

August 24th, 2023

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## **Establishing a New System to Calculate a More Appropriate and Efficient Carbon Footprint of Products**

### **- Reducing greenhouse gas emissions throughout the supply chain -**

NIPPON SHOKUBAI CO., LTD. (Headquarters: Osaka, Japan, President: Kazuhiro Noda, hereinafter “Nippon Shokubai”) has established a new system for calculating the carbon footprint of products (hereinafter “CFP”)\*<sup>1</sup>. We will begin providing CFPs for our products manufactured at the Himeji and Kawasaki Plants, calculated using the new system, to customers who request them.

To achieve carbon neutrality, it is necessary to reduce greenhouse gas (hereinafter “GHG”) emissions not only from individual companies but from the entire supply chain. For this reason, it is essential for each company to calculate CFP which is the GHG emissions for each product and share it among the supply chain.

The chemical industry provides products to a wide range of other industries. As an industry well positioned to contribute to reducing GHG emissions throughout the supply chain, various stakeholders, including customers, financial markets, and governments, require the calculation and disclosure of CFPs for the various chemical products manufactured.

In addition to the existing life cycle assessment\*<sup>2</sup> and the international CFP-related ISO standards and the GHG Protocol Product Standard, we complies with the new CFP calculation and reporting guidelines published both in Japan and overseas\*<sup>3</sup>. We also applied the Carbon Footprint of Products calculation tool CFP-TOMO\*<sup>4</sup> provided by SUMITOMO CHEMICAL COMPANY, LIMITED, and organized the calculation rules for the system.

This has enabled us to calculate CFP appropriately and efficiently and respond to customer requests in a timely manner.

Nippon Shokubai is working toward the realization of carbon neutrality in 2050, under “Strategic Transformation for Environmental Initiatives” in the Nippon Shokubai Group’s long-term vision, “TechnoAmenity for the future.” Nippon Shokubai will continue to contribute to a sustainable society while providing materials and solutions needed by people and society.

\*1: Carbon footprint of products (CFP)

The carbon footprint is a method for quantifying GHG emissions related to products and services over their entire lifecycle, from resource extraction to manufacturing, distribution, disposal, and recycling. It is also known as “cradle-to-grave” emissions. On the other hand, for us, the CFP is an aggregate of GHG emissions from resource extraction to manufacturing by our company, sometimes referred to as “cradle-to-gate” emissions.

\*2: Life cycle assessment

A methodology for quantitatively assessing the environmental impact of products and services throughout their life cycle, from raw material procurement to production and distribution to disposal and recycling.

\*3: Domestic and overseas trends in carbon footprint calculation and reporting

- “Pathfinder Framework - Guidance for the Accounting and Exchange of Product Life Cycle Emissions” (World Business Council for Sustainable Development, November 9, 2021)  
<https://www.wbcsd.org/Programs/Climate-and-Energy/Climate/SOS-1.5/Resources/Pathfinder-Framework-Guidance-for-the-Accounting-and-Exchange-of-Product-Life-Cycle-Emissions>
- “The Product Carbon Footprint Guideline for the Chemical Industry” (Together for Sustainability, September 2022)  
<https://www.tfs-initiative.com/how-we-do-it/scope-3-ghg-emissions>
- “Chemical Industry CFP Guidelines” (Japan Chemical Industry Association, February 28, 2023)  
[https://www.nikkakyo.org/upload\\_files/global\\_warming/clca/cLCA-CO2/Jpn\\_Chem\\_Industry\\_CFP\\_Guideline.pdf](https://www.nikkakyo.org/upload_files/global_warming/clca/cLCA-CO2/Jpn_Chem_Industry_CFP_Guideline.pdf) (Japanese)
- “Carbon Footprints Practical Guide” (Ministry of the Environment and Ministry of Economy, Trade and Industry, May 26, 2023)  
[https://www.meti.go.jp/english/press/2023/0526\\_002.html](https://www.meti.go.jp/english/press/2023/0526_002.html)

\*4: Carbon Footprint of Product (CFP) calculation tool CFP-TOMO (SUMITOMO CHEMICAL COMPANY, LIMITED corporate website and library)

[https://www.sumitomo-chem.co.jp/english/sustainability/information/cfp\\_tomo](https://www.sumitomo-chem.co.jp/english/sustainability/information/cfp_tomo)

CFP-TOMO is a registered trademark of SUMITOMO CHEMICAL COMPANY, LIMITED.

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About NIPPON SHOKUBAI CO., LTD.: About NIPPON SHOKUBAI CO., LTD.: Since 1941, Nippon Shokubai has grown up its business with unique catalyst technology. Nippon Shokubai has supplied, for example, ethylene oxide, acrylic acid, automobile catalysts, process catalysts and so on. Among all, our global market share of superabsorbent polymers is the largest in the world now (according to Nippon Shokubai research in 2022). Nippon Shokubai is a global chemical company operating under its corporate mission "TechnoAmenity-Providing affluence and comfort to people and society with our unique technology."

<https://www.shokubai.co.jp/en/>

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