Honda Motor Europe
Response to consultation on a new CO_2 emissions regulatory framework for all newly sold road vehicles in the UK

Contents

1: Summary of Views

Top Line Summary:

- In line with our global ambitions, Honda fully supports the UK Government's efforts to tackle the climate emergency and to decarbonise the transport sector by ending the sale of conventional petrol and diesel cars.
- Of the options proposed by Government, our recommended approach to delivering the proposed 2035 end of sales date is via a technology neutral CO2 regulation, which should not be combined with a zero-emissions vehicle mandate.
- Full Hybrid technology has a vital role to play in the transition to zero emissions mobility and regulations for the period 2030-35 should support this.
- CO2 regulation for cars and vans should not be applied to the L-category as technologies, use cases and infrastructure requirements are not comparable. We recommend a bespoke approach to decarbonisation of the L-category.
- All new regulations should be consistent with EU regulation.
- CO2 regulation must be accompanied by additional Government action to accelerate infrastructure roll out and a package of consistent and predictable consumer incentives and taxation policy.

Honda's Decarbonisation Ambitions:

1. Honda fully supports the Government's efforts to tackle the climate emergency and to decarbonise the transport sector by ending the sale of conventional petrol and diesel cars by 2030.

2. Globally, Honda has an ambitious vision for achieving net zero – across all our global operations and products – by 2050. We will increase the ratio of battery-electric and fuel cell electric cars in all major markets of electrification – including the UK and wider European region - to 40% by 2030, to 80% by 2035, and then to 100% globally by 2040.

3. The UK, as part of the European region, is at the forefront of our efforts. Electrified models accounted for almost half of Honda's European car sales in 2020, and our mainstream line-up will be fully electrified by 2022. Our advanced Full Hybrid technology, which is being expanded across the European line-up, will play a vital role in supporting the transition to affordable zero emissions mobility.

4. As the largest motorcycle manufacturer in the world, Honda will aim to lead the industry with an approach which will include not only electrification but also the improvement of the fuel efficiency of gasoline engines, utilization of biofuels and other strategies.

5. We are also working hard to decarbonise our other product lines – from power equipment to aircraft, while also launching new products and services, such as our e:Progress smart charging service, to support our customers.

6. As the world's largest internal combustion engine manufacturer, the scale of the challenge of moving to full decarbonisation is huge, but in line with our philosophy of being a company that society wants to exist, we have grasped this challenge and are committed to achieve our goals.

7. Well-designed legislation, incentives and other Government policy measures are vital to supporting customers and the industry in society's transition to zero emissions mobility. We are therefore pleased to have an opportunity to share our views on the Government's proposals for a new framework for regulating CO2 emissions for new cars and vans to deliver the 2030 end of conventional petrol and diesel sales.

Role of Hybrid/SZEC requirements

8. We are pleased to see that Government has recognised the important role that Full Hybrid technologies can play in efficiently decarbonising transport, with the Prime Minister committing to allowing the "sale of hybrid cars and vans that can drive a significant distance with no carbon coming out of the tailpipe" to 2035.

9. As we set out in our response to the consultation on setting a date for ending the sale of conventional petrol and diesel cars, Full Hybrids have a vital role to play in supporting the transition to zero emissions mobility:

    - **Affordability:** Hybrid technology is at an affordable price point for a wide variety of consumers, whereas BEV prices remain high, and will do so for some time to come. As the Advanced Propulsion Centre have indicated, hybrids are forecast to be much more affordable relative to EVs to 2035 and will play a positive role in the consumer transition.

    - **Infrastructure:** Hybrid drivers do not need to rely on specialised charging infrastructure, and the security provided by the ICE engine avoids range anxiety concerns. Equally, Full Hybrids do not rely on driver behaviour, providing significant zero emissions miles without the need to plug into charging infrastructure. This will provide more time for developing sufficient infrastructure and ensure the levelling up agenda is not lost.

    - **Consumer acceptance:** Full Hybrids offer a driving experience and technology that current customers understand and accept, while offering an introduction to electrified driving.

10. Honda's advanced hybrid technology already delivers significant zero emissions miles – and will continue to play a significant role in our approach to decarbonisation in the coming years, as evidenced in our detailed response to the consultation questionnaire below.

11. Therefore, regulation for the period 2030 – 2035 should enable the continued use of a full range of advanced hybrid technologies that can effectively and reliably reduce transport CO2, while not allowing the use of less efficient power trains that do not deliver significant CO2 reductions across the whole drive cycle.

12. We set out our views on this in detail in our response to Question 1 below.

Recommended Approach for Future CO2 Regulation

13. Honda Motor Europe's business and product line up covers both the EU and UK. We thus call for an approach to CO2 regulation that ensures maximum regulatory consistency between the UK and EU markets to avoid creating unnecessary costs and complexity.

14. We therefore support an approach to future regulation that is based on a CO2 regulation – replicating the current arrangements. This would create a regulatory framework consistent with the approach being taken by the EU, while allowing the UK the sovereign ability to set different targets from the EU and control its own climate policy.

15. A CO2 regulation – as opposed to the other option of a ZEV mandate - would also allow for a more technology neutral approach – allowing manufacturers to determine how best to meet the targets, using a wide range of energy sources and power trains. The effectiveness of this approach is evident in the UK, with a rapid increase in EV and HEV sales across the region and a number of ambitious electrification announcements for several OEMs.

16. We do not support an approach to future regulation that combines a CO2 regulation with a ZEV mandate. This would merely add complexity and regulatory burden to the UK market, which would not be faced by EU counterparts.

17. We set out views on this point in more detail in Questions 5 – 8 below.

Approach to L-CAT

18. L-Category vehicles, such as mopeds, scooters, and motorcycles, play a positive role in supporting affordable low emissions mobility and addressing congestion in urban environments, as Government has recognised in the Transport Decarbonisation Plan. We are working to support the increased uptake of L-category vehicles by improving safety for riders and pedestrians and have set a target of zero traffic collision fatalities involving Honda motorcycles and automobiles globally by 2050.

19. As the industry leader, Honda has committed to ambitious action to decarbonise powered two wheelers. On April 23rd 2021, Honda's global CEO Toshiro Mibe, pledged that "Honda will strive to lead the motorcycle industry at the forefront of its environmental initiatives with an approach which will include not only electrification but also the improvement of the fuel efficiency of gasoline engines, utilization of biofuels and other strategies."

20. We recognise the Government's ambition to use regulation to accelerate the decarbonisation of L-Category vehicles and to position the UK in a leadership position in this area, but simply applying rules designed for cars and vans will not work. The different technologies, use cases – and indeed the significant differences between the L-Cat subcategories - mean that a bespoke regulatory approach will be required. We look forward to working with Government on developing an ambitious and effective approach to motorcycle decarbonisation that is consistent with the global realities of the sector.

21. We set out our views in more detail on this point in Question 26 below.

Additional Comments:

22. Government has an important role to play in developing effective regulation that delivers on its vital climate objectives, while ensuring that the UK remains a dynamic market with a range of low and zero emissions vehicles available to consumers.

23. This regulation should be based on a number of key principles, which we outline in detail in the Consultation response below:

    - **One size does not fit all.** CO2 regulation for cars and vans cannot be automatically copied and pasted for other product groups, such as L-categories. Each sector should have its own regulation, taking account of contribution to GHG reduction and other factors such as congestion or affordable mobility.
    - **Conditionality:** The ambition level of a new CO2 regulation must be based on a realistic appraisal of the availability of alternative fuel infrastructure.
    - **Consistency**: Like most large OEMs, Honda Motor Europe's business and product line up covers both the UK and EU. We thus call for an approach to CO2 regulation that ensures maximum regulatory consistency between the UK and EU markets to maximise the opportunities to reduce emissions whilst keeping costs and complexity under control
    - **Levelling Up:** CO2 regulation should ensure that customers have access to a wide choice of technologies to ensure no person or no part of the UK is left behind. + devolution comments.

24. Well-designed CO2 regulation is a necessary but not sufficient condition for achieving the goal of ending the sale of conventional petrol and diesel cars by 2030 and hybrids by 2035. The Government must take action to maintain a competitive UK market, ensuring that customers have a wide choice and can access the right vehicle, for the right use and the right price. Regulation alone cannot deliver this, so in some areas the Government should enable the market to deliver solutions. Key priorities are to:

    - **Levelling Up Infrastructure:** Driving forward the roll out of infrastructure across all parts of the country and not just focussing on rapid charging. The market should be supported to deliver infrastructure, while regulation can ensure reliability, accessibility and interoperability for customers.
    - **Supporting Consumers:** Communicating clearly and effectively with the public to overcome myths and anxiety around low emissions vehicles.

- **Reforming Energy Regulation:** Removing regulatory impediments to investment in energy infrastructure and supporting investment in a range of zero emissions energy sources – not just electricity.
- **Ensuring Fairness**: Using incentives and fiscal tools to Ensure the transition to low emissions vehicles is fair and does not exclude sections of the population from mobility and takes account of the possible impact on automotive employment.
- **Supporting Free Trade:** Even with increased domestic production, the industry is unlikely to increase to the UK built supply of electrified vehicles to the scale required by government ambition levels. Companies such as Honda rely on global supply chains, production and know how to provide customers with a wide range of affordable electrified vehicles. Reducing or eliminating the tariffs on low emissions vehicles would increase consumer choice, improve affordability, and support government in achieving a very important plank of its manifesto.

2: Response to Consultation Questions

Significant Zero Emission Capability

1. What metric, or combination of metrics should be used to set eligibility for cars and vans between 2030 and 2035?

- We are pleased to see that Government has recognised the important role that Full Hybrid technologies can play in efficiently decarbonising transport, with the Prime Minister committing to allowing the "*sale of hybrid cars and vans that can drive a significant distance with no carbon coming out of the tailpipe*" to 2035. Honda's advanced hybrid technology already delivers significant zero emissions miles – and will continue to play a significant role in our multi-pathway approach to decarbonisation in the coming years, as we evidenced in our submission to the consultation on the date for the end of the sale of petrol and diesel cars.

- The metric for measuring "Significant zero emissions miles" needs to be defined in such a way to allow the continued use of such technologies that can deliver significant carbon reductions in the period 2030-2035. A simplistic metric of "x consecutive miles" in zero emissions mode may risk excluding efficient technologies, while allowing the continued use of less efficient vehicles.

- We therefore propose the following metric for hybrids that can deliver significant zero emissions miles:

% EV driving time during phase 1 and 2 of WLTP

- Our proposed metric would have several key benefits:

    - Would enable the continued use of the full range of advanced hybrid technologies that can effectively and reliably reduce transport CO2 emissions up to 2035

- Can be set at a sufficiently challenging level to ensure that only the most advanced hybrids (with or without plugs) can be brought to market
- Avoids allowing use of technologies that do not deliver significant CO2 reductions across whole drive cycle
- Is based on information that can easily be made available by OEMs or calculated on the basis of available data
- Does not require burdensome new testing processes

2. For your chosen metric, what threshold should new cars and vans be required to meet from 2030?

- On the basis of our proposed metric, from 2030 new cars should achieve a minimum of **50% EV driving in WLTP stage 1 and 2.**

3. What other requirements could be introduced, if any, to maximise zero emission capability?

- We would suggest no additional requirements beyond the proposed metric.

4. What would the impact be on different sectors of industry and society in setting an SZEC requirements, using evidence where possible?

- Honda's hybrid technology is a key facilitator of the transition to zero emissions mobility, allowing customers to affordably access electrified mobility while avoiding some of the current barriers to widespread EV take up such as affordability, range anxiety and access to infrastructure.

- **Affordability**: Hybrid technology is at an affordable price point for a wide variety of consumers, whereas BEV prices remain high, and will do so for some time to come. As the Advanced Propulsion Centre have indicated, hybrids are forecast to be much more affordable relative to EVs to 2035 and will play a positive role in the consumer transition.

- **Infrastructure:** Hybrid drivers do not need to rely on specialised charging infrastructure, and the security provided by the ICE engine avoids range anxiety concerns. Equally, Full Hybrids do not rely on driver behaviour, providing significant zero emissions miles without the need to plug into charging infrastructure.

- **Consumer acceptance:** Hybrids offer a driving experience and technology that current customers understand and accept, while offering an introduction to electrified driving.

- Setting an overly stringent or badly designed SZEC risks:
  - Blocking consumers access to accessible and affordable electrified mobility
  - Negatively impacting the current hybrid market and adding to consumer confusion resulting in missed opportunities to further reduce emissions.

5. Do you have any comments regarding Option 1, to replicate the current regulatory framework, albeit with strengthened targets, to meet our wider carbon reduction targets and phase out dates?

- Honda Motor Europe's business and product line up covers both the EU and UK. We thus call for an approach to CO2 regulation that ensures maximum regulatory consistency between the EU and UK markets to avoid creating unnecessary costs and complexity.

- We therefore support Option 1 – replicating the current regulatory framework, which would reflect the approach being taken in the EU, while allowing the UK the sovereign ability to set different targets from the EU and control its own climate policy.

- Option 1 also allows for a more technology neutral approach, allowing manufacturers to determine how best to meet the targets, using a range of energy sources and power trains.

6. Do you have any comments regarding Option 2, to introduce a ZEV Mandate or sales target alongside a CO_2 regulation?

- We do not support the introduction of ZEV mandate alongside a CO2 regulation. In our view, an ambitious CO2 regulation – along with the right Government support - would be sufficient to drive the uptake of zero emissions vehicles – as shown by the rapid increase in EV sales and ambitious announcements by OEMs driven by the EU's CO2 regulation.

- For instance, Honda has already announced ZEV ambitions for major markets (including the European region) in order to meet regulatory and consumer demands. As the market is already moving in the right direction, regulation should be minimal and OEMs should be enabled to focus on existing momentum.

- A ZEV mandate – in addition to a CO2 target - would simply add an unnecessary layer of regulatory burden and complexity to the UK market, which would not be faced by EU counterparts, and would add further surveillance and enforcement demands on the UK administration. Additionally, a ZEV mandate – which would represent significant Government interference in the market and OEM business models - would limit consumer choice and potentially lead to the legacy petrol and diesel fleet remaining in circulation longer than would be wished.

7. Do you have any views on the Government's initial preference for the regulatory approach set out in Option 2?

- As outlined in our response to question 6, we feel that combining both a ZEV mandate and a CO2 regulation would create an excessive regulatory burden for both manufacturers and Government. A strong, well designed CO2 regulation is the most efficient way to deliver the Government's ambitions. In an immature market which is not yet fully understood, a ZEV mandate risks stifling demand and supply, rather than encouraging it. This could have the effect of pushing OEMs out of the UK market and thus limiting choice for UK consumers.

8. Are there alternative approaches that could deliver on the government's carbon budget and 2030/2035 commitments?

- A strong, well-designed CO2 regulation as proposed at Option 1 is the most efficient regulatory tool to deliver the Government's ambitions.

- However, vehicle emissions regulation on its own however, will not be sufficient. In a free market economy Government should not and cannot regulate individuals' purchasing behaviour. A blend of regulation and market stimulation – and indeed communication to customers – are needed for widespread uptake of electrified vehicles.

- The approach to 2035 must therefore also focus on:

    - **Infrastructure**: Driving forward the roll out of infrastructure across all parts of the country and not just focussing on rapid charging. ○ **Consumers:** Communicating clearly and effectively with the public to overcome myths and anxiety around low emissions vehicles.
    - **Energy:** Removing regulatory impediments to investment in energy infrastructure and supporting investment in a range of zero emissions energy sources – not just electricity.
    - **Fairness:** Ensuring the transition to low emissions vehicles is fair and does not exclude sections of the population from mobility and takes account of the possible impact on automotive employment.

9. Do you have any views on how either, or both, of the options could be implemented?

- Honda Motor Europe's business and product line up covers both the UK and EU. We thus call for an approach to CO2 regulation that ensures maximum regulatory consistency between the UK and EU markets to avoid creating unnecessary costs and complexity.

- As the UK and EU CO2 regulations are being developed in parallel, there is an opportunity to ensure that there is consistency between both schemes and that no barriers to trade are accidentally created.

- As the UK and EU both form a single region for most large OEMs, shared targets, dates and approaches would ensure the smoothest, most efficient transition to decarbonisation, while avoiding disruption to customers.

10. Do you have any further comments or evidence which could inform the development of the new framework?

- No.

Additional Issues For Consideration

Stringency of CO2 Target

11. If deploying a combined ZEV Mandate and CO2 regulatory framework, how should the CO2 element be set?

- As outlined in our responses to questions 6 and 7, a strong and well-designed CO2 Regulation is sufficient to drive the uptake of zero emissions vehicles without the need for any separate additional ZEV mandate. The CO2 regulation should be developed along the proven approach and principles on which the EU car CO2 regulation is based.

12. Should the focus be on delivering the largest possible CO_2 savings, or the quickest possible switch to zero emission mobility?

- In our view, the focus of the UK's new CO2 regulation should be on delivering the largest possible CO2 savings, to support the UK achieving its Carbon Budget obligations, whereas a focus on a rapid approach to zero tailpipe emissions risks missing emissions targets and creating negative side effects.

- A CO2 savings approach allows OEMs and consumers to meet the target in the most effective and efficient way possible, using a range of technologies and energy sources.

- A simple focus on accelerating the take up of ZEVs is risky as:

    - Infrastructure is not yet sufficiently widespread, reliable, or accessible ○ ZEVs are still less affordable than hybrids, and upfront costs will remain high for years to come

  - Consumers – and even the PM's Climate Spokesperson - still have concerns about range and reliability.
  - Energy supply is still not fully renewable
  - Risks locking in current technologies over the long term and stifling innovation – which could result in greater costs in future and potentially not achieving CO2 reduction goals.

- Until these issues are overcome, a rush to ZEVs is not the most effective way to meet the Government's climate ambitions. A more market-based approach, setting targets for business to meet, is a much more effective way forward that will stimulate innovation.

13. How do we ensure that the target allows for sufficient supply of low and zero emission vehicles; supports investment in the UK; and delivers our carbon reduction commitments?

- A strong, well designed CO2 regulation is the most efficient way to deliver the Government's ambitions. As we have seen in the EU, ambitious C02 regulation has pushed OEMs to increase the supply of low and zero emissions vehicles faster than in other global markets. Alongside this, the Government must take action to make the UK an attractive market for the sale of electrified vehicles, such as:
- **Infrastructure:** Driving forward the roll out of infrastructure across all parts of the country and not just focussing on rapid charging.
- **Consumers:** Communicating clearly and effectively with the public to overcome myths and anxiety around low emissions vehicles and maintain consistent, long term incentives.
- **Energy**: Removing regulatory impediments to investment in energy infrastructure and supporting investment in a range of zero emissions energy sources – not just electricity.
- **Fairness**: Ensuring the transition to low emissions vehicles is fair and does not exclude sections of the population from mobility and takes account of the possible impact on automotive employment.

- **Leveraging Global Supply Chains:** Even with increased domestic production, the industry is unlikely to increase the UK built supply of electrified vehicles to the scale required by government ambition levels. Companies such as Honda rely on global supply chains, production and know how to provide customers with a wide range of affordable electrified vehicles. Reducing or eliminating the tariffs on low emissions vehicles would increase consumer choice, improve affordability, and support government in achieving a very important plank of its manifesto. Equally, government should avoid creating new non-tariff barriers to the imports of EVs or batteries which could also reduce the supply of zero emissions vehicles to the UK market.

Derogations and Exemptions

14. Should the new regulatory framework include exemptions or modified targets for certain specialist vehicles and/or niche and small volume manufacturers?

- Such a derogation should certainly be considered, but it should be:
  - Consistent with any similar measure taken at EU level, ○ Evidence based
  - Be fair, non-discriminatory and compliant with the UK's WTO obligations

Credit Levels

15. Should credits be awarded to vehicles that meet the SZEC definition?

[Yes]

No

Don't know

Please explain your answer.

- We support the principle of a system of credits but would need to see the detail of the scheme proposed before commenting further.

16. If so, should this be a fixed number of credits, or should there be a sliding scale that recognises the difference in CO2 efficiency of various SZEC-compliant vehicles?

- A sliding scale would be the most logical and fair approach, awarding the most credits to the cleanest SZEC compliant vehicles.

Credit Banking and Trading

17. Should this be considered within the new framework?

Yes

No

Don't know

Please explain your answer.

- Credit banking and trading provides for extra short-term flexibility without any adverse impact on long-term emission reductions.

18. If so, over what timeframe should they remain usable and should credits and debits be treated the same or differently?

- Credits should be usable for a minimum timeframe of one year.

19. Within the trading element of the new scheme, should there be limits on the number of certificates/grams of CO_2 that can be bought or sold?

Yes

No

Don't know

Please explain your answer.

- There is no justification for any such limitation as the overall environmental goals are not adversely affected by the number of certificates or gr of CO2 that can be bought or sold.

20. Should such a market cover the whole of road transport or should there be some constraints imposed on trading across manufacturing sectors (e.g. cars and Heavy Duty Vehicles)?

- Cross-sectoral trading could provide flexibility to meet CO2 reduction targets. UK Government should however ensure a fair and balanced approach to all transport sectors. Any such trading scheme should recognise the fundamental differences between the different vehicle categories (e.g. emission metrics (g CO2/km; g CO2/ton-km; g/kWh), annual mileages, test cycles, …), which are not always directly comparable (which is why we argue at Question 25 below that L-Cat should not be included in a CO2 scheme for cars and vans, due to significant differences in technology and use cases). Further, a trading scheme should be easy to implement, administer and monitor – particularly as it would only be used for a relatively short period.

Levels of fines for non-compliance

21. How, and at what level, should fines be set in the new UK regulatory framework and should this vary for different vehicle types?

- Fines should be set at a sufficiently dissuasive level to avoid undermining the ultimate CO2 savings goal. In our view the current penalty scheme is effective – as shown at EU level by the increased sales of EVs and ambitious electrification announcements by several OEMs.

- UK Government should strive to ensure a fair and balanced approach to all transport sectors. There is no justification for levying higher fines on different vehicle types.

Target setting process

In the future UK regulatory regime, we have the opportunity to determine how far ahead we set the targets, the lead in time for any change in targets and whether the option to amend targets at shorter notice is required. We would welcome views on each of these.

- To ensure long term planning certainty for manufacturers, there should be no changes to targets once set without rigorous consultation with all stakeholders and a full review of enabling conditions for more ambitious targets such as infrastructure availability

- Given the pace of change in this nascent sector, new technologies and zero emissions mobility solutions are developing independently of regulatory targets. Some technologies – such as hydrogen fuel cell cars – may not be ready for a 2030 target date, while other solutions may come more quickly. Target setting is only one part of the equation, and must be balanced with nonregulatory measures to maintain the momentum we already see in the market.

Real-World Emissions

22. Would there be benefits in seeking to ensure any CO2 targets in the new UK regulatory framework take into account real-world emissions data alongside the lab-tested WLTP CO_2 emissions figures? If so, how might the two be linked?

Yes

No

Don't know

Please explain your answer.

- As with the EU scheme, using tools such as Onboard Fuel Consumption Monitoring (OBFCM) would enable UK regulators to check for disparities between WLTP results and real-world fuel consumption. However, the regulation itself, and any target values, should be based on consistent, replicable WLTP values and not real-world CO2 data which is too variable and subject to too wide a range of influences to be a meaningful basis for regulation.

- Real-world emissions data could, however, have a role in helping consumers to make informed choices.

~~Extending the Framework to all Road Vehicles~~

~~Heavy Duty Vehicles~~

23. ~~For vehicle sub-categories that are not yet covered by VECTO, could a ZEV Mandate/sales target be extended before VECTO is adapted?~~

~~Yes~~

~~No~~

~~Don't know~~

~~**Please explain your answer.**~~

24. ~~**Would there be any unintended consequences of establishing a ZEV Mandate for certain vehicle sub-categories before a CO_2-based regulation?**~~

25. ~~**Do you have any views on imposing a CO2 regulation on vehicle types that are not yet covered by a CO_2 test procedure, or existing regulation, particularly in light of the planned future phase out consultation for new non-zero emission buses?**~~

~~**Yes**~~

~~**No**~~

~~**Don't know**~~

~~**Please explain your answer.**~~

L-Category vehicles (Motorbikes, Mopeds, Quad Bikes etc)

26. Should the preferred regulatory approach be extended to all L-category vehicles or should the diversity of the sector (motorbikes, mopeds, motorised tricycles, quadbikes, motorised quadricycles etc) necessitate different approaches?

Yes

No

Don't know

Please explain your answer.

- As the UK government has recognised in the Transport Decarbonisation Plan, motorcycles have a key role to play in offering affordable low emissions mobility and in tackling congestion in urban environments.

- As the industry leader, Honda has committed to ambitious action to decarbonised powered two wheelers. On April 23rd 2021, Honda's global CEO Toshihiro Mibe, pledged that "Honda will strive to lead the motorcycle industry at the forefront of its environmental initiatives with an approach which will include not only electrification but also the improvement of the fuel efficiency of gasoline engines, utilization of biofuels and other strategies."

- Cars and motorcycles are very different technologies and are used in very different ways. While electrification is progressing in some segments, the challenges and scale – and infrastructure required - are much different from cars.

- Honda is actively pursuing the electrification of short distance/urban commuter scooters and motorcycles in some markets. We are also cooperating with other manufacturers to develop swappable battery standards, which will help to address some of the key challenges in this segment.

- The share of these more urban focussed L-category vehicles is slowly growing, particularly as some delivery fleets adopt them for their operations. Globally, Honda's L-category electrification programme will focus initially on business and Government fleets.

- However, the category is much broader than scooters and small urban vehicles. Larger motorcycles will be more challenging to electrify given the size of batteries required to deliver sufficient range vs the size of the bike.

- Therefore, it is not possible to simply copy and paste the CO2 regulation for cars and vans across to motorcycles.

- Rather, we would suggest an alternative, bespoke, and well-designed approach to supporting the decarbonisation of the L-category should be designed in consultation with the industry. This approach should recognise the technical difference between cars and bikes, acknowledge the positive benefits L-category make to reducing congestion and CO2, and take account of the fact that bikes require a different alternative energy infrastructure to cars and vans. An approach to L-category should also be based on a sound understanding of the variances between the sub-segments.

- Given that L-category make a positive contribution to congestion and personal mobility, and the fact that switching from cars to bikes has a positive climate

impact, Government should assess the value of seeking regulation in this space.

Additional Issues for Consideration

As the regulations develop, all potential aspects listed in chapter 5 will need to be considered for each vehicle type. Therefore, we would welcome any additional views on the application of the variables mentioned from paragraph 5.50 onwards, in respect of new HDVs (including the adaptations that should be made for different HDV types) and L-category vehicles.

- As mentioned above, electrification may not be suitable for all L-category segments, particularly larger bikes. Regulation should enable a multi-pathway approach to decarbonising powered two wheelers, ensuring a role for hybridisation, hydrogen or synthetic fuels.

Final comments

Any other comments?

- Honda supports the UK Government's ambitions to achieve net-zero by 2050 and to decarbonise the transport sector by 2040. We are committed to playing a significant role in tackling the climate emergency by developing and bringing to market innovative new products and services. Our CEO has recently set out ambitious targets for accelerating our decarbonisation pathway – "Increase the ratio of battery-electric vehicles (EVs) and fuel cell electric vehicles (FCEVs) within overall unit sales in all major markets of electrification combined to 40% by 2030, to 80% by 2035, and then to 100% globally by 2040"

- In Europe, our business is ahead of Honda's global target curve. Sales of electrified models accounted for almost half of Honda's European sales in 2020 (42%), and our mainstream line-up will be fully electrified by 2022, an objective that we are well on track to meet. A staple of our efforts to achieve this ambitious goal is the innovative, two-motor e:HEV technology, which is being expanded across the European line-up.

- As the largest motorcycle manufacturer in the world, Honda will aim to lead the industry with an approach which will include not only electrification but also the improvement of the fuel efficiency of gasoline engines, utilization of biofuels and other strategies.

- We are also working hard to decarbonise our other product lines – from power equipment to aircraft, while also launching new products and services, such as our e:Progress smart charging product, to support our customers.

- This is a hugely ambitious and challenging step for Honda. The world's largest internal combustion engine manufacturer is now seeking to move rapidly into a new decarbonised era - but in line with our philosophy of being a company that society wants to exist, we have grasped this challenge and will strive to achieve our goals.

- The scale and seriousness of the challenge means that we cannot rely on one technology alone to achieve our goals.

- This is why we advocate for a "multi-pathway approach" that makes use of a range of technologies – including battery electric, advanced hybrid, e-fuels and hydrogen – to deliver rapid reduction in transport emissions while ensuring that personal mobility remains accessible and affordable to everyone, no matter where they live.

- This is key to making sure that customers – in a free market economy – make an active choice to move into low and zero emissions mobility.

- Government has an important role to play in developing effective regulation that delivers on its vital climate objectives, while ensuring that the UK remains a dynamic market with a range of low and zero emissions vehicles available to consumers.

- This regulation should be based on a number of key principles, which we have outlined in the responses above:

    - **One size does not fit all**. A CO2 regulation for cars and vans cannot be automatically copied and pasted for other product groups, such as L-categories. Each sector should have its own regulation, taking account of contribution to GHG reduction and other factors such as congestion or affordable mobility.
    - **Conditionality**: The ambition level of the CO2 regulation must be based on a realistic appraisal of the availability of alternative fuel infrastructure.
    - **Consistency**: Honda Motor Europe's business and product line up covers both the UK and EU. We thus call for an approach to CO2 regulation that ensures maximum regulatory consistency between the EU and UK markets to avoid creating unnecessary costs and complexity.
    - **Customer Focus:** The CO2 regulation should ensure that customers have access to a wide choice of technologies, and Government needs to continue to support affordability though consistent and meaningful incentives.
    - **Good Regulation:** The interaction between a CO2 regulation and other regulatory tools (such as a UK version of Euro 7 or other technical regulations) should be fully assessed to avoid duplication, unnecessary complexity or other unintended consequences. Excessive regulatory complexity creates costs for OEMs, diverting resources that could be better channelled into R&D and increasing productivity.

Contact:

(Redacted - Regulation 13 of the Environmental Information Regulations 2004)