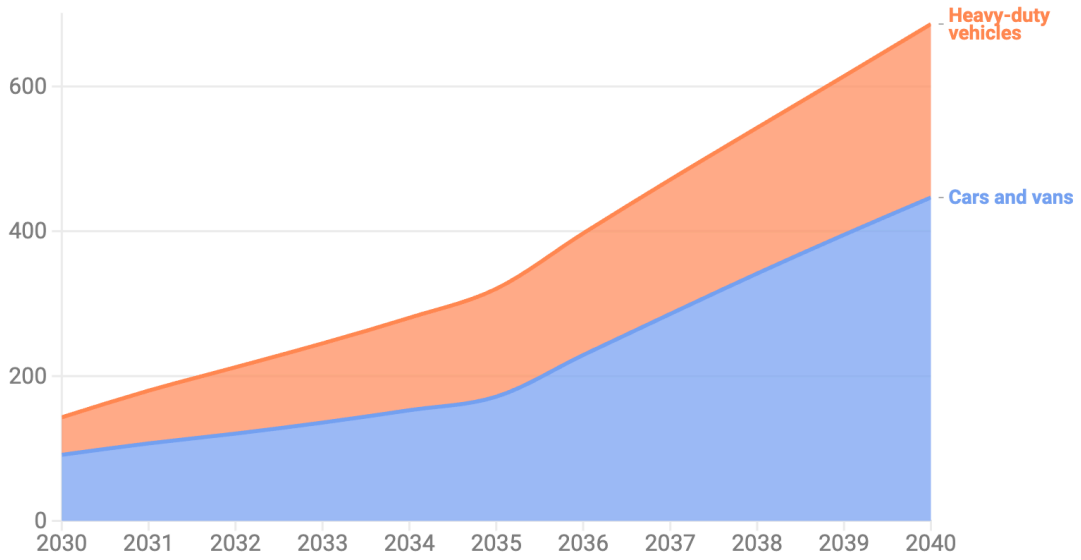
⁵ Ember (2024). “European Clean Power Pathways Explorer”. Retrieved from: [link](#)

⁶ Based on T&E’s internal EV market projections

Energy demand EVs (EU-27)

Cars and vans Heavy-duty vehicles

Electricity Demand Tank to Wheel (TWh)



Source: T&E calculations based on EUTRM (2024), EU (2024)



Figure 5. Energy demand from electric vehicles by 2040

Currently, grid operators and DSOs are operating under a myriad of different rules and regulations, making it impossible for charge point operators (CPOs) to quickly install chargers across EU countries. This is slowing down the otherwise extremely fast uptake of charging infrastructure across Europe. OPENToday it is almost impossible for CPOs to know what a good location for a charging hub could be from a grid perspective, because there is simply no (public) information about available capacity. In many cases there is also no obligation for DSOs to respond to a grid connection request whatsoever, massively delaying charging deployment. The process to request reinforcement of the grid can take up to years in some countries

The recently agreed Electricity Market Design (EMD) and the grid action plan have acknowledged some of these issues and proposed to improve the situation, e.g. requiring grid operators to make capacity maps public and boosting transparency around connection procedures.

However, a lot more is needed to standardise and harmonise the grid connection rules across Europe. This includes:

- The new EMD requires grid operators to make grid capacity maps available to all stakeholders (including CPOs). These provide information on where grid capacity is available and where largest bottlenecks are, speeding up the process and utilisation of the existing grid network. The member states must ensure that all grid operators make this information publicly available across the Union soon after the regulation enters force this year. The European Commission, via its work with ENTSO-E and the EU DSO Entity developing the definitions, should ensure that the data is as up-to-date and accurate as possible.
- There should be one standardised, transparent and digital (as much as possible) process to request a connection to the grid for net zero technology providers, including charging equipment, across the member states. This should include the max timeline within which the answer should be provided, no more than 6 months. The Commission should work with member states and grid operators to ensure that administrative steps and processes are significantly simplified across the EU.
- Where the connection request necessitates grid reinforcement or expansion, the permitting process vis-a-vis national authorities (e.g. NRAs and DSOs) to approve and operationalise that be both harmonised and accelerated across the Union as much as possible.

2.3.2 Renewable hydrogen and e-fuels

The area of EU energy policy that can benefit from more harmonisation is the application of sustainability and transparency rules for hydrogen and hydrogen-derived fuels, or RFNBOs, either made in the EU or imported.

Until recently, the EU had no robust definition and criteria to define what would qualify as a Renewable Fuel of Non-Biological Origin (RFNBO). This was a major obstacle to the deployment of a renewable-hydrogen industry and for the functioning of the EU internal market. As part of the EU Renewable Energy Directive, in 2023, the EU finally adopted dedicated rules for the sourcing of renewable electricity that is used for the production of RFNBOs (additionality rules) and for determining the GHG emission intensity (GHG methodology). These rules now need to be implemented consistently across the board in all EU countries as well as non-EU countries to ensure a level playing field.

The Renewable Energy Directive also includes several provisions to ensure more transparency on the different characteristics of fuels placed on the EU market (origin, GHG emissions, etc.). A union-wide database is also being set-up to centralise all relevant information related to fuels. Drawing on the lessons learnt from widespread fraud with waste-based feedstocks for advanced biofuels, more efforts will be needed to prevent potential fraudulent practices along the hydrogen supply chain and ensure the EU internal market for RFNBOs can be trusted to be 'without fraud'. The reliability of certification schemes that verify the claims about RFNBOs' renewability, carbon reductions, carbon sources used, etc. will require a harmonised approach and clear guidelines from the European Commission. It remains unclear how the union-wide database will be adapted to the specifics of RFNBOs. Without a coherent and uniform approach to certification, a single market for renewable energy cannot function properly.

Beyond the certification of the environmental credentials of RFNBOs, the European Commission should also consider additional environmental and social criteria for imports of RFNBOs from outside Europe, especially when supported with public funds like the European Hydrogen Bank. This will deliver on a twin objective: Ensure a level-playing field with 'made in the EU' RFNBOs as well as supporting a nascent European hydrogen industry. Such criteria could include:

- The introduction of a maximum carbon footprint for the manufacturing of electrolyzers, sustainable sourcing of raw materials and recycling obligations. Similar provisions are already being developed for batteries. Such requirements will not only decrease the lifecycle emissions of hydrogen and e-fuels, but also offer a competitive advantage to European companies.
- Strict compliance with environmental criteria (water, land use), social criteria (mirroring the due diligence obligations under the EU Battery Regulation on human rights, labour rights and industrial relations) and governance criteria (e.g. newly adopted EU horizontal due diligence rules) as a precondition for qualifying for EU support.

2.4 Vehicles

2.4.1 Corporate fleet targets to harmonise ZEV uptake

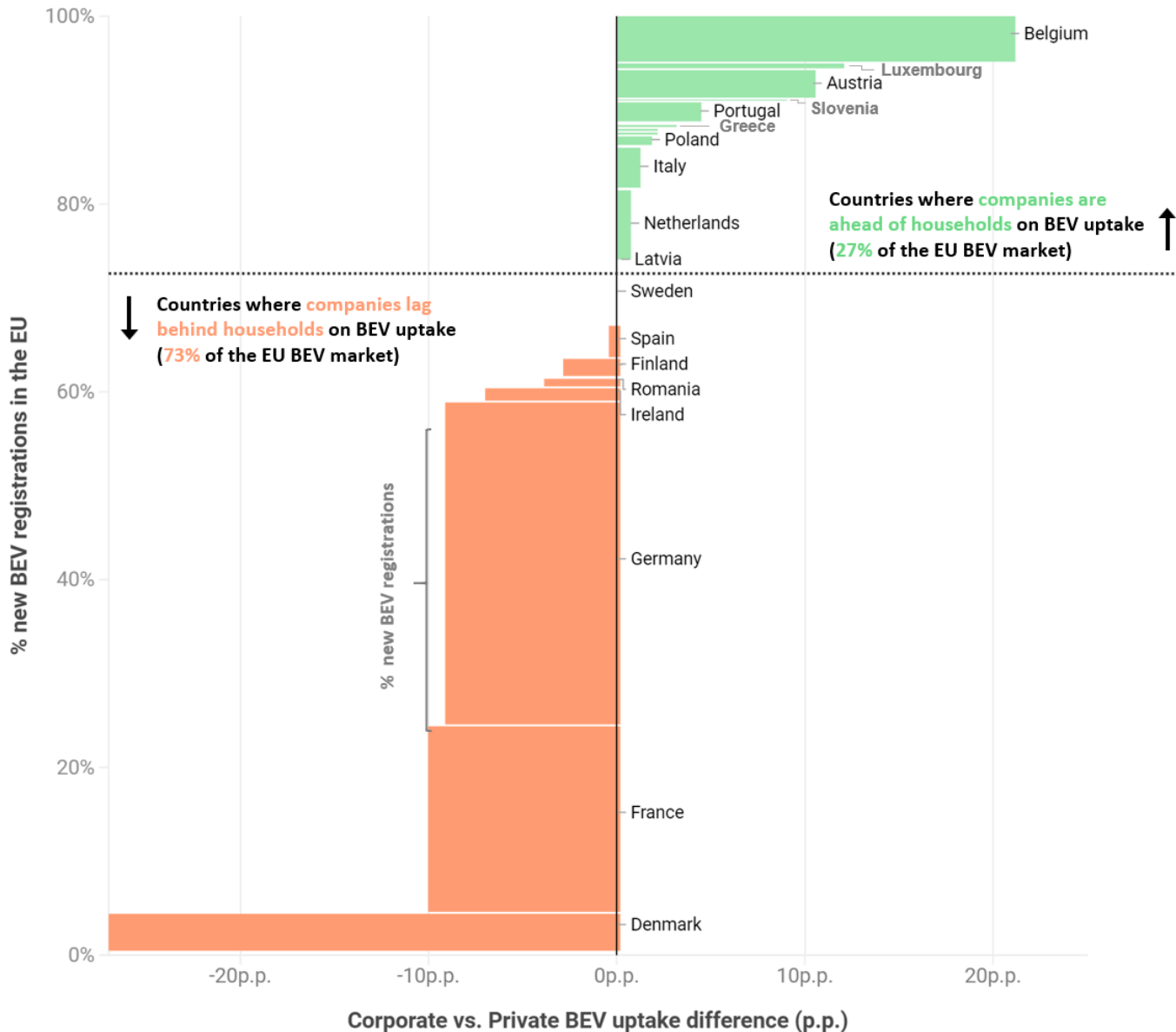
A well-functioning internal market and continuing growing demand are indispensable to incentivise and de-risk investment in zero-emission vehicles (ZEVs), ensure sufficient charging infrastructure and guarantee EU industrial leadership in green technology. Yet, as Enrico Letta highlights, "the Single Market in road transport is not yet fully achieved".⁷ The cost of inaction on this front is already visible today.

The EU is facing a market failure in its biggest car market: corporate fleets, which account for 60% of all new cars in the EU. Notwithstanding the fact that corporate cars enjoy large tax benefits and companies have more financial muscle to invest in green technology, the corporate cars market is lagging behind in the shift to zero emission vehicles: in 2023, 14.5% of corporate cars were ZEVs, for private cars this was 15.6%. Especially in the EU's two biggest car markets Germany and France (accounting for 43% of all new cars in the EU) this is particularly big and therefore problematic for the EU's efforts towards meeting its climate targets and lead on green technology.

⁷ Enrico Letta (2024). "Much more than a market." [Link](#). p. 85

Currently, national taxation drives company car electrification. The result is a split between countries that are leading in company car electrification, offering higher tax differentials between electric and fossil fueled cars (i.e. smaller markets such as Belgium, Netherlands, Portugal, Austria, Slovenia), and those that did not introduce strong incentives (i.e. the largest automotive markets such as Germany, France, Poland and Spain).⁸

In 73% of the BEV market in Europe, companies lag behind private households



Source: T&E calculations based on Dataforce (2024). New car registrations 2023 in EU27
 Note: Some country names are not shown in the graph because they register few vehicles (small bar size)



Figure 6. Difference in BEV uptake between private and corporate

The same trend is visible for zero-emission trucks (ZETs). In 2023, two countries (Germany and the Netherlands) accounted for 60% of EU ZET sales, despite representing only 30% of new truck registrations.⁹ This is because financial support to promote ZET purchases differs widely across

⁸ Transport & Environment (2023). Car taxes: Europe’s powerful tool to accelerate uptake of electric cars. [Link](#).

⁹ ACEA (2024). New commercial vehicle registrations: vans +14.6%, trucks +16.3%, buses +19.4% in 2023. [Link](#).



member states.^{10,11} For example, incentives in the Netherlands cover 40-60% of the price differential with a diesel truck, whereas in Italy they cover only up to €14,000.^{12,13} As a result, 7% of new truck sales in the Netherlands are zero-emission, versus 0.25% in Italy.

Whilst important, this widely diverging national, regional and local patchwork of measures to support ZEV uptake is creating a two-speed Europe. It is also becoming increasingly complex for businesses to navigate, especially for those with operations across the EU. Large fleets represent an ideal entry-point to address this growing crack in the Single Market. Whilst representing only 2-3% of companies, large fleets register around one third of all new vehicles.¹⁴ They also have wider financial resources, allowing them to be leaders of the ZEV transition.

To harmonise corporate ZEV uptake across Europe and simplify the regulatory landscape, T&E recommends introducing binding targets on large corporate fleets to transition to 100% zero-emission vehicles:

- For large corporate car fleets, including leasing, as well as large van fleets the EU should set a 100% ZEV purchase target by 2030. By 2035, the purchase target should transform into a stock renewal target, ensuring also existing fossil fueled vehicles are replaced by ZEVs.
- Following the example of California, large truck fleets should be subject to a target requiring them to largely replace their fleet stock with zero-emission vehicles by 2040 (e.g. 90% ZEV). Intermediate targets to only purchase ZEVs from 2035 can help truck fleets to gradually ramp-up and transform their fleets.¹⁵
- The next European Commission should come forward with a Clean Corporate Fleets Regulation within the first 100 days of its new mandate. Such a Regulation can be proposed as a replacement of the Clean Vehicles Directive of which targets have become obsolete due to more ambitious CO2 standards for cars, vans and trucks.

2.4.2 Environmental score to simplify vehicle materials rules

Under the current car CO2 regulation, the European Commission has to consider setting requirements on electric vehicle efficiency while at the same time it has to develop a methodology for full lifecycle analysis (LCA) of cars and vans by the end of 2025. Instead of moving forward with these different requirements, T&E recommends simplifying and merging these initiatives and instead focus on developing a single environmental score. T&E proposes to focus on steel, aluminium and batteries in the first instance - as key emission hotspots - and use the currently being developed carbon methodologies for those¹⁶.

Creating a single environmental score for vehicles embedded carbon would 1) avoid the complexity of developing a LCA methodology, 2) limit the burden on the European Commission to monitor, track, and verify the use of such a methodology, and 3) reduce the burden on carmakers to map and report on the details of their supply chains.

¹⁰ ACEA (2023). Electric commercial vehicles: Tax benefits and purchase incentives (2023). [Link](#).

¹¹ Transport & Environment (2022). How to buy an electric truck. [Link](#).

¹² Netherlands Enterprise Agency (2024). Purchase subsidy for Zero-Emission Trucks (AanZET). [Link](#).

Ministero delle Imprese e del Made in Italy (2022). Nuovi incentivi per auto e moto elettriche, ibride e a basse emissioni. [Link](#).

¹³ Global Commercial Vehicle Drive to Zero (2024). Global MoU Policy Tracker: The Netherlands. [Link](#).

¹⁴ T&E in-house analysis shows that 3% of companies own ≥ 100 cars but buy 34% of all new cars, 2% of companies own ≥ 20 vans but buy 33% of all new vans, and 2% of companies own ≥ 50 trucks but buy 36% of all new trucks.

¹⁵ Transport & Environment (2024). Greening corporate fleets: an industrial and social policy for Europe. [Link](#).

¹⁶ Steel, aluminium and the battery account for 70-75% of EV production emissions. The score relies on the battery carbon footprint methodology and CBAM methodologies for steel and aluminium.

Example of results of the proposed EV environmental score

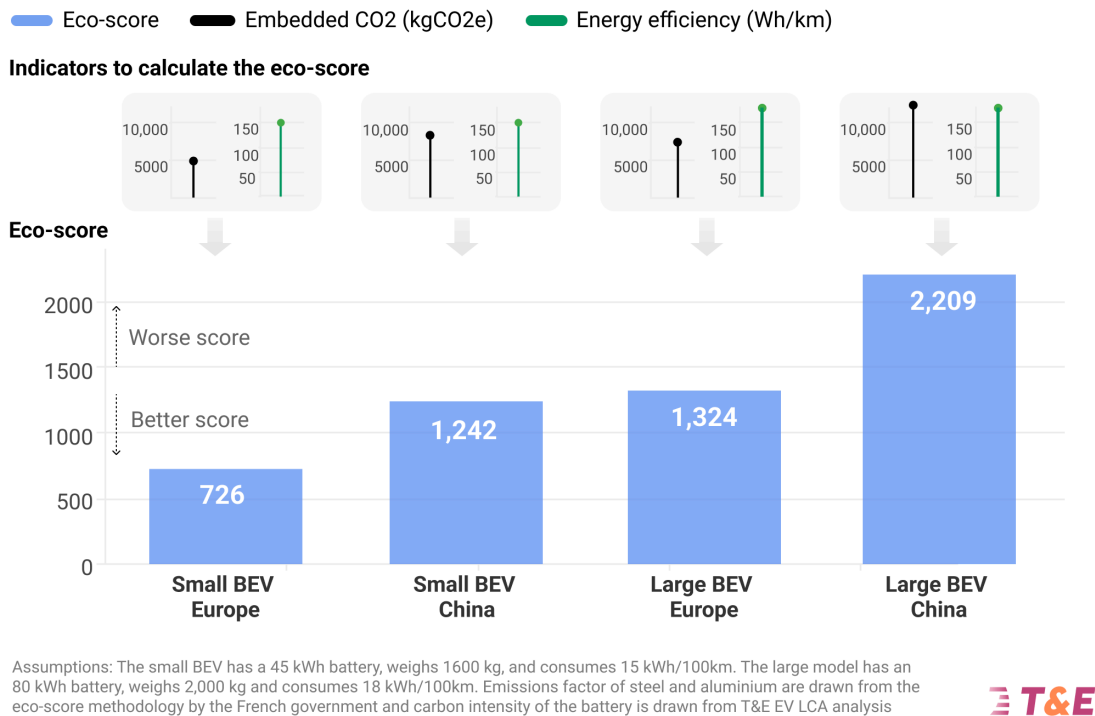


Figure 7. Example of results of the proposed EV environmental score

The proposed environmental score could also replace and streamline the current and future individual requirements on the carbon footprint of the different vehicle components and materials. In particular, this could harmonise the requirements on the battery carbon footprint requirements (as required by the EU battery regulation), with potential future green steel or green aluminium requirements, and merge them into one initiative.

2.4.3 Standardisation of the EU car label

At present, there is no standardised European car label¹⁷, which is required to display the fuel consumption and CO2 emissions of a car at the point of sale. This has resulted in significant variation in Member States on the design of the label, the information provided to consumers and the metrics used¹⁸. This brings with it significant and unnecessary reporting complexity for carmakers which must meet the different reporting requirements on the label across Member States offering significant scope for complexity reduction via standardisation across Europe.

Given the current complexity and divergence of the different vehicle reporting initiatives, T&E recommends to:

- Standardise the EU car label across the EU to make it fit for the single market, e.g. via turning the current EU car label directive into the regulation and developing a standardised EU car label. This will reduce reporting complexity for carmakers by providing one reporting format across all 27

¹⁷ Car Labelling Directive (1999/94/EC)

¹⁸ Gary Haq, Martin Weiss. (2016) "[Car CO2 labelling of passenger cars in Europe: Status, challenges and future prospects](#)." *Energy policy*.

Member States and ensure consumers across the EU are given equal access to the same information and in the same format when purchasing a vehicle.

- In addition, the requirements from the different vehicle reporting initiatives (digital passports, etc) should be merged into one coherent digital reporting requirement.

2.5 Recycling and material sustainability

2.5.1 Recycling

For a large consumer market like the EU, recovering materials from end-of-life products - be it cars, batteries or wind turbines - is one of the best ways to secure critical minerals resiliently and sustainably. Similarly, as Europe scales battery gigafactories and other cleantech facilities, the manufacturing scrap (as we go through the learning curve) represents an additional valuable stream of minerals. T&E estimates that 30% of our cobalt needs, 18% of nickel and 10% of lithium and manganese can come from recycling streams by 2035. However, getting there requires a significant ramp up of almost 25 times the capacity of 2023 in battery recycling (material recovery) facilities across the Union, as the current capacity is nowhere near the volumes coming on stream even by 2030.

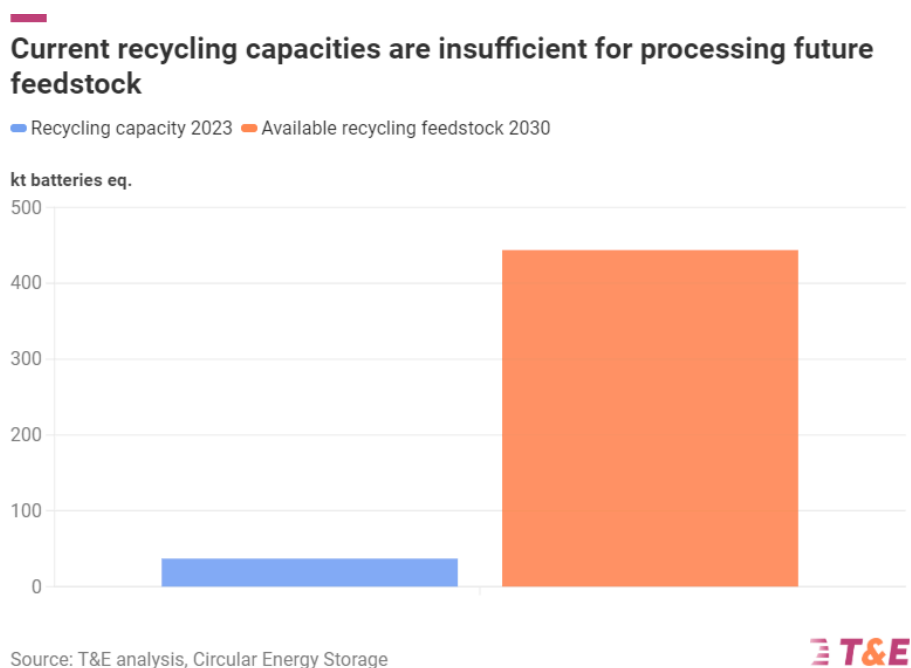


Figure 8. Current material recovery capacities compared to future recycling feedstock

The much needed ramp up can, however, be hindered by a lack of a single market and clear harmonised rules across the member states. As the Letta report points out: “The absence of circular economy principles in the investment strategies and operational practices across the Single Market would perpetuate a linear economic model that is inherently unsustainable and inefficient.” For example, there is no single definition of what constitutes a waste battery, with classifications of black mass - a critical recycling stream following battery shredding - differing across the member states. Similarly, despite some effort, seamless transportation of end-of-life batteries (or black mass) across the borders is not always straightforward and often administratively complex. At the same time, with more and more product legislation requiring recycled content (e.g. batteries, steel, plastics) or relying on product

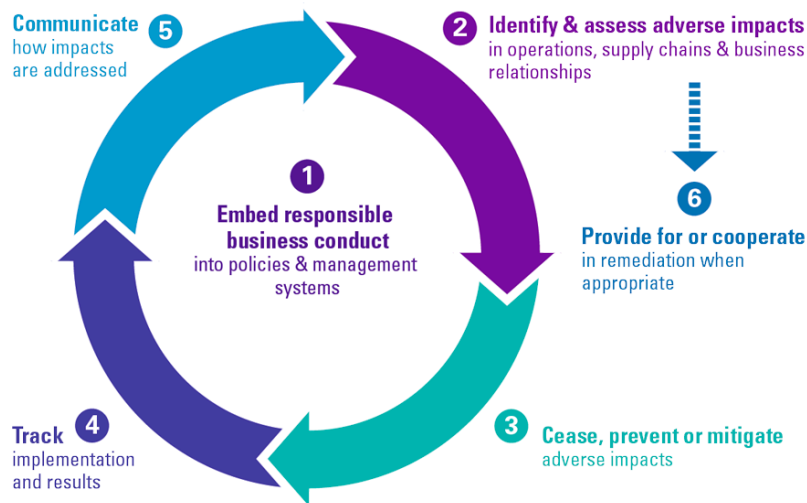
passports, harmonised standards on what constitutes a good quality recycled material is equally missing.

Given how critical recycling can be, not only for our sustainability, but also our industrial objectives, the EU should create a truly Single Market for Recycling, which includes the following actions:

- Put in place a harmonised definition of waste criteria, including definitions of waste, by-products, and waste shipment classifications across the single market, i.e. when a product is no longer fit for use, and ensure all national authorities and recyclers adhere to it correctly. This will enable legal certainty, and therefore investment.
- Quickly implement the Shipment of Waste Regulation, and simplify the waste transportation rules as much as possible across the member states. The EU should consider choosing a few geographically dispersed recycling clusters (to get critical mass in terms of scale and feedstock) and enable simple administrative and cross-border waste passage towards those.
- Different industries need varying quality standards for use of recycled products, e.g. lower grades of scrap steel are required in the construction industry often compared to the higher purity grades needed in many automotive applications. No quality standards, or “nomenclature” of different recycling grades (e.g. in terms of contamination thresholds, etc) exist currently. Creating such a nomenclature could allow recyclers to specialise and create better partnerships with the downstream industry, e.g. carmakers, to design recycled products based on specifications while achieving necessary scale.
- More broadly, a larger scale and level playing field for circular materials must be ensured throughout EU policy, aided by standardised and reliable information provided through digital product passports. The various product passports that have either been adopted or proposed - e.g. at battery and vehicle level - should be merged into one digital infrastructure with interoperable data exchange. For scale, recycled content requirements in new products, based on a simple and harmonised methodology, should become the norm - e.g. for steel, aluminium and plastics for new vehicles.

2.5.2 Due diligence of supply chains

The product supply chains, from mining the raw materials to processing them into finished products and recycling at the end of life, are currently globally, intertwined and, often, opaque. A lot of extractive industries in particular, from oil to gas to minerals, are exposed to social and environmental risks such as waste spillage or forced labour. This is why the EU has spent the last few years putting in place due diligence obligations to require final product manufacturers to trace and mitigate risks across their supply chain. The due diligence provisions in the EU Battery regulation covering battery minerals in particular are the global best practice and must be swiftly implemented. In addition, a horizontal Corporate Sustainability Due Diligence Directive (CSDDD) was recently agreed, requiring human rights action in particular, is an important instrument, giving many EU companies with higher ESG mindset, a competitive advantage.



However, there has been a lot of criticism from companies as to the complex reporting nature of such due diligence provisions, notably CSDDD, especially given the existence of a number of national and European laws targeting the same topic.

Given the criticality to ensure responsible and sustainable supply chains, revoking or weakening the due diligence requirements any more is unacceptable. However, some harmonisation in terms of reporting and compliance obligations can be considered, notably:

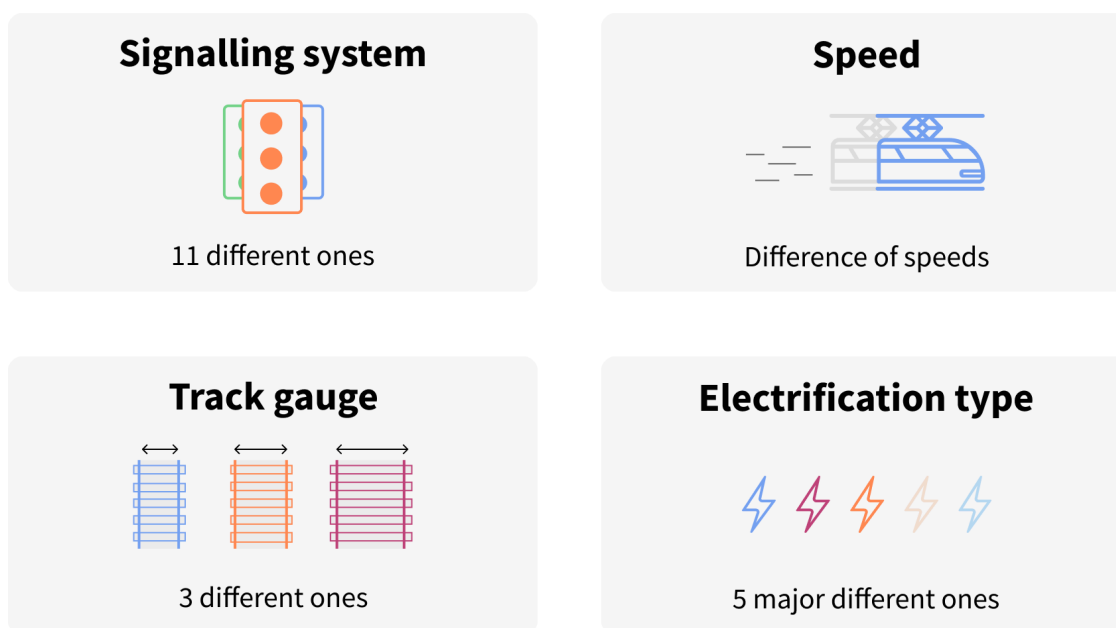
- Aligning the reporting obligations under the French, German and European due diligence laws, ensuring the companies should only be required to submit the similar information once.
- Simplify the ecosystem of EU reporting obligations without weakening the requirements themselves. E.g. the reporting on the relevant due diligence aspects for both the EU Battery regulation and CSDDD should be merged, with the additional requirements reported on top as per the EU battery regulation rules. However, the due diligence implementing measures under the Battery regulation should not be downgraded to align with a significantly weaker CSDDD.
- As much as possible, the reporting of data should be done online, via a single digital platform and in a unified data format. Interoperability of different digital systems should be assured.

2.6 Rail

The rail network is key to the single market as it allows to better connect Member States between each other to the benefit of people that can enjoy smooth cross-border journeys travelling with the most sustainable transport mode: a train. The EU has enacted the *Single European Railway Area Directive 2012/34/EU (SERA)* to improve the rail network, increase the offer and reduce the price. But today European rail is underperforming.

Europe's rail interoperability challenges

The four main technical barriers are:



Source: Open rail way map



Figure 9. Europe's rail interoperability challenges

As Enrico Letta's report points out, the rail network was built at national level so it is not surprising that there are major interoperability issues. European rail suffers from the fragmentation of markets and infrastructure, the persistence of monopolies and technical barriers. The four main technical barriers are: the different signalling systems in Europe (11 different ones), the difference of speeds, the different track gauges (3 different ones) and the different electrification types (5 major different ones).

To reach the goals of the Single Market, of the Single European Railway Area Directive, of the TEN-T Regulation and to double high-speed traffic by 2030 and triple it by 2050, increased investments and rapid harmonisation of technical standards and regulations are needed.

T&E proposes the 5 following key actions:

- The European Railway Agency is understaffed and does not have the mandate to achieve the SERA, key to the rail single market. It needs to become the centralised European agency for monitoring and enforcing the objectives of the SERA and of the TEN-T Regulation. It must have more powers to fast-track the roll-out of rail infrastructures and rolling stocks and organise cross-border flows. It should have the power to impose penalties in case of delays in building the rail infrastructure.
- A European approach to tax incentives is needed. A reduction of rail tolls (track access charges) and an exemption from VAT for international rail will attract private investors and kick-off the offer, including for night trains. While international aviation enjoys an exemption of VAT, international rail does not. It depends on each Member State to decide the level of VAT on international rail tickets.

- The rail slots allocation is first defined in each Member State for their national journeys. As a result, when international journeys must be planned, incompatibility issues arise between the timetables of the different countries due to a lack of coordination. International journeys should be the first to be planned, then national ones.
- It is easy to book a cross-border plane ticket. It isn't for rail. The EU must harmonise the rules on selling transport tickets in order to have a level-playing field between all transport operators and all ticket platforms. The EU needs to force rail operators to fairly communicate their train offer inventory to enable booking platforms to sell rail journeys and single multi-modal tickets (MDMS Regulation), ending monopolistic behaviour in the distribution of tickets.
- The EU single rail market will not happen without additional investment. But the public financing will not be sufficient, so the EU needs to prioritise certain types of investments that will be the most beneficial to reduce GHG emissions by 2040 (e.g. maintenance of the existing infrastructure and its harmonisation, especially the roll-out of the ERTMS signalling system allowing to increase capacity on existing tracks). The process to receive funding from the Connecting Europe Facility must also be simplified to accelerate the construction of the infrastructure.

3. Conclusions

As policy-makers and businesses are turning to putting the European Green Deal into practice, scaling clean technologies and their supply chains quickly and sustainably amidst fierce global competition is the EU's next big task as demonstrated by the Letta report on the EU single market.

T&E believes that at least 10 actions in the area of climate reporting and funding, grids & energy, rail, as well as electric vehicles and materials that go into them can accelerate the decarbonisation of transport across the member states.

1. Merge 12 of the currently standalone national energy and climate plan requirements into the single National Energy and Climate Plans (NECPs) to alleviate administrative efforts and ensure consistency across interacting policy measures and impacts.
2. Simplify the sustainability reporting under both the CSRD and CSDDD frameworks without undermining its core objectives which are also a competitive advantage of European companies globally. Notably key performance indicators under EU Taxonomy Regulation, the CSRD, and the Sustainable Finance Disclosure Regulation should be harmonised as much as possible.
3. Simplifying the current matrix of EU and national funding instruments by creating a single EU rulebook of application procedures, merging pots of money where they focus on the same sector (e.g. batteries or green hydrogen for shipping and aviation) and making funding predictable and output-based. IPCEI's are too complex and should be replaced in favour of more Innovation Fund money.
4. Standardising and simplifying distribution grid permitting and connection approval procedures across the member states to accelerate connection of net zero technologies.
5. Building a recycling single market by harmonising waste product definitions, creating recycling quality standards, restricting battery exports and simplifying transportation rules to create scale and investment.

6. Empowering the European Railway Agency to implement the Single European Railway Area Directive and the TEN-T Regulation to fast-track the harmonisation and modernisation of the rail network.
7. Harmonising rail taxation rules in Europe (VAT and Track Access Charges) to incentivise the creation of international rail connections.
8. Merging the various vehicle material carbon requirements into one single EU vehicle “ecoscore” to accelerate green steel and aluminium investments, and standardising car labels across national markets.
9. Help address the discrepancy in the sales of electric vehicles across the member states by proposing a Clean Corporate Fleets Regulation to electrify large fleets by 2030 (replacing the Clean Vehicles Directive).
10. Ensure comprehensive implementation of EU green hydrogen and hydrogen-derived fuels provisions via a robust carbon footprint methodology (as done for batteries) and clear environmental and human rights due diligence obligations.

The EU governments should rightly turn to the effective implementation of the European Green Deal, including its clear car, truck, as well as aviation and maritime fuel provisions. But this does not mean deregulation; instead closing a number of regulatory gaps - while simplifying some of the reporting frameworks around current laws - can help the Union supercharge its green ambition, scale the new clean industries and boost its Single Market.

Further information

Julia Poliscanova

Senior Director

Transport & Environment

julia.poliscanova@transportenvironment.org