

# Phasing-out sales of internal combustion engine vehicles

Scoping study by Milieu for Transport & Environment

## Final report



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This report was prepared by Milieu Consulting SPRL for Transport & Environment. The views expressed in this report are those of the consultants alone and do not claim to represent the views of Transport & Environment. The report was written by Max Kemp, Marta Ballesteros and Sarah O'Brien.

**Milieu Consulting SPRL**, Chaussée de Charleroi 112, B-1060 Brussels, tel.: +32 2 506 1000; e-mail: [sarahobrien@milieu.be](mailto:sarahobrien@milieu.be); web address: [www.milieu.be](http://www.milieu.be).

# Scoping study

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	Methodology.....	2
<b>2</b>	<b>ANALYSIS.....</b>	<b>4</b>
2.1	Legal scope for national sales or registration bans.....	4
2.1.1	Rules governing the interaction between EU and national legislation .....	4
2.1.2	Relevant EU legal framework for motor vehicles .....	5
2.1.3	Planned national sales or registration bans .....	6
2.1.4	Compatibility with Article 114(5) TFEU .....	7
2.1.5	Conclusion .....	9
2.2	Other phase-out measures.....	10
2.2.1	Measures at EU level.....	10
2.2.2	Measures at Member State level.....	13
2.3	Feasibility of European Commission guidance on ICE Phase-out .....	21
<b>3</b>	<b>COMPARING THE POTENTIAL ICE PHASE-OUT MEASURES .....</b>	<b>22</b>

# 1 INTRODUCTION

The objective of this study is to provide a first assessment of the legal scope for EU or national measures to phase-out ICE vehicles and to identify issues where legal uncertainty remains and further investigation is needed. At national level, it examines whether it is possible for Member States to derogate from the harmonised framework for motor vehicle approval in order to adopt ICE sales or registration bans under the exception provided by Article 114(5) TFEU. It also examines whether such bans could constitute measures of equivalent effect to quantitative restrictions under Article 35 TFEU.

Vehicles with internal combustion engines (ICE) currently represent the most prevalent form of road transport but their emissions have significant impacts on the environment and health. The transport sector represents more than a quarter of Europe's greenhouse gas emissions, with over 70% of transport emissions coming from road transport<sup>1</sup>. ICE vehicles are also key sources of air pollution, such as particulate matter (PM) and nitrogen oxides (NOx)<sup>2</sup>.

In response to these concerns, a number of national and local governments around the world have in the last few years begun to announce measures to phase-out ICE vehicles.

In Europe, authorities in the United Kingdom, France, Germany, Ireland, the Netherlands and Norway have declared their intention to implement bans on the sale or registration of new ICE vehicles with starting dates ranging from 2030 to 2040. Moreover, many countries have already adopted purchase or tax incentive programs for electric vehicles (EV): 24 Member States currently offer some form of tax incentive, while 12 offer bonus payments or premiums to buyers<sup>3</sup>.

Since the Dieselgate scandal in 2015, city governments have increasingly used their powers to promote clean mobility and remove ICE, and particularly diesel, vehicles from circulation in an effort to combat air pollution. Bans on some older diesel vehicles are already in effect in Hamburg, Madrid, and Paris, with the latter two planning to ban all diesel passenger vehicles by 2024. Such diesel bans are due to come into effect within the next decade in 24 cities, including 6 which intend to ban ICE vehicles altogether in city centres by 2030<sup>4</sup>.

However, measures banning the sale of ICE vehicles raise questions as to their compatibility with EU internal market rules, which aim to facilitate trade within the EU. The conditions under which motor vehicles can be placed on the market in the EU have been harmonised through the EU's internal market competence under Article 114 TFEU. Therefore, in principle any vehicle meeting the requirements of the Type Approval Framework set up by Directive 2007/46/EC should be able to be sold anywhere in the EU. A national sales ban would prevent this. Exceptionally, Member States can derogate from fully harmonised provisions on environmental grounds, if the conditions of Article 114(5) are met. This entails notifying the Commission of the measure and showing that it is based on new scientific evidence relating to the protection of the environment or the working environment on grounds of a problem specific to that Member State arising after the adoption of the harmonisation measure.

Other kinds of measures concerning ICE vehicles, such as local driving bans, tax incentives or purchase bonuses for EVs, do not appear to be obviously problematic in terms of internal market rules;

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<sup>1</sup> European Environment Agency, 2019, Greenhouse gas emissions from transport, <https://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-greenhouse-gases/transport-emissions-of-greenhouse-gases-12>

<sup>2</sup> European Environment Agency, 2019, *Air quality in Europe*, <https://www.eea.europa.eu/publications/air-quality-in-europe-2019>

<sup>3</sup> ACEA, 2019, *Electric vehicles: tax benefits & incentives in the EU*. Available at <https://www.acea.be/publications/article/overview-of-incentives-for-buying-electric-vehicles>

<sup>4</sup> C40 Cities, *Green and Healthy Streets, Fossil-Fuel-Free-Streets Declaration, Planned Actions to Deliver Commitments*. Available at [https://c40-production-images.s3.amazonaws.com/other\\_uploads/images/1426\\_G\\_HS\\_160919.original.pdf?1f568791841](https://c40-production-images.s3.amazonaws.com/other_uploads/images/1426_G_HS_160919.original.pdf?1f568791841)

nonetheless, there may still be legal or policy barriers to these measures. There are also the possibility that bans targeting particular segments of the automotive market, such as heavy-duty vehicles, company vehicles, or taxis, raise particular legal issues. These questions warrant further investigation.

Given the issues outlined above, it is key for any ICE phase-out measures to be designed and implemented in a way that does not contravene internal market rules to ensure that they are able to withstand legal challenges. This study provides a preliminary assessment of the feasibility and effectiveness of national or EU measures aiming to phase out ICE with the purpose of protecting the environment taking into account the requirements of Article 114(5) TFEU and the relevant jurisprudence. Furthermore, the analysis of the relevant measures will consider the subsidiarity and proportionality principles in reaching the environmental objectives.

## 1.1 METHODOLOGY

The methodology followed for this assessment is mainly based on desk research to answer the questions to be addressed in the study. This work used predominantly legal research, using key sources such as relevant TFEU provisions and related case-law and academic writing or EU legislation. Our understanding of each of the research questions is outlined below.

- 1) What is clear and what is not under the EU internal market rules as regards to national ICE phase-outs, and what are the key uncertainties?

This question is understood as an overarching question on the state of legal certainty for the different issues addressed in the study. It has therefore been addressed in conclusion boxes, drawing on the findings of the other questions answered.

- 2a) What types of measures at EU, national or local level can be most appropriate to achieve ICE phase-out from the EU-wide vehicle market, if any? Are market-wide performance-based requirements (e.g. CO<sub>2</sub>) for new sales a better legal course than placing restrictions on specific vehicle classes and technologies?

This question is understood as requiring an examination of the subsidiarity and proportionality of different regulatory options in order to achieve EU-wide ICE phase-out.

- 2b) What specific criteria would these measures have to fulfil in order to be compatible with the rules of the EU internal market?

This question is addressed by presenting the criteria that Member State measures must fulfil to be found compliant with internal market rules under the TFEU and the relevant case law of the Court. In particular, the following points are considered: The criteria needed to meet the exception in Article 114(5) TFEU relating to the introduction by a Member State of legislation derogating from an EU harmonised measure; The conditions under which a measure can be considered as having equivalent effect to a quantitative restriction under Article 35 TFEU, and the exceptions to the prohibition under Article 36 TFEU and the Cassis de Dijon doctrine.

- 3) What are the legal differences between national ICE phase-out and restriction on movement (e.g. LEZ) and national ICE phase-out and more local ICE phase-out?

This question is addressed by considering the legal requirements applicable to national ICE vehicle sales or registration bans or restrictions on movement on the one hand, and national ICE sales or registration bans and local bans on use on the other.

- 4) What other measures (e.g. taxes, advertisement bans or other measures with an indirect but equivalent effect) could be proposed in order to limit the sales of ICE vehicles with the aim of achieving a carbon neutral transport sector?

This question is answered by identifying and assessing potential measures other than sales or registration bans which could have the effect of limiting sales of ICE vehicles and contribute to achieving carbon neutrality in the transport sector.

The work on this question involved a brief assessment of the feasibility and potential effectiveness of the range of policy instruments available to policy-makers (EU, national, regional) with the goal of reducing CO<sub>2</sub> and air pollutant emissions from vehicles. These measures could include legislation that target the design, marketing, sale, registration or use of vehicles (e.g. vehicle bans and standards, or restrictions on circulation of ICE vehicles, advertising restrictions). Equally, the instruments may be non-legislative measures, which often target the users of vehicles, including pricing instruments (e.g. taxes on fuels or vehicles, tax incentives for vehicle ownership, subsidies and rebates, road pricing) and information and educational measures (e.g. improved consumer information through labelling or other measures).

- 5) What legal means does the EU have to require certain market segments or groups of users (e.g. private hire vehicles or corporate fleets) to use zero-emission vehicles? Are EU-level regulations in this field feasible?

This question is understood as requiring examination of the legal competence of the EU to legislate in order to impose the use of zero-emissions vehicles for certain categories of vehicle users or sections of the market. This involved determining whether such legislation could fulfil the conditions of subsidiarity and proportionality. It would also involve reviewing lessons from existing EU legislation containing environmental requirements for certain operators in the transport sector and/or automotive market (e.g. the Eurovignette Directive and the Clean Vehicles Directive).

- 6) Would different considerations apply to light duty vehicles (cars and vans) and heavy-duty vehicles (trucks, buses and coaches)?

This study addresses this question by examining whether different requirements would apply to light- or heavy- duty vehicles with regards to ICE phaseouts in terms of compatibility with internal market rules.

- 7) Is it feasible for the European Commission to give harmonised guidance in relation to the national ICE phase-outs that could give some indicators to MS how to address national ICE phase-out, or does every individual national measure have to be evaluated and approved on a case by case basis?

This question is addressed by examining whether the European Commission could issue a guidance document for Member States on how to design legally compliant ICE phase-out measures, or whether it is required to evaluate and approve each measure individually.

## 2 ANALYSIS

### 2.1 LEGAL SCOPE FOR NATIONAL SALES OR REGISTRATION BANS

This section analyses to what degree of legal certainty it would be possible for Member States to adopt sales or registration bans for internal combustion engine (ICE) vehicles at the national level. It first examines the rules governing the interaction between EU and national law, so as to determine under what conditions Member States can adopt measures where EU measures have been adopted. It then examines the relevant EU legal framework as well as the measures envisaged at national level, and analyses to what extent they are compatible.

#### 2.1.1 Rules governing the interaction between EU and national legislation

The respective scope for Member State or EU legislative action is determined by the field of competence concerned as established under the EU Treaties. Indeed, different rules apply according to whether the legislation in question falls within one of the areas of exclusive competence listed under Article 3 of Treaty on the Functioning of the European Union (TFEU), or shared competence (Article 4 TFEU) of the EU. For exclusive competence, only the EU may legislate, whereas for shared competence the Member States retain the possibility to legislate if the EU has not acted in this area. Measures such as sales or registrations bans for ICE vehicles would be of relevance to the internal market or the environment, which fall within the policy areas of shared competence.

In areas which are not within the exclusive competence of the EU, the principle of subsidiarity applies requiring the Union to act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level and by reason of the scale or effects of the proposed action can be better achieved at Union level. In those cases, the content and form of Union action should be proportionate to achieve the objectives of the Treaties (Article 5 Treaty of the European Union, TEU).

Once the EU has acted within the field of shared competence, the margin of action left to Member States depends on the scope and degree of harmonisation intended by the EU measure. If the EU exercises its shared competence to regulate a certain area with an EU measure, there is little discretion left for the Member States to legislate on it.

In the internal market sphere of competence, the adoption of EU measures aiming at total harmonisation is not uncommon, given that it is sometimes the best way of avoiding market distortions. However, the Treaties provide for the possibility for Member States to exceptionally derogate from fully harmonised provisions on certain grounds, including health or environmental, if the conditions of Article 114(5) are met. This entails notifying the Commission of the measure and showing that it is based on new scientific evidence relating to the protection of the environment or the working environment on grounds of a problem specific to that Member State arising after the adoption of the harmonisation measure.

The EU may also only partially harmonise an issue within a policy area of its competence, for example by regulating some products, but not all of a certain type. It may also provide for minimum harmonisation, setting standards at EU level but allowing for more stringent standards to be set at national level. Union environmental legislation based on Article 192 TFEU is a good example of this last kind of harmonisation. Since the goal pursued here is to ensure optimal preservation and improvement of the quality of the environment, it makes sense to enable Member States to apply stricter standards, if they want to. Indeed, this possibility is enshrined in Article 193 TFEU, on the condition that the measures are compatible with the Treaties and be notified to the Commission.

The Treaty legal basis under which a harmonising measure is adopted is therefore crucial with regards to the way in which derogating measures will be evaluated. Of course, many harmonising measures will

pursue both internal market and environmental objectives. In this case, the legal base will depend on the ‘centre of gravity’ of the harmonising measure, meaning which of the two objectives is dominant within the provisions contained in the measure. If the balance is even slightly tipped to the side of the internal market provisions or environmental provisions, then the entire harmonising measure will take that legal basis, and any derogating national measure will have to fulfil the corresponding criteria in either Article 114(5) TFEU or Article 193 TFEU<sup>5</sup>.

## 2.1.2 Relevant EU legal framework for motor vehicles

The rules governing market access of vehicles have been harmonised at EU level by Directive 2007/46/EC<sup>6</sup> (the Framework Directive) under the internal market policy. This instrument defines the requirements and procedures for vehicle **type approval**, so as to ensure that vehicles put on the market provide a high level of road safety, health protection, environmental protection, energy efficiency and protection against unauthorised use<sup>7</sup>. Vehicle manufacturers therefore have to apply for type approval in order to demonstrate conformity with a certain number of requirements set out in various regulatory acts, regarding safety (e.g. lights, brakes, crashworthiness, pedestrian protection), the environment (e.g. emissions, sound levels, fuel consumption), and specific parts (e.g. seatbelts, windscreen wipers, seats). These requirements are listed in Annexes IV and XI of the Framework Directive along with the corresponding legal acts. The Framework Directive has recently been repealed by Regulation 2018/858 following a similar objectives and structure.

Concerning pollutant emissions standards, the requirements for **type approval** are contained in Regulation 715/2007<sup>8</sup> for light passenger and commercial vehicles, and in Regulation 595/2009 for heavy-duty vehicles<sup>9</sup> under internal market policy. These instruments set emissions standards for certain pollutants such as nitrogen oxides or particulate matter, with the aim of improving air quality, and empower the Commission to adopt test procedures in order to measure emissions.

Member States are prohibited from refusing type approval or preventing the sale, registration or entry into service of new vehicles meeting the requirements of the Type Approval framework and the legal acts under it where the vehicle concerned complies with those requirements, as this area is fully harmonised at EU level<sup>10</sup>.

However, it should be noted that although CO<sub>2</sub> emissions are measured as part of the type approval test<sup>11</sup>, this is done for information purposes only as there is no limit value set for CO<sub>2</sub> in the Type Approval requirements<sup>12</sup>. Instead, for cars this information feeds into Regulation 443/2009<sup>13</sup> (the Cars CO<sub>2</sub> Regulation), and Regulation 510/2011<sup>14</sup> for vans, which are based on environmental policy legal

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<sup>5</sup> L. Kramer, 2016, *EU Environmental Law*, Sweet & Maxwell, p. 123

<sup>6</sup> Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive)

<sup>7</sup> See Recital 3 of Directive 2007/46

<sup>8</sup> Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information

<sup>9</sup> Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC

<sup>10</sup> See Recital 2 and Article 4 of Directive 2007/46 as well as Article 10 of Regulation 715/2007 and Article 8 of Regulation 595/2009

<sup>12</sup> See Annex I of Regulation 715/2007 and Regulation 595/2009

<sup>13</sup> Regulation (EC) no. 443/2009 of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles.

<sup>14</sup> Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles

basis and set fleet-wide emissions limits for CO<sub>2</sub> for manufacturers concerning new vehicle types. For each manufacturer, the CO<sub>2</sub> emissions measured at type approval for cars and vans covered by the legislation are collected by the Member States for each car registered on their territory. This data is then sent to the Commission, which verifies whether the average emissions for each manufacturer are below the limits sets by the respective Regulations. The post-2020 limit values have recently been adopted under Regulation (EU) 2019/631<sup>15</sup>, which replaces the respective regulations for cars and vans as of 1 January 2020. For heavy-duty vehicles, fleet-level standards have recently been set by Regulation (EU) 2019/1242<sup>16</sup>.

The Cars CO<sub>2</sub> Regulation (and its update) discourages Member States from maintaining or adopting measures imposing additional or stricter penalties on manufacturers who fail to meet the required CO<sub>2</sub> limits<sup>17</sup>. However, unlike the Type Approval rules, which are adopted on the internal market legal basis (Article 114 TFEU), the Cars CO<sub>2</sub> Regulation takes environment as its legal base (Article 192 TFEU). Measures adopted under Article 192 TFEU are usually considered to pursue minimum harmonisation, and Article 193 TFEU provides the possibility for Member States to go beyond the harmonised requirements in this area. However, this must nevertheless be done consistently with the Treaties, and in particular with regard to internal market rules.

### 2.1.3 Planned national sales or registration bans

National sales or registration bans have been officially announced in a number of Member States in the last few of years. In 2017, Norway (which as an EEA member takes part in the Single Market) adopted the goal that all new cars sold by 2025 should be zero-emission vehicles (electric or hydrogen), equating to a sales ban on all ICE vehicles by that date<sup>18</sup>. The Netherlands have also set a similar target for 2030<sup>19</sup>, as well as Ireland<sup>20</sup>, while Scotland aims to achieve this by 2032<sup>21</sup>, and Britain<sup>22</sup> and France<sup>23</sup> by 2040. It should be noted that these targets are mostly only laid out in strategic documents and do not have legal force. The French target was however formally adopted on 19 November 2019, setting into law the objective of ending sales of passenger cars and light commercial vehicles using fossil fuels by 2040<sup>24</sup>. No plans have currently been announced to ban ICEs for heavy-duty vehicles.

These proposed measures all pursue goals related to achieving climate objectives or improving air quality, similarly to Regulation 715/2007 or the Cars CO<sub>2</sub> Regulation. The question is therefore whether

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<sup>15</sup> Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO<sub>2</sub> emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011

<sup>16</sup> Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO<sub>2</sub> emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC

<sup>17</sup> See Recital 28 of Regulation 443/2009 and Recital 46 of Regulation 2019/631

<sup>18</sup> Norwegian Ministry of Transport and Communications, *Meld. St. 33 (2016–2017) Report to the Storting (white paper) National Transport Plan 2018-2029*, p. 30. Available at:

<https://www.regjeringen.no/contentassets/7c52fd2938ca42209e4286fe86bb28bd/en-gb/pdfs/stm201620170033000engpdfs.pdf>

<sup>19</sup> Rijksoverheid, 2017, *Regerakkoord 'Vertrouwen in de toekomst'*, p. 39

<sup>20</sup> Government of Ireland, 2019, *Climate Action Plan 2019 To Tackle Climate Breakdown*, p. 7. Available at <https://static.rasset.ie/documents/news/2019/06/climate-action-plan.pdf>

<sup>21</sup> Transport Scotland, 2019, *National Transport Strategy: Protecting our Climate and Improving Lives – Draft for Consultation*, p. 7. Available at: <https://www.transport.gov.scot/media/45149/national-transport-strategy-draft-for-consultation-july-2019.pdf>

<sup>22</sup> United Kingdom Department for Transport, 2017, *UK plan for tackling roadside nitrogen dioxide concentrations*, London: Crown, p. 4. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/633269/air-quality-plan-overview.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633269/air-quality-plan-overview.pdf)

<sup>23</sup> République Française, Ministère de la transition écologique et solidaire, Transports, 2018, *Projet de loi d'orientation des mobilités*, p.14

<sup>24</sup> Vie Publique, *Le projet de loi mobilités*, last updated on 27 November 2019: <https://www.vie-publique.fr/loi/20809-loi-mobilites-lom-projet-de-loi-dorientation>

these measures or similar ones can be considered an access to market restriction that would derogate from the fully harmonised provisions of the Type Approval framework, in which case they would have to fulfil the criteria of Article 114(5) TFEU, or instead only to the requirements of the Cars CO<sub>2</sub> Regulation, in which case Article 193 TFEU would apply. As no measures have been proposed by Member States for heavy-duty vehicles, the analysis will focus on cars and vans, but given the similarity of the legal frameworks, the same conclusions should apply.

It could be argued that an ICE ban does not derogate from the Type Approval framework, since the main objective of such a measure would be to reduce CO<sub>2</sub> emissions from passenger vehicles, and CO<sub>2</sub> emissions limits for individual cars are not included in the Type Approval requirements (apart from mandatory recording/information provision in certificates of conformity). However, a sales or registration ban for ICE vehicles is not as such a requirement on CO<sub>2</sub> emissions, but rather a technical requirement making market access conditional on the use (or non-use) of a specific propulsion technology. As such a measure would prevent market access for vehicles that would otherwise meet the Type Approval requirements, it would appear difficult to consider that it would not constitute a derogation from these rules. Indeed, this would go against Article 4 of the Framework Directive and Article 10 of Regulation 715/2007 which prohibit Member States to refuse the granting of type approval or registration where the vehicle complies with the relevant rules (...) *on grounds related to aspects of their construction and functioning covered by this Directive*, if they satisfy the requirements of the latter’.

Member States wishing to introduce measures formulated in a way which impacts upon the Type-Approval requirements would have to pass the hurdle of Article 114(5) TFEU, and the analysis will therefore be continued on this basis. However, whether Member States could introduce CO<sub>2</sub> standards at the national level as an additional measure to the Type Approval requirements is a different question, which will be examined below (section 2.2.2).

#### **2.1.4 Compatibility with Article 114(5) TFEU**

As mentioned above, Article 114(5) TFEU provides for the possibility for Member States to introduce national measures derogating from harmonised rules under the EU’s internal market competence in order to pursue goals relating to the protection of the environment or the working environment. An ICE vehicle ban would certainly be considered to pursue environmental goals.

These measures must meet the following three cumulative criteria:

- The new national measure must be based on new scientific evidence
- The problem must be specific to the Member State that wishes to introduce the measure
- The problem must have arisen after the adoption of the harmonising measure

Whether these conditions are fulfilled is assessed by the European Commission, which must be notified of the derogating national measure.

##### **2.1.4.1 New scientific evidence**

As all EU legislation must already, according to Article 114(3) TFEU, take into consideration ‘any new development based on scientific facts’, this scientific evidence must arise after the adoption of the harmonised rule. However, scientific evidence which existed at the time, but which had not been fully validated at that point by the scientific community may be admissible<sup>25</sup>. The use of the word ‘evidence’ indicates that it is not necessary to conclusively show proof of a causal relationship between the risk to

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<sup>25</sup> N. De Sadeleer, 2010, *Environnement et marché intérieur*, Editions de l’Université de Bruxelles, p. 437 ; L. Kramer, 2016, *EU Environmental Law*, Sweet & Maxwell, p. 134-135

the environment and the damage, only bring sufficient data to credibly highlight this link<sup>26</sup>.

Evidence concerning the contribution of CO<sub>2</sub> to climate change, and of road transport's role in this regard, has long been known and was certainly already present at the time of the adoption of the Type Approval framework. It is therefore doubtful whether 'new' evidence in this regard could justify the introduction of stricter rules<sup>27</sup>. Moreover, the CO<sub>2</sub> measurement testing procedure applied during type approval, as well as the fleet-level CO<sub>2</sub> limits that these testing procedures serve to inform have received recent updates. Indeed, Commission Regulation (EU) 2017/1151 introduced the WLTP test procedure for the measurement of CO<sub>2</sub> in order to replace the obsolete NEDC cycle and increase its accuracy<sup>28</sup>. As mentioned above, the fleet-level emissions limits have also very recently been updated<sup>29</sup>, with the objective of lowering road transport emissions to the levels required in order to meet the EU's climate target. This revision is specifically linked to the adoption of CO<sub>2</sub> standards for cars sold after 2021 based on the new WLTP test procedure<sup>30</sup>.

On the other hand, recent evidence gathered on behalf of the Commission itself has concluded that, in order for the EU to achieve decarbonisation (net zero emissions) by 2050, which is likely to be required in order to meet the 1.5°C target set by the Paris Agreement, it would be necessary for CO<sub>2</sub> emissions from all new cars to be null from 2040 onwards<sup>31</sup>. In its recent European Green Deal communication, the Commission has also announced its intention to propose legislation by March 2020 enshrining the 2050 decarbonisation target into law and to present a plan by summer 2020 for increasing the EU's 2030 emissions reduction target to at least 50% below 1990 levels<sup>32</sup>. However, as such new legislation has not been proposed yet and its scope and specific objective has not been determined yet, its impact on the possibility for Member States to phase out ICE vehicles will need to be addressed once the proposal is published.

Nevertheless, it can be doubted whether evidence submitted by Member States to justify introducing a sales ban would be considered 'new' by the Commission, given the recent legislative action on type approval or CO<sub>2</sub> standards for cars. Even assuming that the Commission would accept the novel character of such evidence, there remains the issue of specificity.

#### 2.1.4.2 Specific problem

This requirement is often the most difficult of the three to substantiate, and this will especially be the case with regards to a global issue such as climate change, which the ICE vehicle bans would be intended to address, as it necessarily affects all Member States.

It should however be noted that the Commission does not give this condition a strict interpretation: it is

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<sup>26</sup> *Idem*

<sup>27</sup> On this point see L, Kramer, 2016, *EU Environmental Law*, Sweet & Maxwell, p. 135: "To take another example: the continuing global climate problem would not justify a Member State introducing national standards for air emissions from cars which deviate from EU standards; again, this is neither a "new" scientific evidence nor is the problem specific to one Member State alone".

<sup>28</sup> Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Commission Regulation (EC) No 692/2008

<sup>29</sup> Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO<sub>2</sub> emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011

<sup>30</sup> *Ibid.* Recital 14

<sup>31</sup> European Commission, 2018, *In-depth analysis in support of the Commission Communication COM(2018) 773 A Clean Planet for all – A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy*, p. 113

<sup>32</sup> European Commission, 2019, *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal*, COM(2019) 640 final, p.4. Accessible at [https://ec.europa.eu/info/sites/info/files/european-green-deal-communication\\_en.pdf](https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf)

not necessary to demonstrate that the problem that the national measure is designed to address is unique to the Member State adopting it. However, it does require that the Member State show that the problem affects it in some specific way, for example due to certain national characteristics<sup>33</sup>. Indeed, the Court has found that a problem could be specific if it related to a situation which was “unusual”, and not necessarily “unique”<sup>34</sup>.

Regarding ICE bans, a parallel can be drawn with a case in which the Netherlands had submitted measures introducing stricter emissions standards to those applicable under EU law at the time for particulates from diesel. The Commission accepted the more recent studies on the health effects of particulate matter as constituting new evidence. However, after comparing the emissions of particulates and the number of diesels in the Netherlands with that of other Member States, it considered that the health problems caused by diesel particulate emissions were not more acute in the Netherlands than in other Member States<sup>35</sup>.

It is however worth noting that in this case the Court of Justice annulled both the decision of the Court of First Instance and of the Commission, for failure to give reasons<sup>36</sup>. The Court did not address the issue of the specificity of the problem, but in her Opinion for this case, AG Kokott suggested that a problem arising from a breach of EU law, such as of EU air quality legislation by the Netherlands in this instance, should be regarded as specific, as this could not be regarded as a “usual” situation in a legal sense<sup>37</sup>. She therefore considered that in such circumstances, comparison with the situation in other Member States should be irrelevant.

There is therefore some legal scope for Member States to argue that this condition is substantiated by pointing to difficulties they face in complying with air quality and/or climate-related EU legislation.

#### 2.1.4.3 New problem

This condition requires that the effects of the problem that the national measure intends to address only materialise after the harmonised rules have been adopted. A change in a Member State’s environmental policy, for example, would not be sufficient to meet this requirement<sup>38</sup>. Therefore, it again appears doubtful whether an ICE ban with climate objectives would be able to meet this condition.

#### 2.1.5 Conclusion

Fulfilling the three conditions presented above will be challenging for ICE vehicle sales or registration bans at national level, within the current EU legislative framework forbidding Member States to refuse the granting of type approval or registration where the vehicle complies with the relevant rules.

In this regard, it should be noted that Denmark has already put a proposed 2030 ICE vehicle sales ban on hold after the Danish Parliament’s Europe Committee received a letter from EU Internal Market, Industry, Entrepreneurship and SMEs Commissioner Elzbieta Bienkowska advising that such a ban would be contrary to current Union Type-Approval legislation<sup>39</sup>.

The Commissioner however invited Denmark to bring up the matter in Council in order to initiate a debate at EU-level. Denmark responded to the Commissioner’s invitation, and in the Council’s Environment meeting of 4 October 2019 made a proposal, supported by 10 other Member States, calling for possible measures to be examined at national and EU level, including alignment of Single Market

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<sup>33</sup> N. De Sadeleer, *op. cit.*, p. 135-136; L. Kramer, *op. cit.*, p. 438-439

<sup>34</sup> Joined Cases C 439/05 P and C 454/05 P, *Land Oberösterreich v Commission*, paras 65-67

<sup>35</sup> Case T-182/06, *Netherlands v Commission*

<sup>36</sup> Case C-405/07 P, *Netherlands v Commission*

<sup>37</sup> Opinion of Advocate General Kokott in Case C-405/07 P, para. 84

<sup>38</sup> N. De Sadeleer, *op. cit.*, p. 136

<sup>39</sup> E. Bienkowska, letter of 18 December 2018 available at:

<https://www.ft.dk/samling/20182/almdeleu/bilag/68/2063574.pdf>

rules, in order to improve the conditions for phasing out petrol and diesel cars<sup>40</sup>.

Indeed, even though national registration or sales bans seem unlikely, there are no legal barriers to measures being adopted at the EU level, either to impose an EU-wide ban, or to adopt measures imposing CO<sub>2</sub> standards on cars or allowing Member States to derogate from the Type Approval framework for this purpose. This last kind of measure has for example already been adopted in the context of the framework for GMO approval before the product is placed in the market<sup>41</sup>.

### Key Uncertainties

- There is a limited possibility that recent evidence concerning the increasing urgency of the climate crisis, as well as the specific findings concerning the need to decarbonise passenger vehicles by 2040 could be accepted as ‘new’ by the Commission.
- The impact of the new European Climate Law and increased 2030 emissions reduction targets should be assessed once the proposals are published.
- Evidence is also emerging concerning other pollutants from cars which are not currently covered by Type Approval requirements, such as ultrafine particles, soot carbon or organic carbon, which could qualify as ‘new’.

## 2.2 OTHER PHASE-OUT MEASURES

The purpose of this section is to review the legal feasibility of other measures that could be adopted by the EU or Member States to limit the sales of ICE vehicles with the aim of reaching a carbon neutral transport sector. The section first reviews potential measures at EU-level, then reviews potential measures at Member State-level, before providing a preliminary assessment of the potential feasibility and effectiveness and identifying issues for further investigation.

### 2.2.1 Measures at EU level

#### 2.2.1.1 Amending the Type Approval framework

Based on the internal market competence the EU could amend Directive 2007/46/EC and its regulations for the market access of vehicles measures. The new legislation could modify the requirements and procedures for vehicle type approval, either by establishing an EU-level ban of ICE vehicles or introducing a CO<sub>2</sub> emission standard for cars in the Type Approval framework by a certain date or by allowing a derogation from the type approval rules for environmental protection objectives, in particular air quality and CO<sub>2</sub> emissions reduction.

It should be noted that, given that the Type Approval framework is based on Article 114 TFEU, any amendment to it must still be couched in terms of improving the conditions for the internal market. A sunset clause on ICE vehicles could meet this requirement, as it would provide the requisite certainty for manufacturers concerning their production arrangements. Allowing Member States to derogate individually might be more difficult to justify on these grounds, given that it would necessarily distort the internal market for vehicles rather than facilitate it. One could however envisage making this option exclusively open to groups of Member States under Enhanced Cooperation, which allows a group of minimum 9 EU countries to go cooperate more closely on a certain policy area within EU structures.

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<sup>40</sup> Note from General Secretariat of the Council to Delegations, *Transition to a fleet of zero-emission passenger cars – a necessity for a climate neutral EU by 2050 at the latest – Information from the Danish delegation, supported by the Luxembourg delegation*, 12545/1/19 REV 1

<sup>41</sup> Directive 2015/412/EU amending Directive 2001/18/EC as regards the possibility for the Member States to restrict or prohibit the cultivation of genetically modified organisms (GMOs) in their territory

### 2.2.1.2 CO<sub>2</sub> standards

In its European Green Deal communication, the Commission announced its intention to propose a new revision of the CO<sub>2</sub> fleet standards for cars and vans by June 2021, in order to set the course for zero-emission mobility from 2025 onwards<sup>42</sup>. This indicates that the Commission is exploring options for further tightening the CO<sub>2</sub> standards for cars and vans.

### 2.2.1.3 Zero-emission vehicle requirements for specific market segments

In order to promote clean road transport vehicles, the EU's Clean Vehicles Directive<sup>43</sup> requires public institutions to take the life-cycle emissions of vehicles into account in the context of public procurement procedures for their own fleet, as well as public or semi-public ride sharing services. The Directive sets minimum procurement targets for clean light-duty (Table 3 of Annex) and heavy-duty (Table 4 of Annex) vehicles, as a proportion of total vehicles covered by awarded contracts under the two reference periods (2021-2025; 2026-2030).

Noting that the public sector only represents a small share of road transport emissions, recital 23 of the Directive indicates that 'Member States can, in compliance with Union law, decide to impose similar requirements also on private operators and services outside the scope of this Directive, such as taxi, car rental and ride-pooling companies.'

The question could be asked whether such measures concerning specific market segments might also be adopted at EU level. Answering this question would require an examination of the legal base for such a measure, as well as determining whether it would meet the conditions of subsidiarity and proportionality.

As explained above, determining the appropriate legal base depends on the objective of the measure. In this case, the idea would be to regulate certain market segments due to the high mileage they require of road vehicles, and therefore their high levels of emissions, such as corporate fleets or private hire vehicles. A parallel in regulatory logic could for example be drawn here with the Industrial Emissions Directive<sup>44</sup>, which sets emissions limits in installations of a certain size carrying out certain industrial activities, due to their particularly polluting character.

Requirements for private fleets also already exist at EU level in the field of social legislation for commercial road transport, for example under Regulation 561/2006, which requires transport undertakings to ensure that their drivers comply with minimum breaks and rest periods<sup>45</sup>.

One could therefore envisage legislation requiring private operators with a fleet beyond a certain size, or with a high mileage fleet, to ensure that a certain proportion of their vehicles are low- or zero-emissions. Such a measure would presumably take environment as its legal base (Article 192 TFEU), thereby allowing Member States to adopt more stringent standards at national level.

The subsidiarity test involves showing that the EU level is the most appropriate for adopting the kind of measure envisaged, because the objective of the measure cannot be achieved sufficiently by the Member

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<sup>42</sup> European Commission, 2019, *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal*, COM(2019) 640 final, p.11

<sup>43</sup> Directive (EU) 2019/1161 of the European Parliament and of the Council of 20 June 2019 amending Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles

<sup>44</sup> Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

<sup>45</sup> Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85

States and the scale or effects of the proposed action require Union action<sup>46</sup>. Relevant points to consider here would for example be the degree to which the characteristics of these market segments vary across the different Member States, in which case national characteristics would need to be taken into account when proposing the EU legislation or even lead to the conclusion that national action might be more appropriate. Also relevant is the question of whether action at the Member State level alone would create additional challenges or be of limited effectiveness.

Lastly, proportionality requires that the proposed measure not go beyond what is necessary in order to meet its objective.

#### Key Uncertainties

- Further analysis is needed in order to determine whether the subsidiarity and proportionality conditions could be met for EU measures setting emissions requirements for specific vehicle market segments.
- Further analysis is needed on the impact that EU measures imposing CO<sub>2</sub> emissions standards for specific market segments would have on national markets, e.g. with different tax schemes.
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#### 2.2.1.4 EU rules on car labelling

In order to inform consumers of the CO<sub>2</sub> emissions of passenger vehicles and reduce demand, the EU adopted a Directive<sup>47</sup> requiring information about vehicle's CO<sub>2</sub> emissions to be included on a label attached to all new cars, or displayed nearby at the point of sale. This information must also be included in all promotional literature for the vehicle. However, the Directive's evaluation pointed to several issues with regards to its effectiveness<sup>48</sup>.

For example, the lack of harmonised standards for the label has led in some cases to a lack of clarity, limiting the recognition of the label by consumers and therefore the level of awareness. Indeed, in some Member States, no standardised label is required, which leads to variations from manufacturer to manufacturer and makes comparison between different models difficult for consumers. The fact that the requirements relating to promotional literature only apply to print<sup>49</sup> and do not cover online publications has also been highlighted as a major flaw, given the waning relevance of printed media.

It could therefore be desirable to revise this legislation in order to take a more harmonised approach, for example imposing a colour-coded system similar to the EU Energy Label which has been found to be generally clearer for consumers. As costs are a major purchase consideration, the label and literature could also be required to provide information in relation to the running costs (including taxes). The inclusion of used cars – which represent a significant part of the market - within the scope of the legislation, would also serve to increase the Directive's effectiveness<sup>50</sup>.

#### Key Uncertainties

- No specific uncertainties were identified from a legal point of view

<sup>46</sup> European Commission, *Better Regulation Toolbox: Tool #5. Legal basis, subsidiarity and proportionality*, p. 26. Available at [https://ec.europa.eu/info/sites/info/files/file\\_import/better-regulation-toolbox-5\\_en\\_0.pdf](https://ec.europa.eu/info/sites/info/files/file_import/better-regulation-toolbox-5_en_0.pdf)

<sup>47</sup> Directive 1999/94/EC of the European Parliament and of the Council of 13 December 1999 relating to the availability of consumer information on fuel economy and CO<sub>2</sub> emissions in respect of the marketing of new passenger cars

<sup>48</sup> European Commission, 2015, *Evaluation of Directive 1999/94/EC (« the car labelling Directive »)*, p. 119-121

<sup>49</sup> See Article 6 read in conjunction with Article 2(9) of Directive 1999/94/EC

<sup>50</sup> European Commission, 2015, *Evaluation of Directive 1999/94/EC (« the car labelling Directive »)*, p. 119-121

## 2.2.2 Measures at Member State level

### 2.2.2.1 National CO<sub>2</sub> standards - vehicle-level

As demonstrated above, national rules which impact upon the harmonised Type Approval requirements are unlikely to be found compatible with internal market rules. It could however be asked whether this would apply to national measures that are additional to the Type Approval requirements and that establish CO<sub>2</sub> emissions limits. Indeed, Article 4 of the Framework Directive states that Member States ‘shall not prohibit, restrict or impede the registration, sale, entry into service or circulation on the road of vehicles (...) *on grounds related to aspects of their construction and functioning covered by this Directive*, if they satisfy the requirements of the latter’<sup>51</sup>. Although requirements relating to the recording of CO<sub>2</sub> emissions exist within the type approval procedures, CO<sub>2</sub> emissions limits do not figure among the technical requirements for type approval. A measure imposing such limits would therefore arguably not be contrary to the type approval rules and would thus not be subject to the conditions of Article 114(5) TFEU.

Those national measures could either be linked to an existing EU measure adopted under Article 192 TFEU and imposing more stringent standards under Article 193 TFEU or be a national measure with environmental purposes not falling within the scope of an EU action.

In both cases, additional measures establishing CO<sub>2</sub> emission standards could for example require car manufacturers to provide the authorities with a certificate or due diligence proving compliance with the standards.

However, it should be noted that the reasoning based on Article 4 of the Framework Directive is affected by Regulation 2018/858 (“the Framework Regulation”) which repeals and replaces the Framework Directive as of 1 September 2020, and under which Member States cannot refuse registration, placing on the market or entry into service for vehicles approved according to its requirements as of 5 July 2020 at the manufacturer’s request. This is because, under Article 6(5) of the Framework Regulation, ‘Member States shall not prohibit, restrict or impede the placing on the market, the registration or the entry into service of vehicles, systems, components or separate technical units that comply with this Regulation, *except in the cases provided for in Chapter XI*’. The new wording is therefore more restrictive, as it would prevent Member States from imposing CO<sub>2</sub> requirements at the vehicle level unless such measures fall under one of the cases provided for in Chapter XI of the Framework Regulation. Whether this could be the case is examined below.

#### ***More stringent measure under Article 193 TFEU***

It must first be considered whether a national CO<sub>2</sub> emissions limit on individual vehicles would derogate from the Cars CO<sub>2</sub> Regulation, in which case it would have to meet the conditions of Article 193 TFEU.

The measure must first be more stringent than the standard set at EU level. This of course means that it has to achieve a higher level of environmental protection, but it must also be in the continuation of the initial measure and not be a different measure altogether. Requiring new vehicles to meet CO<sub>2</sub> emissions standards set below the fleet-level average would certainly be more ambitious in terms of the climate goals pursued by the Cars CO<sub>2</sub> Regulation, but they could perhaps be considered to be a different kind of measure, since they would operate in a different manner (i.e. as an additional requirement for the approval of vehicles on the national market, rather than as a measure applying to the manufacturer’s fleet). If this latter position is taken, then the measure would fall outside the scope of EU action and, rather than being examined under Article 193 TFEU, would be subject to the general internal market principles of Article 34 and 36 TFEU. This possibility is examined below.

Assuming that this first condition of being more stringent than the existing EU measure is fulfilled, it must then be shown that the measure is compatible with the Treaties. There is some legal debate as to

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<sup>51</sup> Emphasis added

whether compliance with the Treaties also requires compliance with secondary legislation, especially where the area in question has been fully harmonised<sup>52</sup>. The argument behind this latter position is that secondary legislation derives from the Treaties, but of course this would imply that Member States would be prevented under certain conditions from adopting stricter measures although this is expressly provided by the primary law. As noted above, EU environmental legislation does not usually pursue full harmonisation, but the issue can arise with regards to product-related norms as in this case deviations from the EU standard are liable to interfere with free circulation of goods<sup>53</sup>. In such cases, it can be considered that the margin of discretion left to Member States to adopt stricter measures is in inverse proportion to the level of consideration given by the Union legislator to the balance between environmental and internal market/economic interests of the measure, and the level of detail of the harmonised provisions<sup>54</sup>.

National CO<sub>2</sub> standards for vehicles are certainly a product-related requirement and have the potential to interfere with free circulation of goods. Indeed, car manufacturers would have to adapt the models sold in that Member State in order to meet the standard. This would also create difficulties with regards to the Type Approval system, given that it is based on the principle of mutual recognition, whereby any vehicle approved in one Member State can be sold in all other Member States. A Member State applying such a measure would necessarily have to refuse vehicles type-approved in other Member States if they did not meet the national CO<sub>2</sub> emissions limit. The recitals of the Cars CO<sub>2</sub> Regulation and its update also emphasise the balancing of economic, social and environmental interests taken into consideration when drafting its provisions, and these texts require a review of this balance in view of a possible amendment of the fleet-wide targets<sup>55</sup>. It might therefore be considered that the Cars CO<sub>2</sub> Regulation, operating in conjunction with the Type Approval system, fully harmonises the area of CO<sub>2</sub> reductions for cars and vans. On the other hand, the Cars CO<sub>2</sub> Regulation itself refers to the possibility for Member States to introduce measures under Article 193 TFEU, even though it discourages them from imposing additional or more stringent penalties in doing so<sup>56</sup>. If the legislator had considered this area fully harmonised, one could ask why such a reference would have been included.

Setting the question of conformity with secondary legislation aside, the condition of compatibility with the Treaties is mainly intended to ensure that the measure is not a means of arbitrary discrimination or a disguised restriction on trade contrary to Article 34 TFEU. In case the proposed measure is liable to interfere with the internal market it must in any case be shown to be proportionate, which involves demonstrating its suitability and necessity<sup>57</sup>. Suitability refers to the existence of a logical relationship between the measure and the goal pursued, whereas necessity concerns the actual goal pursued and whether the measure can achieve the goal while affecting EU law the least.

Whether lower CO<sub>2</sub> standards for vehicles are capable of achieving climate-related goals is not in question. Fulfilling the necessity criterion might be more difficult given that, as already mentioned, the measure would be quite highly disruptive for the Type Approval framework. As already stated, where the free movement of goods is liable to be substantially disturbed, Member States are normally only given a restricted margin of manoeuvre for environmental measures and therefore the Member State would therefore have to show that the protection of environmental interests is in this case more relevant<sup>58</sup>.

In this regard, inspiration could be drawn from a line of case law in which the Court has been willing to accept justifications relating to climate change mitigation for measures which it considered restrictive of trade. For example, in the *Ålands Vindkraft* case<sup>59</sup>, the Court considered that a Swedish measure

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<sup>52</sup> N. De Sadeleer, *op.cit.*, p. 424-428 ; L. Kramer, *op. cit.*, p. 124-128

<sup>53</sup> L. Kramer, *op. cit.*, p. 126

<sup>54</sup> L. Kramer, *op. cit.* p. 127

<sup>55</sup> Article 13 Regulation 443/2009; Article 15 Regulation 2019/631

<sup>56</sup> See recital 28 of Directive 443/2009 and Recital 46 of Regulation 2019/631

<sup>57</sup> Case C-6/03, *Deponiezweckverband Eiterköpfe*, ECLI:EU:C:2005:222, paras. 61-62

<sup>58</sup> L. Kramer, *op. cit.* p. 102

<sup>59</sup> Case C-573/12, *Ålands Vindkraft*

which directly restricted trade, and moreover was discriminatory in effect and aim as it gave priority to electricity produced domestically from renewable sources, was justified on environmental grounds. Nevertheless, it is not certain whether the Court would reach the same conclusion for the measure envisaged as regards proportionality. Indeed, the *Vindkraft* case concerned electricity, which is more a service than a product, while CO<sub>2</sub> vehicle level standards are product-related requirements which would require manufacturers to adapt their vehicles' propulsion technologies in order to be able to continue to access the national market. This may be considered a more severe disruption to trade than a measure giving preferential access to domestic green energy production.

Lastly, such a measure would have to be communicated to the Commission. In contrast with the procedure under Article 114(5) TFEU, this is not related to an authorisation procedure, but is for information purposes only. The legality of the measure would therefore be determined before the Court were it to be challenged by the Commission under Article 258 TFEU.

In conclusion, a Member State attempting to introduce vehicle-level CO<sub>2</sub> standards under Article 193 TFEU would have to overcome:

- Uncertainty concerning whether such a measure constitutes a “more stringent” measure in relation to the Cars CO<sub>2</sub> Regulation. If it does not, the measure falls outside of the scope of harmonised EU rules, and must therefore be evaluated directly in the framework of Articles 34 and 36 TFEU.
- Uncertainty concerning whether the Cars CO<sub>2</sub> Regulation and the Type Approval framework together result in full harmonisation of this area, thereby precluding compatibility with the Treaties.
- Uncertainty concerning the outcome of a proportionality evaluation in relation to internal market rules if the measure was challenged before the EU courts. Arguably, the EU courts should be more lenient with regards to measures adopted under Article 193 TFEU

### ***Compatibility with Articles 34 and 36 TFEU***

As mentioned previously, national CO<sub>2</sub> emissions limits for vehicles could be considered to not be more stringent measures under the Cars CO<sub>2</sub> Regulation, but a different kind of measure altogether. Indeed, such a measure arguably does not follow the same logic, since it takes place at a different regulatory level, and the Cars CO<sub>2</sub> Regulation considers that CO<sub>2</sub> limits should not be imposed for individual vehicles so as to give flexibility to manufacturers<sup>60</sup>.

In this case, these measures imposing CO<sub>2</sub> emission limit values on individual vehicles could be considered not regulated under EU law and therefore subject to national discretion but would have to be evaluated according to their compatibility with the general principles of free circulation of goods under Articles 34 and 36 TFEU. Measures liable to infringe the prohibition of restrictions on free circulation of goods under Article 34 TFEU can be justified on the grounds set out in Article 36 TFEU, including ‘the protection of health and life of humans, animals or plants’. This can be used to cover some environmental measures, but not those related to global warming for example as the relationship to health is rather distant. However, the ECJ accepts that protection of the environment in general, which covers climate-related action, figures among the ‘mandatory requirements’ which may justify a restriction on free circulation of goods<sup>61</sup>.

Such a restriction must nevertheless be shown to meet the proportionality test. In addition to the two criteria described above, the ECJ normally applies a third one outside of the framework of more stringent measures under Article 193 TFEU: proportionality *stricto sensu*. This requires the comparative advantages and disadvantages of the measure to be assessed. The considerations exposed above with regards to proportionality would also be applicable here.

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<sup>60</sup> See Recital 19 of Regulation 443/2009

<sup>61</sup> Case C-302/86, *Commission v Denmark* [1988] ECR 4607, para. 9

### ***CO<sub>2</sub> standards under Chapter XI of the 2018 Type Approval Framework Regulation?***

As noted above, upon the entry into force of the 2018 Type Approval Framework Regulation on 1 September 2020, Member States will only be able to impose restrictions on vehicles that have been type-approved according to the conditions in Chapter XI of that Regulation<sup>62</sup>. This Chapter of the Framework Regulation concerns safeguard clauses, which are provisions intended to enable Member States to take special measures to remedy issues arising despite the type-approval procedures.

Under Article 52 of the Framework Regulation, Member States can restrict the placing on the market, registration or entry into service of a vehicle (or part thereof) if, following an evaluation by its market surveillance authorities, it finds that it presents a serious risk to a public interest covered by the Regulation. According to Recital 7 of the Framework Regulation, ensuring a ‘high level of safety and of health and environmental protection’ figure among its aims.

A Member State could therefore potentially rely on this provision to impose restrictions on ICE vehicles in relation to their health and environmental impacts. That being said, it is clearly not the intended purpose of this provision to enable prolonged derogatory measures to the type-approval framework.

Also of note is the fact that Article 52(4) of the Framework Regulation enables the Commission to adopt implementing acts laying down a classification of the seriousness of the non-compliance and the appropriate measures to be taken by national authorities to ensure the uniform application of this Article. Such implementing acts have not yet been adopted, but through these the Commission could either prevent Member States from applying restrictive measures on ICE vehicles, or officially endorse them.

Furthermore, under Article 53 of the Framework Regulation, any measures that Member States wish to adopt based on Article 52 must be notified to the Commission. If the Commission or another Member State objects to them, the Commission must consult with the Member State concerned and, based on the outcome of the consultation, the Commission must adopt an implementing act to decide on harmonised corrective or restrictive measures at EU-level. If the Commission considers that the measure is unjustified, the MS must withdraw or adapt the measure in accordance with the Commission’s decision.

Thus, a Member State attempting to impose restrictions on ICE vehicles based on Article 52 of the Framework Regulation would have to receive approval from the Commission first. If the measure is rejected by the Commission, the Member State could then challenge the resulting implementing act before the EU courts, but would have to comply with the decision in the meantime.

Therefore, unless the Commission explicitly decides to authorise such measures through an implementing act under Article 52, which it might not be prepared to do given that this was not the original purpose of this provision, adopting ICE restrictions based on the safeguard clauses of the Framework Regulation may not succeed.

#### **Key uncertainties**

- The scope for more stringent measures under Article 193 TFEU in this area is difficult to determine with precision, given that there is little case law on this issue and the legal doctrine concerning the criterion of compliance with the Treaties as regards secondary legislation is somewhat unclear. Additional research would be needed.
- Although from a legal point of view the current type approval framework under the Framework Directive does not appear to forbid national CO<sub>2</sub> standards for vehicles, the practical implications of such a measure on the internal market and free movement of goods might make it difficult to justify with regards to the proportionality test. Additional research would be needed.
- The scope for such measures following the changes introduced by the Framework Regulation as of 1 September 2020 is highly dependent on the Commission’s willingness to accept them.

<sup>62</sup> Article 6(5), Regulation 2018/858

### 2.2.2.2 National CO<sub>2</sub> standards - fleet-level

On a similar note to the question above, it could be examined whether Member States could choose to derogate from the Cars CO<sub>2</sub> Regulation by imposing stricter fleet-level CO<sub>2</sub> standards at national level.

The difference with the previous measure envisaged lies in the fact that it follows the same mechanism as the Cars CO<sub>2</sub> Regulation, but at national level: instead of imposing a CO<sub>2</sub> limit for individual vehicles, the limit would be set as an average for a fleet of vehicles within that Member State. This would entail setting limits for each manufacturer operating within that Member State and presumably defined on the basis of calculating an average based on the recorded CO<sub>2</sub> emissions at type-approval per vehicle registered on its territory. There would therefore not be any emission limit per vehicle, but the emission standards applied to a fleet would be based on the calculation of the emissions per vehicle.

Since this kind of measure concerns a different regulatory level than market access, it is therefore unrelated to the type-approval framework and Article 114(5) TFEU is not applicable, as no harmonised rule based on the internal market competence is being derogated from. Indeed, as already mentioned, the Cars CO<sub>2</sub> Regulation and its recent update are based on the environment legal base, and measures derogating from them must fulfil the conditions of Article 193 TFEU, namely that the measure be stricter than the EU standard, that it be compliant with the Treaties, and that it be notified to the Commission.

A similar analysis to the one developed for the previous measure considered with regards to Article 193 TFEU would also apply here. Indeed, although perhaps not strictly speaking a product-related measure, since the CO<sub>2</sub> standard does not apply at the vehicle level, the envisaged measure would nevertheless certainly interfere with free circulation of goods. Indeed, manufacturers would need to ensure that a majority of the vehicles sold on the territory of the Member State applying the measure have lower CO<sub>2</sub> emissions than those it sells in other Member States, so as to ensure that the lower average could be met. There would also be issues with regards to the import of vehicles bought in other Member States who have not adopted such measures: since the Member State imposing the measure could not prevent this without directly breaching internal market rules, this would entail that manufacturers would have to ensure that vehicles sold in neighbouring Member States, for example, also meet the lower standards. Such a measure at national level would thus be highly disruptive to the internal market and to the system established under the Cars CO<sub>2</sub> Regulation. This would thus raise issues with regards to meeting the necessity criterion under the proportionality test.

Furthermore, there may also be issues under the suitability limb of the proportionality test (i.e. whether the measure is capable of reaching its goal). Compatibility of such a measure with the low- or zero-emissions incentive mechanisms of the Cars CO<sub>2</sub> Regulation would raise an issue here. Indeed, it would in theory be possible for a car manufacturer to sell the same number of low- or zero- emissions vehicles overall, but simply concentrate sales on the Member State(s) imposing this measure in order to meet the lower standard, while lowering them elsewhere. This would result in the EU average emissions for the manufacturer remaining the same, thus suggesting that such a measure is not capable of reaching its goal.

#### **Key Uncertainties**

- As with the measure above, there is uncertainty concerning the scope for more stringent measures under Article 193 TFEU concerning the Cars CO<sub>2</sub> Regulation.
- There is a need for further research to clarify how such a measure would be designed in practice and the compatibility with internal market rules (secondary legislation and Treaty rules).

### 2.2.2.3 Tax and financial incentives for zero-emission vehicles

Many Member States already encourage consumers to shift towards low- or zero- emissions vehicles through various kinds of tax or financial incentives, with 24 offering incentives for electrically

chargeable cars, of which 12 proposing bonus payments or premiums to buyers<sup>63</sup>. These kinds of measures do not raise any particular issues with regards to EU law, and have been effective in reducing CO<sub>2</sub> emissions from passenger cars, as well as emissions of pollutants such as NO<sub>x</sub> and PM<sub>64</sub>.

Not all taxes and incentives are however equally effective. For example, due to the gap between CO<sub>2</sub> emissions recorded in the lab at type approval and on-the-road emissions, the effectiveness of tax incentives based on this information in reducing actual CO<sub>2</sub> emissions has been limited. On the other hand, incentives promoting the purchase of electric vehicles have had clear climate-related and environmental benefits<sup>65</sup>. Indeed, in the Netherlands and Norway, which have focused on the latter kind of measure, new passenger cars emitted on average respectively 38% and 54% less CO<sub>2</sub> in 2017 than in 2001<sup>66</sup>.

Such advantages are most likely to be effective if they are applied in a significant way upon purchase of the vehicle, for example through tax breaks or one-off bonus payments upon purchase or registration coupled with more taxes for higher emitting vehicles. This can also be achieved by exempting vehicles from value-added tax, as is the case in Norway for example<sup>67</sup>.

Benefits should also continue to be applied during vehicle use to decrease running costs for low- or no-emission vehicles. Examples of such measures include lower ownership taxes, lower taxes on electricity and/or higher taxes on conventional fuels, as well as reduced road charges<sup>68</sup>. Such approaches could be supported by amendments to the Energy Taxation Directive at the EU-level.

Given the important role played by company cars in Europe, which represent the majority of new car registrations in several major Member States, it is also important to ensure that vehicle emissions are accounted for in the company-car tax system by incentivising employees to opt for zero -emissions vehicles<sup>69</sup>.

These incentives must also be regularly re-adjusted in order to ensure that they remain sustainable. Indeed, subsidising the purchase of electric vehicles through one-off payments should be used as a transitional measure only, as it will otherwise become overly costly. A more sustainable incentive system should ensure that higher-emission vehicles are subject to increased taxes in order to generate the income to provide tax breaks for lower-emissions ones, with regular reviews to account for changes in market structure<sup>70</sup>.

It is also important to ensure that such incentives lead to substitution of low- or no- emission vehicles to ICE in new vehicle purchases, rather than simply leading consumers to buy more cars due to lower prices ('rebound effect')<sup>71</sup>. All such measures must be well targeted, to ensure that they do not result in perverse outcomes, such as increased demand for road transport by private vehicle or strengthened incentives for diesel vehicles.

#### Key Uncertainties

- No particular uncertainties were identified from a legal point of view
- Further analysis including modelling is necessary in order to determine whether such fiscal measures could be sufficient for achieving a phase-out.

<sup>63</sup> ACEA, 2019, *Electric vehicles: tax benefits & incentives in the EU*. Available at

<https://www.acea.be/publications/article/overview-of-incentives-for-buying-electric-vehicles>

<sup>64</sup> European Environment Agency, September 2019, *Fiscal instruments favouring electric over conventional cars are greener*. Available at: <https://www.eea.europa.eu/themes/transport/electric-vehicles/taxes-and-incentives-promoting-electric>

<sup>65</sup> *Idem*.

<sup>66</sup> *Idem*

<sup>67</sup> ICCT, 2018, *Using vehicle taxation policy to lower transport emissions – an overview for passenger cars in Europe*.

<sup>68</sup> *Idem*

<sup>69</sup> *Idem*

<sup>70</sup> *Idem*.

<sup>71</sup> European Environment Agency, 2018, *Appropriate taxes and incentives do affect purchases of new cars*. Available at <https://www.eea.europa.eu/themes/transport/vehicles-taxation/appropriate-taxes-and-incentives-do>

#### 2.2.2.4 Advertising requirements, restrictions or bans for ICE vehicles

One method to divert consumers away from ICE vehicles and towards zero emission vehicles could be to drive down demand through requirements on advertising. A parallel can for example be drawn here with the measures taken with respect to tobacco, especially given the direct comparisons now being made between the health impact of air pollution with that of smoking<sup>72</sup>.

With regards to CO<sub>2</sub>, as mentioned above, harmonised rules already exist at EU level. However, the Car Labelling Directive is a minimum harmonisation measure based on the EU's environment competence and allows for Member States to take more stringent measures. Many Member States have in fact already done this, for example by implementing colour-coded labels similar to the EU energy label or adding relevant information such as running costs<sup>73</sup>.

However, no harmonised rules currently exist concerning advertising requirements for air pollutants from vehicles, and their compatibility with internal market rules would therefore be assessed with regards to the conditions of Article 34 TFEU. This provision comes into play regarding national measures capable of hindering intra-EU trade, even if only indirectly or potentially<sup>74</sup>. Advertising restrictions fit this description, given that they limit the possibilities for a product to be promoted in the Member State, and can therefore have the effect of limiting the amount of sales there. However, since the *Keck and Mithouard*<sup>75</sup> judgment, advertising restrictions are generally considered 'selling arrangements' which concern the circumstances in which a product is sold (how, when and where), rather than the characteristics of the product itself. Such rules are not considered contrary to Article 34 TFEU, so long as they apply to all traders operating within the national territory, and affect in the same manner, in law and in fact, the marketing of domestic products and those imported from other Member States<sup>76</sup>. Information requirements concerning atmospheric pollutants from vehicles and their impact on health would in all likelihood meet these conditions, and could therefore be implemented by Member States.

Bans on certain forms of advertising for passenger vehicles, such as billboards or on screen for example, might also be considered 'selling arrangements'. However, there is a possibility that the second criteria under *Keck* might here not be fulfilled: this might be the case for example if certain cars produced in other Member States are less recognised on the national market<sup>77</sup>. In such a circumstance, the measure again falls under the prohibition in Article 34 TFEU, and it must be examined whether the measure could meet the criteria of Article 36 TFEU. This provision allows certain trade restrictions justified on grounds of, *inter alia*, the protection of health and life of humans, so long as they are proportionate. The proportionality test can generally be split into three elements. The first limb is that of 'suitability', and is concerned with whether the measure is capable of fulfilling its stated objective, i.e. whether it bears some rational connection with it. The 'necessity' limb of the test examines whether the measure chosen was the least onerous one available, i.e. the one which puts the least strain on inter-State trade. Finally, '*proportionality stricto sensu*' involves weighing the advantages of the measure against any disadvantages it may cause.

In addition, advertising bans may also pose issues under the prohibition of restrictions on the freedom to provide services under Article 56 TFEU, as advertising is in itself a service<sup>78</sup>. Member States can however adopt rules derogating from this prohibition if they are justified on public interest grounds such

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<sup>72</sup> Guardian, 2018, *Air pollution is the "new tobacco" warns WHO head*. Available at <https://www.theguardian.com/environment/2018/oct/27/air-pollution-is-the-new-tobacco-warns-who-head>

<sup>73</sup> European Commission, 2015, *Evaluation of Directive 1999/94/EC ("Car Labelling Directive")*, p. 119

<sup>74</sup> Case 8/74 *Dassonville* [1974] ECR 837, para. 5

<sup>75</sup> Case C-267/91, *Criminal proceedings against Bernard Keck and Daniel Mithouard*, ECLI:EU:C:1993:905, 24 November 1993

<sup>76</sup> *Idem*, para. 16

<sup>77</sup> Joined Cases C-34/95 to C-36/95 *De Agostini and TV-Shop* [1997] ECR I-3843, para. 42; Case C-405/98, *Konsumentombudsmannen v Gourmet International Products AB* [2001] ECR I-1795

<sup>78</sup> Joined Cases C-34/95 to C-36/95 *De Agostini and TV-Shop* [1997] ECR I-3843

as public health (Article 52 TFEU), and are proportionate.

As proportionality must always be evaluated on a case-by-case basis, it is therefore not possible to make a definitive determination of whether advertising bans for vehicles would meet them in all circumstances. It does however seem possible to design such measures in a manner which would fulfil these conditions.

#### Key Uncertainties

- Additional information is required in order to determine whether advertising bans for passenger vehicles could be considered ‘selling arrangements’.
- Advertising bans or restrictions should be designed in a way that ensures they can meet the criteria for proportionality.

#### 2.2.2.5 Low-emission zones and zero-emissions zones.

##### *At the local level*

In the wake of the Dieselgate scandal, an increasing number of cities are implementing measures to limit air pollution from passenger vehicles, particularly diesel, by imposing measures to reduce access of such vehicles to certain areas. This is for example done by discouraging certain vehicles from entering certain areas by imposing a charge, or by banning certain vehicles from accessing a low-emission zone, based on the emissions standard to which they were type-approved. A number of major European cities have even pledged to implement zero-emissions areas (no ICE vehicles) by 2030<sup>79</sup>.

Since such measures inherently do not have any cross-border dimension, given their local nature, they do not raise any particular issues with regards to EU law. In fact, Member States are arguably required to implement such measures under the Air Quality Directive<sup>80</sup> where the limit values for pollutants it sets are exceeded, since they will often be the most effective in keeping the period in which limits are exceeded as short as possible<sup>81</sup>. This reasoning has indeed already been followed by several national courts<sup>82</sup>.

##### *At the national level*

The question could be asked whether it would be possible for a Member State to implement a similar measure at national level, by only allowing use of certain kinds of vehicle on the territory or subjecting their use to a charge, according to their environmental characteristics.

If applied on the basis of vehicles emissions classification, this would again conflict with the Type Approval framework, which explicitly prevents Member States from prohibiting, restricting or impeding the circulation on the road of vehicles on grounds related to the requirements for type approval if the vehicles meet those requirements<sup>83</sup>. Indeed, the emissions class of vehicles is determined with regards to the Type Approval requirements under Regulation 715/2007. The regulatory logic of such a measure would also be unclear, given that LEZs aim at improving air quality, which is mainly an issue in large

<sup>79</sup> C40 Cities, *Green and Healthy Streets, Fossil-Fuel-Free-Streets Declaration, Planned Actions to Deliver Commitments*. Available at [https://c40-production-images.s3.amazonaws.com/other\\_uploads/images/1426\\_G\\_HS\\_160919.original.pdf?1568791841](https://c40-production-images.s3.amazonaws.com/other_uploads/images/1426_G_HS_160919.original.pdf?1568791841)

<sup>80</sup> Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

<sup>81</sup> European Court of Auditors, 2018, *Special Report – Air pollution: our health still insufficiently protected*, para. 42

<sup>82</sup> See e.g. High Court, *ClientEarth v Secretary of State for the Environment, Food and Rural Affairs* [2016] EWHC 2740 (*Admin*), German Federal Court

<sup>83</sup> Article 4 of Directive 2007/46

agglomerations.

Whether a similar driving ban could be implemented on grounds relating to the CO<sub>2</sub> emissions of vehicles would be subject to the same considerations as for sections 2.2.2.1 and 2.2.2.2 above.

## 2.3 FEASIBILITY OF EUROPEAN COMMISSION GUIDANCE ON ICE PHASE-OUT

The terms of reference for this study ask whether it is feasible for the European Commission to publish guidance to Member States on national ICE phase-outs, to enable Member States to design phase-out measures that would comply with EU law. This section considers the question of whether such guidance would be legally feasible.

If Member State-level phase-outs are not legally possible, due to inconsistency with the EU Type Approval Framework, as discussed under section 2.1 above, EU-level guidance would be unnecessary. However, should another type of Member State measure that would effectively phase-out ICE phase-out (e.g. Member State CO<sub>2</sub> standards) be legally feasible, the EU may wish to publish guidance for Member State authorities. In such cases, EU-level guidance would be valuable as a means of supporting Member States in complying with EU-law and supporting harmonised approaches, thereby limiting the impacts on consumers and industry .

Under the Treaties, the Commission has the power to issue guidance documents<sup>84</sup>. Where these guidance documents include the interpretation of EU law, they may legally bind the Commission according to the case law<sup>85</sup>, and therefore they should be endorsed by the College of Commissioners<sup>86</sup>. In the case of guidance on how the Commission is likely to consider Member State measures related to the sale, registration or use of ICE vehicles, this guidance would be very likely to touch on interpretations of EU law. In this case, they would therefore need to be endorsed by the College of Commissioners. Such guidelines would also likely to be subject to inter-service consultation and potentially a consultation procedure including an open public consultation.

The publication of Commission guidance on Member State ICE measures would not remove the need for Member State notification of such measures under Article 114 or Article 193 and Commission approval of each measure on a case-by-case basis under Article 114 where relevant.

European Commission guidelines on other topics, such as advertising restrictions or tax and financial incentives for low emissions, would be less likely to touch on issues that would legally bind the Commission, and thus they are likely to not require the endorsement of the College of Commissioners.

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<sup>84</sup> Article 292

<sup>85</sup> See, for example, point 72 of Cases T-61/00 and T-62/00 *APOL and AIPO v Commission* [2003]; point 35 of Case C-171/00 *Libéros v Commission* [2002]

<sup>86</sup> European Commission, *Better Regulation Toolbox*, ‘Tool #39. Guidance documents containing legal interpretation of EU law’,

### 3 COMPARING THE POTENTIAL ICE PHASE-OUT MEASURES

This section provides a summary and preliminary comparison of the measures that could be used at EU or Member State level to phase-out ICE vehicles. The summary, presented in **Error! Reference source not found.** below, is based on the following criteria:

- Legal feasibility: Based on the analysis set out above, is it likely that such a measure would be permissible under EU law? What are the key legal issues in question for the measure?
- Likely effectiveness: Based on a preliminary consideration of how the measure would apply in practice, how effective is the measure likely to be, in terms of reducing emissions of CO<sub>2</sub> and air emissions from passenger vehicles?

A short outline of the issues requiring further investigation is also provided. A more complete assessment would also consider the measures according to other criteria, including efficiency, coherence with other policy measures, and political acceptability.

In summary, it appears that there would be significant legal challenges to Member States seeking to implement a national sales or registration ban of ICE vehicles, due to the likely incompatibility of such measures with EU internal market rules. However, Member State measures that seek to impose emissions performance-based standards on vehicles may face fewer legal hurdles; nonetheless, further investigation into whether such measures could be considered proportionate and practical implementation approaches is warranted.

**Table 1 Preliminary assessment of potential EU and Member State measures on ICE vehicles**

Measure	Level	Feasibility – Preliminary assessment	Effectiveness – Preliminary assessment	Issues for further investigation
ICE sales or registration ban or phase-out	EU	Legally feasible – the EU could restrict the approval, sales or registration of ICE vehicles under its internal market. The EU could also amend the Type Approval legislation allowing Member States to phase-out ICE vehicles.	Likely to be effective in phasing-out ICE vehicles and reducing emissions from vehicles, but likely to distort the internal market for vehicles.	Investigation would be needed into the most appropriate and effective legislative means for allowing Member States to phase-out ICE vehicles, while limiting distortion of the internal market
Zero-emissions vehicle standards for specific market segments	EU	Potentially feasible, but a full assessment of the subsidiarity and proportionality of such action at the EU-level is needed. This assessment will vary according to the market segment targeted (e.g. fleet vehicles, company cars for private use).	Likely to be effective in phasing-out ICE vehicles and reducing vehicle emissions within the specific market segments.	Further investigation is needed of the appropriateness (subsidiarity, proportionality) of EU-level action in this area.
Amendments to vehicle labelling requirements	EU	Legally feasible, as the EU has already legislated in this area	Likely to improve the effectiveness of the existing framework, but would be of relatively limited effectiveness overall in terms of reducing emissions and phasing-out ICE vehicles	None
ICE sales or registration ban or phase-out	Member State	Likely to not be legally feasible, as it would be considered a derogation from the Type Approval framework, which fully harmonises market access for passenger vehicles, and does not fulfil the conditions under which the Commission would approve the derogation in line with the TFEU. Should the EU adopt legislative measures allowing Member State ICE phase-outs from the Type Approval framework, these measures would be legally feasible.	Implementation challenges could undermine the effectiveness of such a measure. These challenges include the treatment of vehicles from other Member States, and possible unintended consequences, such as increased demand for second-hand vehicles. Well-designed supporting measures and coordination with other Member States could help overcome such challenges.	Some aspects of the analysis (e.g. whether certain evidence could be considered 'new') could be further investigated; however, the overall conclusion that these measures are likely to not be legally feasible is not expected to change.
Zero-emissions vehicle standards for specific market segments	Member State	Appears to be legally feasible, given the text of recital 23 of the Clean Vehicles Directive, which notes that Member State can impose emissions-specific criteria for the procurement of vehicles within certain market segments (e.g. taxis, ride-sharing).	Likely to be effective in phasing-out ICE vehicles and reducing emissions from vehicles within the specific market segments.	None
National CO <sub>2</sub> emissions	Member State	Unclear – potentially feasible under the current type-approval framework, but	Potentially effective, but it is unclear how this measure would be applied in	Further investigation is needed into compatibility with Article 193 or internal

Measure	Level	Feasibility – Preliminary assessment	Effectiveness – Preliminary assessment	Issues for further investigation
standards – vehicle-level		compatibility with either Article 193 or with internal market rules under Article 34 and 36 and, in particular, the likely proportionality of such a measure, requires further investigation. The scope for such measures is further reduced once Regulation 2018/858 comes into effect.	practice. There is a risk that it would be undermined by implementation challenges, such as the treatment of second-hand vehicles from other Member States.	market rules and into how such a measure could be applied in practice. This however becomes a moot point once Regulation 2018/858 comes into effect.
National CO2 emissions standards – fleet-level	Member State	Unclear – potentially permitted under the TFEU, but compatibility with either Article 193 or with internal market rules under Article 34 and 36 and, in particular, the likely proportionality of such a measure, requires further investigation.	It is unclear whether this measure could be applied in practice. There is a risk that it would be undermined by implementation challenges, such as the methods for calculating average fleet emissions at national-level.	Further investigation is needed into the compatibility with Article 193 and into how such a measure could be applied in practice
Tax incentives for zero-emission vehicles	Member States	Legally feasible	Likely to be moderately effective in phasing out ICE vehicles and reducing emissions	None
Advertising requirements, restrictions or bans	Member State	Restrictions on the content of advertising are likely to be legally permissible. However, the legal feasibility is less clear of banning advertising for certain types of products because of potential distortion of the internal market for goods and the provisions of services; the proportionality of such measures would need to be demonstrated.	Likely to be of relatively limited effectiveness in phasing out ICE vehicles and reducing emissions	While such measures appear to be legally feasible, the compliance of advertising bans with internal market rules would warrant further investigation.
Low-emissions zones – local	Member State (cities, regions)	Legally feasible	Effective in reducing air pollutant emissions and CO <sub>2</sub> in specific areas.	None
Low-emissions zones – national	Member State	Unclear – potentially permitted under the TFEU if the measure is adopted on climate change rather than air quality grounds, but compatibility with internal market rules under Article 34 and 36 and, in particular, the likely proportionality of such a measure, requires further investigation.	Effective in reducing air pollutant and CO <sub>2</sub> emissions within the Member State	Further investigation is needed into the compatibility with internal market rules, and proportionality in particular.