

December 1, 2023

Opinion of the Japan Auto Parts Industries Association on Proposal for a Regulation of the European Parliament and of the Council of the European Communities on vehicle design circularity requirements and the management of end-of-life vehicles

1. Introduction

The Japan Auto Parts Industries Association (JAPIA) was established in August 1969 as a public interest incorporated association for the purpose of promoting the Japan auto parts industry.

Since its reorganization as a general incorporated association in December 2011, the association has been engaged in a variety of activities for the development of the industry.

The high level of quality of each car component makes a significant contribution to the safety and comfortable driving of the car. In order to maintain high quality, JAPIA actively collaborates with member companies to solve various issues that arise in the automotive parts industry.

There are 6,500 auto parts manufacturers in Japan, with 640,000 direct employs. The company generated annual sales of EUR 222.2 billion. Japan's automotive industry accounts for 17.5% of Japan's manufacturing shipments. Japan's auto parts account for more than 50% of Japan's total automotive industry shipments, half of which come from JAPIA member companies.

2. Executive Summary

JAPIA's Basic Stance on the proposal

In response to the proposal announced by the European Commission, JAPIA is committed to "reducing carbon dioxide emissions" and "valorizing through resource recycling."

I agree with the basic idea from the point of view.

In addition, we were able to confirm that many verifications have been carried out at JRC.

However, there are some concerns in the manufacture of automotive parts, so I would like to express my opinion.

The plastics collected from the market are products that have a short shelf life, such as food containers and household products, as well as household appliances and automobiles.

There are products that have a long period of use. Products that have been used for a long time are difficult to recycle due to deterioration and deterioration, and there are concerns about whether the target of 25% PCR as material supply, of which 25% is ELV-derived, will be met.

Impurities are inevitable in the process of plastic being recovered from the market.

Since there is no means at this stage to guarantee environmentally hazardous substances such as REACH and EU POPs regulations when such materials are used, the subject substances should not be included in the scope of regulation.

Automobile parts are complex in design, consist of a variety of parts made up of multiple materials, and there are many parts for which recycling technology has not been established, so the environment in which automobiles (parts) are used and safety should be considered. In particular, plastics require high quality in terms of strength and flame retardancy, and we believe that it will take time to solve technical issues.

3. Proposal for Clauses

[Article 4, Paragraph 2]

When it comes to collecting data throughout the supply chain, it is assumed that all manufacturers obtain material data and make correct declarations. The automotive sector is already using IMDS¹ to collect data throughout the supply chain. We have been able to ensure reliability through the incorporation of the knowledge of those in charge of the materials field from the past, clarification of procedures and operational rules to ensure the accuracy of information, and periodic revision and education of input information. On the other hand, when launching a new data collection system in the broad automotive industry, it is necessary to consider measures to reduce the workload and User Fee Burden due to system changes for Tier 1 and 2 companies, as well as regional disparities as production becomes global. In order to use it throughout the supply chain, it is necessary to

¹ IMDS: International Material Data System

conduct a verification process that takes into account the impact and burden not only in Europe but also globally, we should establish a timeframe for the introduction of the system that users can handle.

[Article 5, Paragraph 1]

Recycled materials collected from the market are composed of parts that were developed and produced more than 15~20 years ago when there were no restrictions on substances of concern, and contain substances of concern under the REACH regulation or substances of concern that will be prohibited in the future. In addition, by repeating recycling, the content of substances of concern becomes uncontrollable. Recycled materials are collected and manufactured on a batch-by-batch basis, so it is impossible to analyze and guarantee them on a lot-by-lot basis. Since there is currently no means to guarantee REACH-regulated substances, they should not be included in the scope of regulation. In addition, to guarantee content, significant time and cost should be avoided in establishing a global and cross-value chain analysis and assurance system.

Since there is no means at this stage to guarantee environmentally hazardous substances such as REACH and EU POPs regulations, the substances subject to these regulations should not be included in the scope of regulation. In addition, recycled materials should not be included in the scope of regulation because it is difficult to establish an analysis and assurance system for the entire value chain in order to guarantee the content of recycled materials on a global basis.

[Article 5, Paragraph 5]

This proposal has been extended to include recycling system. The contractor for the study of alternatives for exemptions should be ECHA, an expert in chemical substances, as well as consultants familiar with the automotive supply chain as in the past, to achieve the greatest effect with the least risk.

[Article 6, Paragraph 1]

[Restrictions on parts used]

Although this clause covers all plastics used in automobiles, they are used in a wide range of parts, from important safety parts to general decorative items, and are designed and manufactured in a wide range of areas with strict safety and quality requirements. For this reason, there are large and small technical issues

related to the type of material and the part where it is used, and for the time being, it is necessary to limit the use of non-structural materials to non-structural materials, and to give due consideration to the amount of recycled materials used and the timing of the start of application by assessing the progress of technological innovation.

[Gradual expansion of material types]

Among the material types, the recycling of thermosetting resins is more technically difficult than that of thermoplastics, and regeneration is difficult. In particular, in the case of products recovered from the market, the details of the compounding materials are unknown, and it is difficult to control the reverse reaction to return to virgin materials, making it practically difficult to recycle. In addition, if alternative materials are used, it is predicted that the performance may not be sustainable in order to ensure the safety of the vehicle. Since it is expected to be difficult to secure recycled materials for individual material types, we support regulations that are first limited to thermoplastic resins as defined by polymers in the REACH regulation, rather than uniform restrictions.

[Limits of recycling]

When manufacturing recycled materials using waste plastics collected from the market, it is expected that the traceability of waste plastics obtained not only from domestic cars but also from vehicles of various ages will be extremely difficult for a long time after the start of implementation. Additives must be added to recycled plastics because their strength decreases, and it is necessary to ensure that the physical properties of materials that can be used repeatedly and the safety of the human body and the environment are evaluated.

[Avoidance of the effects of environmentally hazardous substances]

The amount of car-derived waste collected from the market is more than 15 years old, and there are many unknowns about how it was manufactured and disposed of. There is a high possibility that the waste is contaminated with environmentally hazardous substances, even if it is not intentional. The number of dismantling, sorting, and recycling companies that can carry out analysis related to environmentally hazardous substances every time is small, and it is expected that the number of recycled materials on the market will be greatly reduced.

The use of environmentally hazardous substances should be permitted for a certain

period of time. As a result, the use of recycled materials itself becomes impossible and the objectives of this regulation are not achieved.

[Compatibility of environmental assessment]

In response to the growing need for ESG in society as a whole, it is necessary to balance the three elements of CN, CE, and NP in the promotion of environmental operations. Due to the mandatory use of recycled materials, environmental pollution and destruction of nature in the process of collection ~ manufacturing are absolutely unacceptable. In the implementation of this regulation, an environmental impact assessment should be conducted that takes into account society as a whole.

When manufactured recycled materials are compared with virgin materials, the physical properties of the materials deteriorate. In order to ensure the required quality of products, it is necessary to increase the wall thickness compared to conventional products, and as a result, there is concern that the vehicle weight will increase due to the increase in the amount of materials used, and the amount of CO2 emissions will increase throughout the life cycle.

[Emergency measures in case of procurement difficulties]

It is predicted that the expansion of CE and social instability will continue worldwide in the future. When recycled materials become unavailable in force majeure, there are only a few alternative manufacturers that can provide recycled materials with the quality necessary for the manufacture of automobile parts.

In that case, there is a high possibility that production will be stopped, so an exception should be described. In addition to material recycling, a wide range of measures should be considered, such as expanding the application of chemically recycled materials and bio-based materials.

[Effects of odor, VOC in the cabin, decolorization]

During the production of recycled resins, talc and anti-fog additives are added, which can cause disgust in odor evaluation. It is difficult to apply to automotive interior parts, and there is a concern that vehicle parts will be limited in where they can be used.

Many of the recycled materials are dark (black, gray), and mixed plastic flakes are a mixture of colors such as black, gray, and white, and gray pellets are produced when melted and mixed. There is a concern that vehicle parts will be restricted from where they can be used.

Article 6.2

[Clarification of calculation conditions for biomaterials]

Cellulose nanofibers (CNFs), which are next-generation plant-derived materials to meet CN requirements, are expected to spread to automobiles, home appliances, housing, and building materials due to their advantages in lightness, strength, and reduction of environmental impact. In the formability study of some automotive parts, it is possible to mold complex shapes and large parts, and the CO₂ reduction potential has been confirmed by switching from "PP-talc" to "PE-CNF". In order to continue to develop and disseminate bio-based materials, bio-materials should be reflected in the calculation of the recycling rate.

[Factorial waste is included in the recycling rate]

Purge materials, offcuts, and defective resin materials discharged from factories are reused if the molding conditions in the process are satisfied, and the remaining resin materials are reused through recyclers. Since it is generated in a single factory or process, the source of supply is clear, there is little contamination of impurities, and the value of use is high. It has a good track record in the past at many automotive parts manufacturers, and in order to further accelerate recycling activities, waste generated from factories should also be reflected in the calculation of the recycling rate. In addition, the recycling rate can be accurately and fairly calculated by utilizing the certification of a third-party organization. By balancing large recycling collected from the market and small recycling collected in factories, the purpose of the use of recycled materials in this regulation can be achieved.

[Expansion of application of chemical recycling]

It is expected that recycled materials collected from the market will not be able to be material recycled as they are due to deterioration due to repeated recycling or contamination by foreign substances. In the case of chemical recycling, in principle, the same level of quality as virgin materials can be ensured, so chemical recycling should be taken into account in the calculation of the recycling rate. In addition, since it is difficult to draw a clear line between ELV-derived, PCR-derived, and PIR derivation due to the construction method of chemical recycling, it is necessary to consider a method for calculating the recycling rate by taking into account mass balance calculations.

[Utilization of recycled materials outside Europe]

Currently, the globalization of the industry is accelerating, with European OEMs producing in the Asian region. It is also expected that plastic materials that will be introduced to the market in Europe will be imported from third countries or used in products produced in third countries. These should also be included in the target, and certification and verification schemes that apply to both European and non-European countries should be implemented. We request that a certification and verification scheme be implemented that applies to both European and non-European markets, so that recycled materials placed on the market within the European region are also included in the actual use, even if they are imported from third countries or utilized in products produced in third countries. We would like you to consider the timeframe required for verification and application of the scheme in order to implement it for recycling and for global implementation as a whole.

Article 6 Paragraphs 3 and 4

[Process for determining the recycling rate]

Mandating the use of recycled materials could also compromise climate neutrality in the process of sourcing recycled materials, which could undermine the objectives of the proposed rule. Therefore, when considering the content of the detailed rules in the future, as described in paragraphs 3 (f) and 4 (d), detailed rules should be established to minimize the impact on climate neutrality through discussions with stakeholders.

(Reference)

Clause 3 (f): The contribution of a minimum proportion of recycled steel components in vehicles to the European Union's open strategic autonomy, climate and environmental goals.

Clause 4(d): The minimum proportion of recycled materials listed in subparagraph 2 of the vehicle for the EU's strategic autonomy and its climate and environmental objectives.

[Failure of the existing recycling system]

The material quality of recycled materials is strongly influenced by the quality of scrap from which they are made. If the minimum recycling rate is set carelessly, the supply-demand balance of scrap will be disrupted, and inferior scrap will be used, and it may not be possible to maintain material quality above a certain level. In addition, since some impurities in scrap are difficult to remove, the more resource

recycling using inferior scrap progresses, the more they accumulate in the material, causing further deterioration in quality. Therefore, the setting of the lower limit should be carefully considered, and the recycling rate should be set by comprehensively taking into account various factors such as scrap grade trends, reflux status, development status of recycled materials, and establishment of technology to detoxify impurities.

Article 7.3

While dismantling is expected during the design of vehicles and parts, it is expected that parts that are judged to be able to be removed or replaced from vehicles will be gradually reflected in laws and regulations due to advances in technology and information distribution. Criteria should be established to reflect the design.

Article 10(1)

Neodymium, aluminum, magnesium, and copper are already being recycled in factories and markets, and recycling is also being realized through various routes. In the future, a method for calculating the use of recycled materials should be established in order to set recycling rate targets and to ensure that results are understood.

Article 12

When using recycled materials, since materials derived from various products are used, it is expected that the additives in the recycled materials will be diverse, and the content of additives will differ depending on the product lot.

Since it will be difficult for manufacturers of parts, components, and materials to respond to all of these, material marks and labels related to recycled materials should be exempted.

Article 30, Annex VII.Part C

Although it is necessary to design for easy dismantling in order to remove the parts of Annex VII.Part C1~19, it is necessary to secure them firmly in order to ensure the safety of passengers and pedestrians, and they cannot be easily removed. If everything is dismantled by hand, there are concerns about an increase in occupational accidents for workers and an increase in costs due to the large number of workers and time consumed, so it should be carefully considered.

Technically difficult 10 dashboards, 13 wiring harnesses, 19 electrical and electronic

components (b) printed circuit boards with a surface area of more than 10 cubic meters, and 11 navigation systems designed to prevent theft should not be removed. In addition, an electronic board is attached to the inside of the component, and important electronic information is stored, so it should be carefully considered from the viewpoint of security.

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