

January 2018

## Review of CO<sub>2</sub> emission standards for new cars and vans

*Impact Assessment (SWD(2017)650, SWD(2017)651 (summary)) of a Commission proposal for a regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars and for new light commercial vehicles as part of the Union's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles and amending Regulation (EC) No 715/2007 (recast)*

### Background

This note seeks to provide an initial analysis of the strengths and weaknesses of the European Commission's [impact assessment](#) (IA) accompanying the above proposal, adopted on 8 November 2017 and [referred](#) to European Parliament's Committee on Environment, Public Health and Food Safety (ENVI).<sup>1</sup>

According to the IA, road transport caused 22 % of all EU greenhouse gas (GHG) emissions in 2015, 73 % of which came from cars and vans (IA, p. 19). The transport sector (except for aviation) is not covered by the EU's emissions trading system (ETS), adopted in 2005 in the context of international efforts to reduce GHG. Instead, the EU has put sector-specific legislation in place, in particular to reduce carbon dioxide (CO<sub>2</sub>) emissions. When it became clear that a 1999 voluntary emissions reduction agreement between the European Commission and the Association of European Automobile Manufacturers had not delivered,<sup>2</sup> the EU adopted two regulations on mandatory CO<sub>2</sub> standards for all new passenger cars and vans, in 2009 and 2011 respectively.<sup>3</sup> Both were amended in 2014 with new emissions targets.<sup>4</sup> After the [Paris Agreement](#), countries such as China, the United States of America (USA) and Japan quickly began implementing ambitious policies for low-carbon transport. To comply with the agreement, the EU included the proposal to amend the current legislation in the European Commission's 2017 work programme.

The review of the current regulations started in 2015, with publication of the European Commission's extensive *ex-post* [evaluation](#). It found the current regulations effective and more efficient than expected, but also identified weaknesses. These included the measurement of emissions (test procedures), the utility parameter (mass or footprint) and emissions from energy and vehicle production, currently not covered (IA, pp. 15-16). As announced in its May 2017 communication, [Europe on the Move](#), the Commission is pursuing an integrated approach to address all factors and actors relevant for CO<sub>2</sub> emissions, from environment to industry (IA, p. 11). This proposal is therefore part of a comprehensive legislative package aiming to ensure 'clean, competitive and connected mobility for all' (IA, pp. 11-12, 17) and is flanked by important initiatives such as the EU action plan on alternative fuels infrastructure, revision of the Clean Vehicles Directive and the battery initiative.

<sup>1</sup> G. Erbach, CO<sub>2</sub> standards for new cars and vans, EU legislation in progress, EPRS 2018 (forthcoming).

<sup>2</sup> E. Thirion, [Emission performance standards for new passenger cars and light commercial vehicles](#), EPRS, European Parliament, April 2017, pp. 2-3.

<sup>3</sup> Regulations 443/2009 and 510/2011, both to be amended and repealed by this proposal.

<sup>4</sup> For new cars, the current established fleet-wide average target for new cars is 95 g/km by 2021, and for vans 147g/km by 2020.

## Problem definition

The IA defines three main problems and their drivers:

1. **Insufficient uptake of the most efficient vehicles to meet the commitments of the Paris Agreement**, including low and zero emission vehicles (LEVs, ZEVs). The IA points out that, based on the evaluation, the CO<sub>2</sub> performance of new vehicles is not improving fast enough to achieve the EU's climate goals of at least 40 % emissions reduction by 2030, as per its commitment under the Paris Agreement (IA, p. 19). With 1.1 % of the new EU car fleet, the uptake of LEVs and ZEVs is very low (2016). The IA cites several causes for these poor results, such as a lack of stringency of existing CO<sub>2</sub> standards, uncertainty about standards beyond 2021, limited infrastructure – for instance for charging batteries – and increasing road transport volumes. Moreover, it highlights the higher upfront costs of efficient vehicles, which consumers tend to focus on before a purchase, not taking into account the reduction of lifetime costs through fuel savings (IA, pp. 17, 23-26). The IA also mentions buyers' concerns about the resale value of ZEVs, while their high upfront costs, owing partly (55 %) to battery costs, keep sales low (IA, pp. 25, 41).
2. **Consumers do not benefit from possible fuel savings**. In 2013, with the current standards, a new car cost €183 more than in 2006, i.e. before CO<sub>2</sub> standards, while fuel savings amounted to €1 336 for petrol cars (€981 for diesel) across the vehicle's lifetime. However, according to the IA, tighter standards would generate far greater fuel savings during a vehicle's lifetime (IA, p. 21). In addition, the growing 'emissions gap' – the increasing divergence between average test and real world CO<sub>2</sub> emissions – led to considerably less actual CO<sub>2</sub> savings than suggested by tests (IA, p. 27). This has already sparked the development of a new testing procedure.<sup>5</sup> The fact that, for example, air conditioning systems are not included in the tests for certified CO<sub>2</sub> emissions, distorts their results (IA, 27).
3. **Insufficient innovation in low-emission automotive technologies**, entailing the risk of the EU losing its competitive advantage, whereas the automotive industry is of crucial importance for the EU economy. EU imports of third country vehicles increased from 2.5 million in 2010 to 3.4 million in 2016, as China, the USA, Brazil and South Korea have now implemented ambitious fuel standards (IA, 21). The IA stresses, based on the evaluation, that fuel efficiency standards have been a strong driver for innovation and efficiency in the EU automotive sector in the past and should be used as such in the future as well.

The problem areas, their context and consequences are described in a concise way, with quantified information for all three of them. The IA explains that several other initiatives will tackle some of the problem drivers, for example the limited infrastructure and increasing transport activity, which is why these drivers are not explored further in this IA (IA, p. 17). Nevertheless, the link between the individual drivers and the problems could have been indicated in a more explicit way to clearly specify the problems and to make the assessment of the policy options later on more transparent. While the text refers to five drivers, the problem tree features several more (IA, p. 18). The IA details the groups affected by the problems, and in Annex 3 also provides an overview of the implications in terms of cost and benefits for each group (IA, p. 28, Annex 3, pp. 17-19). They cover important parts of the EU's economy and society: vehicle manufacturers, users of vehicles (individuals, businesses), suppliers of vehicle components and construction materials, suppliers of fuels and energy, vehicle repair and maintenance businesses, the workforce, other users of fuel and oil-related products (chemical industry, heating) and society in general, especially citizens in urban areas.

## Objectives of the legislative proposal

The IA presents the general, specific and operational objectives of the proposal. The *general* objective is twofold and consists of contributing to the achievement of the EU's commitments under the Paris Agreement and strengthening the competitiveness of the EU automotive industry (IA, p. 31). The three *specific* objectives are to:

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<sup>5</sup> Worldwide harmonised light vehicles test procedure (WLTP), fully applicable to all new cars and vans from September 2019 (IA, Annex 5).

1. reduce CO<sub>2</sub> emissions from cars and vans in a cost-effective way;
2. reduce fuel consumption costs for consumers; and
3. strengthen the competitiveness of the EU automotive industry and stimulate employment.

The distinction between the general and specific objectives is not entirely clear from the IA, as specific objectives 1 and 3 appear to be nearly identical with the general objectives. In addition, it is not apparent from the IA if the specific objectives fulfil the 'SMART' criteria of being specific, measurable, achievable, relevant and time-bound, as required by the European Commission's better regulation (BR) guidelines<sup>6</sup> to ensure a transparent assessment and comparison of the policy options. At the same time, the IA does present *operational* objectives for the preferred policy options that seem to be more in line with these criteria (although levels and targets will be specified only in 2022).<sup>7</sup> This is particularly important with a view to proper monitoring and evaluation of the achievement of the objectives in the future (IA, pp. 168-169). The *operational* objectives are the following:

1. to reach a specific CO<sub>2</sub> emissions target level by the target year(s);
2. to achieve a certain level of deployment of zero/low emissions vehicles by a specific year;
3. to achieve actual CO<sub>2</sub> emissions reductions without an increase in the 'emissions gap' resulting from divergent test results and real world emissions.

Altogether, the objectives seem pertinent and are in line with the EU's 2020-2030 [framework for climate and energy](#), the [Europe on the Move](#) communication and the [Paris Agreement](#). Since they are closely linked to other initiatives of the package relating to CO<sub>2</sub> emissions reduction, the IA could have developed their complementarity with a view to attaining the objectives in greater detail.

## Range of options considered

The IA screens a multi-layered set of up to 50 policy options in relation to the problems and aiming to achieve the objectives (IA, pp. 32-65). It groups them into five areas of action:

**1) CO<sub>2</sub> emission targets** (EU-wide fleet targets for the 2021-2030 period, under the new WLTP test; defined relative to the emission targets for 2021). The preferred options of the IA are shaded in grey.

**a) CO<sub>2</sub> emission target levels** for passenger cars (TLC). The IA presents eight corresponding options for vans (TLV).

Option TLC 0: baseline

Options TLC 10/20/25/30<sup>8</sup>/40: decrease of WLTP CO<sub>2</sub> target level of 10 to 40 % (2021-2030)

Options TLC\_EP40/EP50: (options with non-linear trajectory<sup>9</sup>: reduction by 40/50 %)

**b) Timing of CO<sub>2</sub> targets** (TT): start of application of new CO<sub>2</sub> standards.

Option TT 1: 2030

Option TT 2: 2025 and 2030

Option TT 3: 2022

**c) Target metric (TM):**

Option TM\_TTW (tank-to-wheel)

Option TM\_WTW (well-to wheels – the sum of TTW and well-to-tank (WTT))

Option TM\_EMB (inclusion of embedded emissions)

Option TM\_MIL (mileage weighting, average mileage by fuel and vehicle segment)

<sup>6</sup> Better Regulation Guidelines, [SWD\(2017\) 350](#), European Commission, July 2017.

<sup>7</sup> The absolute numbers (g/km) depend on the transition to the WLTP and will only be published in October 2022 (IA, p. 34).

<sup>8</sup> 30 % reduction is preferred for both cars and vans.

<sup>9</sup> Covering the strictest end of the 2025 target range referred to in the statement by the Commission in 2014 in the context of the cars and vans regulations (IA, pp. 35-36, footnotes 63, 65).

## **2. Distribution of effort among manufacturers (utility parameter (DOE))**

Option DOE 0: baseline (mass, based on current linear limit value curves)

Option DOE 1: mass-based limit with equal reduction effort for all manufacturers<sup>10</sup>

Option DOE 2: footprint<sup>11</sup>-based limit with equal reduction effort for all manufacturers

Option DOE 3: Uniform target for each individual manufacturer (no unity parameter)

Option DOE 4: Equal reduction percentage for each individual manufacturer (no unity parameter)

## **3. Incentives for zero-/low-emission vehicles (ZEVs/LEVs)**

Option LEV 0: baseline (no incentives)

### **a) Incentive: definition of zero/low-emission vehicle**

Option LEVD\_ZEV: only vehicles with zero CO<sub>2</sub> emissions

Option LEVD\_25 (cars): car with less than or equal to 25g/km emissions

Option LEVD\_40 (vans): vans with less than or equal to 40g CO<sub>2</sub>/km emissions

Option LEVD\_50: less than 50 g/km CO<sub>2</sub> emissions (all vehicles)

### **b) Type and level of incentive**

Option LEVT\_MAND: each manufacturer's new vehicle fleet would have to include a given share of LEV

Option LEVT\_CRED1: crediting system with one-way adjustment of CO<sub>2</sub> target; reward of less stringent CO<sub>2</sub> target in cases where a manufacturer exceeds the benchmark of LEVs in the new fleet in a given year

Option LEVT\_CRED2<sup>12</sup>: crediting system as in CRED1 option, but with two-way adjustment of the CO<sub>2</sub> target: manufacturers not meeting the LEV benchmark must comply with a stricter specific CO<sub>2</sub> target

## **4. Elements for cost-effective implementation**

### **a) CO<sub>2</sub> cap and mobile air-conditioning systems**

Option ECO 0: baseline (current pooling regime)

Option ECO 1: future review and possible adjustment of the cap on eco-innovation savings

Option ECO 2: extension of scope of eco-innovation to include mobile air-conditioning systems

### **b) Pooling of individual manufacturers to meet emissions targets**

Option POOL 0: baseline

Option POOL 1: empower the Commission to specify conditions for open pool arrangements

### **c) Trading of CO<sub>2</sub> credits below the targets between manufacturers (cars and vans separately)**

Option TRADE 0: baseline (current rules)

Option TRADE 1: individual manufacturers or pools not benefitting from a derogation would be allowed to exchange CO<sub>2</sub> and LEV credits on an ad hoc basis

### **d) Limited<sup>13</sup> banking and borrowing of CO<sub>2</sub> emissions by manufacturer or pool**

Option BB: baseline (no banking or borrowing)

Option BB 1: only banking of CO<sub>2</sub> and/or LEV credits allowed

Option BB 2: banking and borrowing of CO<sub>2</sub> and/or LEV credits allowed

### **e) Derogations for 'niche' car manufacturers**

Option NIC 0: baseline (current rules)

Option NIC 1: new derogation targets

Option NIC 2: remove 'niche' derogations

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<sup>10</sup> The IA mentions two additional variants here (a WLTP test mass, and two different slopes for vans), but it is not clear if these options were considered or not, as later in the text (for DOE2) they are dropped (IA, p. 40).

<sup>11</sup> Wheelbase multiplied by track width (IA, p. 40).

<sup>12</sup> For cars; for vans the preferred option is no additional incentive (LEV 0) (IA, pp. 163-164).

<sup>13</sup> To avoid an accumulation of credits (IA, p. 56).

## 5. Governance of test procedures and market surveillance

### a) Provide robust real data on real-world CO<sub>2</sub> emissions (RWG) and fuel consumption

Option RWG 0: baseline (current rules)

Option RWG 1: collection of real-world data by manufacturers and empowerment of the Commission to monitor and evaluate the data collection to improve market surveillance

### b) Market surveillance to detect irregularities in CO<sub>2</sub> emissions and fuel consumption data

Option MSU 0: baseline (current rules)

Option MSU 1: obligation for Member States and manufacturers to report irregularities systematically

The screening of the policy options generally seems logical and consistent. However, it could have been better structured, in particular by indicating where options are self-standing options, or represent sub-options, complementary options or variants. The IA shows (in two tables) the link between the areas of action and the problems as well as the specific objectives, but not the link between problems and the individual options. This makes it challenging to see the whole picture. The summary table provided at the end of the assessment does not solve this problem, because it does not indicate the preferred options and omits many baseline options (those on CO<sub>2</sub> targets, eco-innovation, pooling, trading, banking and borrowing, governance, real world emissions and market surveillance) (IA, pp. 154-155). The comparison of the options adds to the confusion by not referring at all to the names of the options used in the earlier screening of the options (TLC, DOE, etc., IA, pp. 156-165).<sup>14</sup>

The complex technical characteristics of some options meanwhile are not described in a transparent, accessible way for a non-specialist reader as requested by the BR guidelines. For some (sub-)areas (pooling, trading, market surveillance), the choice between only two options, one of which is the baseline scenario, seems limited, but overall the range of options under the five areas of action appears to be balanced. The IA explains that options to change the current *de minimis* exemptions and rules on derogations were discarded because their impact is expected to be relatively low (IA, pp. 57-58).<sup>15</sup> The option of developing an EU-wide ex-ante CO<sub>2</sub> real-driving emissions procedure at the type approval stage, including a not-to-exceed-limit, which was advocated by many stakeholders, is not considered feasible in this context, due to the high variability of CO<sub>2</sub> emissions and the strong influence of other external factors beyond the scope of the IA, such as temperature, humidity and driving behaviour (IA, p. 62).

## Scope of the impact assessment

The IA assesses the options regarding their short- and long-term (2025-2040/2050) economic, environmental and, to a lesser extent, social impacts, justifying when an option is given no further consideration, for example the 10 % CO<sub>2</sub> emissions reduction, which is expected to have similar impacts as the baseline and therefore discarded at this stage (IA, p. 73). The analysis provides a wealth of quantified information, illustrating the implications of the options as compared with the baseline. The baseline scenario builds on the [EU Reference Scenario 2016](#), a regularly updated projection of EU and Member States' energy, transport and emission-related developments up to 2050. It assumes that CO<sub>2</sub> emissions reductions would be limited if the current standards were maintained after 2020/21 (IA, pp. 67-68, Annex 4, pp. 28-37). Some aspects of the overall logical analysis could have been more transparent and accessible for non-specialists, especially by adding explanations to technical and sector-specific assumptions, when using different methods and/or models.

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<sup>14</sup> For example, the presentation of the preferred option for the definition of zero/low-emission vehicles is confusing (IA, pp. 118-141) and not clearly mentioned in the text.

<sup>15</sup> *De minimis* exemption for manufacturers of fewer than 1 000 newly registered vehicles per year and small volume derogations for manufacturers of between 1 000 and 10 000 cars or 1 000 and 22 000 vans registered per year.

*Economic* impacts are assessed for capital, fuel, operating and maintenance costs for an 'average' new vehicle (total ownership costs), and for the cost and fuel savings benefitting consumers, businesses and society (IA, pp. 75-90). The analysis is based on established modelling (PRIMES-TREMOVE) and extensive calculations of cost optimal combinations of technologies, illustrated in numerous tables and figures (IA, pp. 77-90, Annex 8). The IA includes further cost curves taking into account 'sensitivities' related to technology costs, future oil prices and the share of diesel cars in the fleets (IA, p. 76). The future targets for CO<sub>2</sub> emissions reduction are assessed in depth and constitute a focus of the assessment (IA, pp. 69-116), followed by incentives for ZEVs/LEVs (IA, pp. 117-141). The assessment for cars and vans is conducted separately for target levels and together for the metric and timing of standards. Macro-economic impacts are analysed based on a set of specific models (E3ME, GEM-E3 and DIONE) (IA, pp. 66, 91-99). Depending on the model and the option, the IA expects very small positive or marginally negative impacts on EU-28 gross domestic product compared with the baseline (IA, pp. 91-94). It notes for instance that the vehicles manufacturing output would decrease by 0.1 % under the preferred option by 2030 (target reduction of 30 %), as would fossil fuel production (-0.4 %), while electrical equipment manufacturing would go up by 0.9 %. In this context, the IA also quantifies expected effects on employment. If the EU were to develop its own battery sector – as opposed to importing battery cells for electric vehicles from third countries – it is estimated that 20 000 jobs would be created under the preferred option by 2030, 149 000 by 2040 (IA, p. 95).<sup>16</sup> Looking further at the social implications, the IA considers improved qualification as a result of innovation and looks (briefly) into total ownership costs on the used-vehicle market (IA, p. 99, Annex 7). It finds that second owners would benefit from reduced CO<sub>2</sub> emissions as they could ask for a higher price when selling a car (IA, p. 100). Overall, social impacts could have been explored more exhaustively, including implications for (public) health, which seem relevant, but are not assessed. Effects on third countries are mentioned in the context of battery imports only, although the competitiveness of the EU's automotive industry constitutes one of the main objectives.

As regards *environmental* impacts, the IA looks at the reduction of both CO<sub>2</sub> and other air pollutants (NO<sub>x</sub> and particulate matter) (IA, pp. 101-109). It concludes that a 30 % emissions reduction with new standards in 2025 and 2030 is the most effective and efficient solution, combined with, inter alia, a crediting system to incentivise low emission cars and some changes to governance and monitoring. It should be noted that the impacts of some options will depend on the concrete implementation measures and, as indicated above, on full transition to the new worldwide harmonised light vehicles test procedure (WLTP).

## **Subsidiarity / proportionality**

The IA addresses the principles of subsidiarity and proportionality, stressing the cross-border nature of the implications of climate change and the need for further EU action to maintain strong incentives for innovation and CO<sub>2</sub> emissions reduction (IA, pp. 28-30). The recast of the existing regulations is presented as a proportional solution, assuming that no action would be detrimental to CO<sub>2</sub> emissions reduction and EU competitiveness. At the time of writing, no reasoned opinions from national parliaments had been received.

## **Budgetary or public finance implications**

The IA gives no information on EU budget implications. According to the explanatory memorandum (p. 10), the proposal does not require additional financial resources. The IA considers the administrative costs linked to the proposed new rules on data collection and the monitoring of real world fuel consumption – and the obligation to report deviations – to be 'well justified' by the benefits of the CO<sub>2</sub> emissions reduction envisaged (IA, p. 167).

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<sup>16</sup> According to the E3ME model. The GEM-E3 model foresees a slight increase in employment of 0.02 % compared with the baseline by 2030 under the preferred option and the loan-based variant, IA, p. 96.

## **SME test / Competitiveness**

According to the IA, one of the objectives of the proposal is to foster the competitiveness of the EU's automotive industry. It highlights that the net savings from CO<sub>2</sub> emissions reduction are significantly higher for vans than for cars, on account of the much higher fuel cost savings. This is expected to help improve the competitiveness of SMEs, who use them most (IA, pp. 86, 88). Moreover, the IA maintains the existing *de minimis* exemptions for manufacturers of less than 1 000 newly registered vehicles per year, as well as the option of individual targets for small volume manufacturers (between 1 000 and 10 000 cars or 22 000 vans registered per year (IA, pp. 56-58)).

## **Simplification and other regulatory implications**

The ex-post evaluation of the existing legislation, the basis for this proposal, was conducted under the Commission's Regulatory Fitness and Performance programme (REFIT) in 2015 (IA, p. 15). The recast regulation now proposed would replace the two current regulations. The IA underlines that the preferred options are not expected to generate additional administrative costs, and that they would maintain the possibility to reduce compliance costs, for instance through a crediting system for low emission cars (IA, p. 165). It also specifically advises limiting administrative burden in future implementing legislation.

## **Quality of data, research and analysis**

The IA is based on a wide range of sound internal and external expertise, including the extensive (external) 2015 *ex post* evaluation, several support studies and eight other studies run between 2014 and 2017, listed in Annex 1.<sup>17</sup> One of the evaluation's key findings was the weakness of the test cycle used up until September 2017 (NEDC), replaced as a result by the new WLTP test. The transition to the new test procedure was taken into account in the IA, for example in the options regarding the emission reduction targets and the governance of test procedures, which is why some options are defined in relative, not absolute terms. At the same time, the IA acknowledges a lack of data as regards the implications of the new WLTP (IA, p. 47). For the quantification of impacts, the IA builds on the PRIMES-TREMOVE model run by ICCS-E3MLab and frequently used in the past, as well as on two macroeconomic models (GEM-E3 and E3ME) and the DIONE model, the latter developed by the Joint Research Centre to assess impacts at manufacturer category level (IA, Annex 4). The models and methods are explained, but, as indicated before, some technical issues could have been presented in a more transparent way for non-specialists. This includes non-specified acronyms (OEM, IA, p. 47, 50) or missing abbreviations in the glossary (for example DOE, OEM, TCO, TM-EMB, LEV, ZEV). Overall, the quality and evidence-base of the analysis and the underpinning research appear to be solid and consistent.

## **Stakeholder consultation**

The IA clearly identifies the different types of stakeholder affected by the problem and by the proposal, all of which were consulted, starting with a two-part public on-line consultation from 20 July to 28 October 2016. This generated 205 replies, the main categories of respondents being 82 individuals, 33 civil society organisations, 31 professional organisations and 28 private enterprises (IA, annex 2). The first part of the consultation contained general questions, the second questioned well-informed stakeholders on technical details and actions to be taken. In addition, the European Commission drew on two stakeholder workshops, held in March and June 2017, and on various meetings with relevant industry associations (car manufacturers, and component and fuel suppliers), as well as bilateral meetings with Member State authorities, vehicle manufacturers, suppliers, social partners and non-governmental organisations. According to the IA, stakeholder feedback was used to develop and assess the policy options (IA, Annex 2, p. 15). The analysis refers to stakeholders' opinions on numerous aspects, and where options were ruled out explains which enjoyed broad support amongst stakeholders, for example on the metrics for targets, or where opinions were split, for instance on the degree of emissions reduction, the derogations scheme or mileage by fuel and vehicle segment (IA, p. 38, Annex 2, pp. 11-13).

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<sup>17</sup> Three of the studies were to be published after the IA. Annexes 4-8 feature explanations of models and detailed calculations.

However, as compared with the number of stakeholders potentially affected, the number of replies seems rather limited and is on some important issues clearly mixed, it can only be considered an additional tool for the assessment.

## Monitoring and evaluation

The IA suggests maintaining the current monitoring and evaluation provisions, considered to have worked well, alongside a crediting system that can be built in without additional compliance costs (IA, p. 167). New elements include the collection and monitoring of data on real world fuel consumption, as well as the obligation to report and correct deviations if they occur. The IA identifies three sets of indicators to evaluate the achievement of each *specific* objective, in a mid-term review and an ex-post evaluation. It also presents three targeted indicators to check if the *operational* objectives have been achieved (IA, pp. 167-168).

## Commission Regulatory Scrutiny Board

The Regulatory Scrutiny Board (RSB) has issued a positive [opinion](#), with reservations, on the draft IA. It noted considerable shortcomings in the description of the context, including the competitiveness challenge and the relevance of other initiatives in the field. It also requested an explanation of obstacles to higher consumer uptake of electric vehicles. The final IA takes these remarks partly into account, providing some insight as to the need to integrate the proposal with other initiatives so as to be effective. However, the final IA gives no information on the details or costs of flanking policies, or on the various aspects of EU competitiveness in the world or the conditions for greater demand for low-emission vehicles.

## Coherence between the Commission's legislative proposal and IA

The European Commission's legislative proposal broadly follows the recommendations and preferred options of the IA. On some issues, such as the governance system, implementing measures will be adopted later on.

## Conclusions

The IA draws on broad internal and external expertise and provides a lot of quantitative information. While the analysis is logical overall and underpinned by sound research, some parts lack transparency and accessibility, in particular for non-specialists. The definition of the problems and objectives could have been more precise, but generally, the options and their comparison appear to be pertinent and evidence-based. Some of the preferred options are defined in relative terms, as the absolute values of the CO<sub>2</sub> emission reductions will only be determined in 2022. The IA could have addressed the relevance of external factors, such as test procedures, consumer behaviour or third countries, more in-depth, as well as impacts on public health, which are not assessed. These factors influence the effectiveness of standards for cars and vans considerably, as do other legislative initiatives aimed at reducing transport CO<sub>2</sub> emissions.

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*This note, prepared by the Ex-Ante Impact Assessment Unit for the European Parliament's Committee on Environment, Public Health and Food Safety (ENVI), analyses whether the principal criteria laid down in the Commission's own Better Regulation Guidelines, as well as additional factors identified by the Parliament in its Impact Assessment Handbook, appear to be met by the IA. It does not attempt to deal with the substance of the proposal. It is drafted for informational and background purposes to assist the relevant parliamentary committee(s) and Members more widely in their work.*

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