Activities of JAPIA No. 17 Circular Economy Task Force

Report: Circular Economy Task Force

Special team responds to EU resource recycling obligations Working hard to collect and analyze information in preparation for the 2031 obligation

A new trend in the automobile business is beginning: the EU's 'Circular Economy (CE) Action Plan 2020/ (Resource Recycling)' proposes to make the use of recycled materials mandatory in the manufacture of automobile parts. In response to this, JAPIA launched 'CE Task Force' in December 2023. Currently, 16 companies (36 members) are active in this task force, which has started discussions on the formulation of measures through the collection and analysis of information from the EU side and an understanding of the current situation of member companies and the market. Since member companies have traditionally developed and manufactured automobile parts using virgin materials, a major review is inevitable. In addition, there is no time to spare, and as the EU concept envisages mandatory production in 2031, we have to aim for mass production in six years. This section presents the past activities and the future direction of the project.

CE activities as one of the eight key theme projects

In 2020, the EU Commission published 'CE Action Plan 2020'. In response, a draft ELV (End of Life Vehicle) Regulation was published in the automobile sector in 2023, specifying the targets, conditions and deadlines for the use of recycled materials. Specifically, '25% PCR (post-consumer recycled) resin (one quarter of which is derived from ELVs) must be applied in the manufacture of new vehicles'; 'The scope will be expanded to include aluminum, steel and other raw materials in the future'; 'Target vehicles will be gradually expanded to include motorcycles, freight vehicles and buses'; 'Mandatory installation of Circular Vehicle Passport with electronically recorded information about the product' are included.

In the future, resin parts for cars will have to be manufactured from recycled materials (25% mixed) and have the same quality, performance and cost as before. This means that the business model, which was one of Japan's

strengths, will have to change. This is because changes in raw materials mean that procurement, development and production have to be reviewed. In addition, the grace period is short, and if the European Parliament and Council approve it in 2025, it will become obligatory from 2031. Taking into account the time to develop new vehicles, a deadline will have to be reached in two to three years. Furthermore, as the number of raw materials and vehicle models to be covered is scheduled to increase in the future, the success or failure of the first round of resin measures will have a very significant impact on the maintenance and expansion of the international competitiveness of the Japanese automotive components industry. As parts suppliers involved in the automobile industry have common production lines in each country, if they are unable to respond to Europe, they will not be able to expand globally as they have done in the past.

This sense of crisis led JAPIA to set 'CE' activities as one of the eight major thematic projects in this year's activities, and 'CE Task Force' was established. The structure consists of an Executive Committee (led by Mr. Seshita of AISIN CORPORATION) and three working groups (WGs): 'Roadmap Study WG', 'Market Study WG' and 'Liaison WG'.

Co-operation areas to obtain and secure recycled materials

The problem is achieving the '25% PCR resin'. Analysis of the current situation has revealed the following problems: 1) over 80% of vehicles and parts go overseas, 2) 60% of waste plastic is thermally recycled (burnt recovery), 3) ELV-derived recycled resin materials account for 4% of new vehicle production (horizontal recycling is almost zero), 4) 80% of recycled resin goes overseas, and 5) the supply of recycled resin varies widely. It is difficult to secure sufficient quantities of recycled materials in Japan today.

Automobile parts require a high level of performance in terms of precision, quality and durability, but as current recycled materials have a gap with the required specifications, an analysis of quality assurance is also required. Recycled materials are required to ensure the same quality as virgin materials. Recycling also costs money, which must be kept at the same level as current costs.

"CE Task Force" is working to solve problems in the 'cooperative area' out of the cooperative and competitive areas. The collection and securing of recycled materials is dealt with in the 'cooperative area', as it is judged essential for the industry world (among members) to cooperate in securing resources and forming rules as the basis for creating a market in Japan that can cope with the quantity, quality and cost of recycled materials. In addition, this issue is not confined within JAPIA. Cooperation from Ministry of Economy, Trade and Industry, Ministry of the Environment and Japan Automobile Manufacturers Association (JAMA) is essential, and the collaboration with organizations involved in materials and recycling. Mr. Tomita of CE Task Force Secretariat says: 'We must set out a clear banner and policy, call on the government, local authorities and related organizations, join their forces and aware the importance of an all-Japan approach' and call for wide-ranging cooperation and collaboration.

Support from other industries and the recycling industry is essential to secure the volume of recycled materials in Japan. Mr. Fujinaka, a member of Roadmap Study WG, says: 'Traditionally, we have manufactured parts in the "arterial" field, but recycled materials are in the "vein" field. We must increase the number of new members and build the foundations for new manufacturing'. We aim at creating a structure that transcends the boundaries of the traditional components industry.

Of course, the 'competitive area' between members is also important. To overcome this challenge, the development and technical capabilities of individual companies in designing components and utilizing recycled materials are essential. Mr. Kuriyama, a member of Roadmap Study WG, is confident in the underlying strength of Japanese companies: 'Solving problems will enhance the development and technological capabilities of individual companies and lead to superiority in the global market'.

The CE Task Force's current outlook is to "identify production with recycled materials in 2025-2027. Meanwhile, the latest information is that there is a 'possibility of a delay' in the mandatory implementation, but efforts are being made according to the original schedule. Mr. Ito, a member of Market Study WG is saying that we must do everything in our power to ensure that individual companies can continue their business in time.

The targets for FY2024 are: 1) Create a vision roadmap for the automobile (parts) industry towards the realization of CE and promote coordinated areas for the entire supply chain. 2) Clarify the status of issues regarding the quantity, quality and cost of recycled materials required by the automobile parts industry, recommend the standardization (set rules) of materials (quality) in the vein market, while working with the government to promote the development of the

vein industry. 3) By submitting public comments on the European ELV Regulation, we will carry out liaison activities in order to move in a favorable direction in terms of the period and items to be addressed by the Regulation.

Although there are concerns that the new regulations and rules will completely change the structure of the industry, the members of CE Task Force have the aspiration that 'CE compliance is essential for the Japanese automobile parts industry to exist for the next 10 years' (Mr. Tomita) and that 'this is not a risk but an opportunity' (Mr. Fujinaka). We are taking a positive approach and are working with an aggressive attitude.