

# Report on Keidanren Circular Economy Mission to Europe (Finland and Germany)

**February 17, 2026**  
**Keidanren**



# Background and Objectives

## Background

- Headwinds such as inflation and soaring energy prices in Europe and rollbacks in US environmental policy
- Acceleration of CE regulations in the EU and the need to enhance industrial competitiveness
- Growing importance of securing autonomy in critical mineral resources amid escalating geopolitical risks, including US–China tensions

## Objectives

- Understanding CE regulatory trends in the EU and market direction in light of the above context
- Gaining insights into CE policies and on-the-ground implementation in Finland and Germany, both leading CE nations
- Understanding industry initiatives in both countries, including corporate transformation, cross-sector collaboration, and the roles of startups

<b>Itinerary</b>	January 26–27, 2026	Helsinki
	January 27–28, 2026	Berlin
	January 29, 2026	Munich

## Participants (37 participants from 22 companies and organizations)

- Mission Leader  
Yumiko Noda, Vice Chair of Keidanren and Chair of the Committee on Environment
- Delegates  
Asahi Kasei Europe, Idemitsu Kosan, ANA Holdings & All Nippon Airways, KPMG Consulting, Shimizu Corporation, Sumitomo Chemical, Sumitomo Forestry, Taisei Corporation, Taiheiyo Cement, Teijin, DOWA Eco-System, Toyota Motor Corporation, Toyota Motor Europe, The Japan Iron and Steel Federation, PwC Advisory, Hitachi, FUJIFILM Business Innovation, Mizuho Bank, Mitsui Sumitomo Insurance, Yokogawa Electric Corporation, Veolia Japan, and Keidanren Secretariat



# Objectives of Visit to Finland and Germany



Finland



Germany

## Learning from Finland's pioneering CE strategy and its innovative integration with the bioeconomy

### ● Understand Finland's Strategic CE Policy Framework

- Finland's comprehensive CE policy and progress as the first country to adopt a national CE roadmap (2016)
- Policy approaches balancing ambitious climate targets (carbon neutrality by 2035) with industrial competitiveness
- Multi-stakeholder collaboration models and education and awareness-raising initiatives aimed at shifting consumer behavior

### ● Integrate the Bioeconomy and CE

- Strategies for integrating and leveraging abundant forest resources (approximately 75% of land area) into CE

### ● Learn from Industry CE Case Studies

- Industrial symbiosis ecosystems and cross-sector collaboration in practice
- Insights into the transformation strategy of Neste, the world's largest producer of renewable fuels (biofuels), and a visit to its Kilpilahti plant—a demonstration site for decarbonization and circular solutions

## Understanding the forefront of CE transformation with a focus on the manufacturing sector

### ● Understand Policies and Regulations

- Insights into legal frameworks and implementation strategies for achieving a fully circular economy by 2050
- Policy design that simultaneously ensures resource autonomy and strengthens industrial competitiveness

### ● Investigate Cross-Industry Data Infrastructure

- Mechanisms and operational realities of cross-sector data-sharing ecosystems in industries such as automotive and semiconductors, led by the Federation of German Industries (BDI) and Catena-X
- Standardization efforts centered on the Digital Product Passport (DPP)

### ● Learn from Industry CE Case Studies

- Advanced CE transformation examples from Germany's global manufacturing companies
- Insights from collaboration models uniting large corporations and startups

# Full Itinerary

	Jan. 26 (Mon)	Jan. 27 (Tue)	Jan. 28 (Wed)	Jan. 29 (Thu)
<b>AM</b>	H.E. Mr. Sakari Puisto, Minister of Economic Affairs, Finland	Joint meeting with the Confederation of Finnish Industries (EK) and Business Finland	Ms. Rita Schwarzelühr-Sutter, Parliamentary State Secretary, German Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN)	BMW (includes site visit)
	H.E. Ms. Sari Multala, Minister of Climate and the Environment, Finland		Dr. Thomas Steffen, State Secretary, German Federal Ministry for Economic Affairs and Energy (BMWE)	
<b>PM</b>	Neste / Kilpilahti (includes site visit)	(Helsinki to Berlin)	Catena-X / VDI (Industrie 4.0)	Infineon
	Finnish Innovation Fund (Sitra)	Business Roundtable with the Federation of German Industries (BDI)		
<b>Dinner</b>	Dinner hosted by Ambassador Okada in Finland	Briefing and dinner with Mr. Okamoto, Director General, JETRO Berlin	(Berlin to Munich)	

# CE Policy Direction in Finland

## (1) H.E. Mr. Sakari Puisto, Minister of Economic Affairs



- **Amid worsening economic security conditions, securing critical minerals and strengthening the resilience of global supply chains have become urgent priorities.** Building circular and resilient value chains is indispensable, and Finland is actively advancing circular economy practices, such as repair, to enhance resilience.
- Initiatives leveraging sustainable bio-based resources—including forests, seaweed, food, and biomass—are advancing, and **related startups are emerging.**
- Japan and Finland are trusted partners that value free trade, respect nature, and share cultural ties. **Finland possesses strengths in mining, refining, and recycling of critical mineral resources, making it highly complementary to Japan's advanced technological capabilities, and thus strongly desires collaboration with Japan.**

## (2) H.E. Ms. Sari Multala, Minister of Climate and the Environment



- In pursuit of its national target of carbon neutrality (CN) by 2035, Finland is promoting sustainable consumption through a full transition to clean energy and the adoption of CE. **CE is a means to simultaneously enhance corporate competitiveness and resilience.**
- In advancing CE, **public procurement serves as a crucial lever.** Demand creation through public procurement is essential.
- Construction is a key sector, and Finland is promoting the use of low-carbon and recycled materials in building products.
- Forests are a vital resource linked not only to construction but also to diverse industries. Finland is cultivating high-value-added forest-based industries while ensuring sustainable forest management.

# CE Case Studies from Finnish Industry



**(1) Neste** \* A government-linked oil company undergoing gradual privatization; since the 2000s, it has grown into the world's largest producer of renewable diesel (RD) and sustainable aviation fuel (SAF).

- To realize CN and CE, **Neste utilizes renewable and recycled feedstocks as alternatives to fossil-based materials and fuel.**
- Neste produces “Neste RE,” a textile fiber made from waste cooking oil, animal fats, waste plastics, and other feedstocks, and has achieved GHG emissions reductions of over 85% compared to conventional alternatives.
- “Neste RD” (Renewable Diesel), a diesel substitute made from waste cooking oil and plant-based feedstocks, delivers emissions reductions of approximately 90%.



**(2) Sitra** \* An innovation fund and think tank, established with funding from the Finnish Parliament, that promotes education, awareness-raising, and other initiatives.

- In 2016, Sitra convened stakeholders from government, industry, academia, and other sectors to develop Finland's national CE roadmap, with particular emphasis on the circularity of critical minerals.
- Its mission centers on **economic growth, enhanced well-being, and raising consumer awareness.**
- In addition to providing funding for corporate CE investments and R&D support, Sitra runs **school education programs focused on the circular economy.**
- It also prioritizes public CE awareness (e.g., through a fun, quiz-based app illustrating individuals' daily CO2 emissions from food and transportation choices and the potential reduction through behavioral change).



**(3) Confederation of Finnish Industries (EK) & Business Finland**

- Finland is a showcase country for advancing the Green Transformation (GX) while ensuring energy cost competitiveness (second-lowest electricity prices in Europe after Sweden), security, and resilience.
- CE is indispensable for achieving a sustainable society.
- The key concept is the **“ecosystem.”** Finland emphasizes **fostering innovation through diverse cross-sectoral collaborations.**

# CE Policy Direction in Germany

## (1) Ms. Rita Schwarzelühr-Sutter, Parliamentary State Secretary, Ministry for the Environment

- CE is no longer merely an environmental policy issue; it has become **central to resource strategy and industrial policy in light of geopolitical crises**. It must be advanced in a sustainable and economically sound manner.
- EU measures (including **Ecodesign** for recyclability, repairability, and leasing, the Digital Product Passport, and extended producer responsibility) are being systematically rolled out across member states.
- Factoring in reduced dependence on China, Germany plans to develop a CE Action Plan with a budget of €260 million allocated in order to strengthen support.
- **Promoting the use of recycled materials and creating markets for them are crucial**. The government will **lead by example through strategic public procurement of recycled materials**.



## (2) Dr. Thomas Steffen, State Secretary, Ministry for Economic Affairs and Energy

- Key geopolitical risk factors revolve around **China and the United States**. Outcompeting China is a critical challenge.
- **Balancing sustainability and competitiveness** is a new priority. Increasing recycling rates for critical minerals such as rare earths and lithium is an urgent need. **Reducing reliance on primary resources is essential**, and the EU plans to strengthen its secondary resource market in the future.



- Close cooperation between government and industry is vital in analyzing vulnerabilities in primary resource supply chains and developing countermeasures.
- To address the outflow of end-of-life vehicles to Africa and elsewhere, Germany needs to explore measures to **enhance traceability and retain resources within the EU**. **It is imperative to keep manufacturing within Germany and the EU**.
- Both China and the US are weaponizing export controls. While cooperation with trusted partners is a strategic economic security imperative, the number of such partners is dwindling. **Japan remains one of the few reliable partners**.
- Japan and Germany share many similarities as manufacturing-based export economies. **Germany proposes establishing a joint expert dialogue on CE between the two countries**.

# German Industry Initiatives



## (1) BDI (Federation of German Industries)

- Although the EU is issuing numerous CE-related regulations, the ultimate goal is to create a unified CE market within the EU. It will be critical to preserve industry's freedom of discretion.
- In an environment of extreme uncertainty, minimizing negative impacts is essential. **CE must be promoted not only for environmental reasons but also to drive economic growth.**
- Both Japan and Germany are resource-scarce nations with high manufacturing shares. To secure strategic resources such as copper, efforts to diversify away from dependence on specific countries like China and ensure stable supply are indispensable. **Japan and Germany should jointly build a CE market.**
- **“We face challenges head-on. We don't take the easy path.”**

## (2) VDI & Catena-X

- Germany's “Industrie 4.0” industrial policy centers on digitalization and prioritizes enhancing competitiveness. **New business models** are essential to create added value—namely, CE.
- Catena-X is a platform that rapidly connects data and ensures full interoperability without vendor lock-in. It actively collaborates with the Ouranos Ecosystem (Japan's METI-led data-sharing infrastructure) to avoid becoming a closed system.
- **Automakers such as BMW, Volkswagen, and Mercedes-Benz require their suppliers to register on Catena-X.** Participation is expanding beyond the automotive sector into many other industries. Although challenging, given the roughly 50,000 subcontractors involved, adoption is expected to progress gradually.
- German industry believes the **Digital Product Passport (DPP) is key to realizing CE.**



# German Industry Initiatives: Corporate CE Case Studies

## (3) BMW \* Visit to Recycling and Dismantling Center, assembly plant, and headquarters

- Processing 10,000 vehicles a year, Recycling and Dismantling Center focuses on utilizing the most efficient dismantling practices. With 35% of components reused in some form, the facility helps enable significant profits through reuse as resources.
- **Circularity is integrated from the initial vehicle design stage onward.** Key priorities include: (1) a **secondary-first approach**, (2) selection of circular materials, and (3) design for optimal disassembly.
- Net zero is a non-negotiable goal, with 50% of executive variable compensation tied to ESG targets. The philosophy is to set the highest possible targets and adjust as needed — **“Throw the ball as far as possible, then take it back.”**

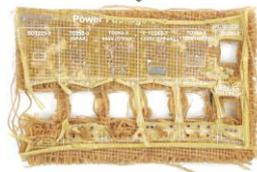
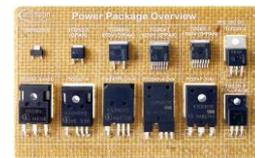


A crushed BMW vehicle after its scarce resources have been recovered



## (4) Infineon \* A leading power semiconductor company spun off from Siemens

- Infineon aspires to be a sustainability role model in the semiconductor industry. Semiconductor manufacturing consumes significant amounts of water and chemicals, so the company prioritizes recycling wherever possible.
- While there are currently no direct EU regulations on semiconductors, **Infineon closely monitors potential impacts on manufacturers and end users.** Customer inquiries regarding circularity are increasing.
- High-purity requirements and traceability present challenges. To enable resource circulation and create cascading added value, **a whole-ecosystem approach is essential.**
- Infineon has adopted a recyclable and biodegradable printed circuit board (PCB) developed by the UK startup Jiva Materials (photo on left).



Hot-water-soluble PCBs significantly simplify resource recovery and recycling



Source of PCB photo  
<https://www.infineon.com/ja/market-news/2023/infip202307-137>

# Reflections on the Mission

## Strategic Reorientation of CE

- Against the backdrop of heightened geopolitical uncertainty—including from China, Russia, and now the United States—**CE is pushing forward and entering a new as a strategy to simultaneously enhance competitiveness and resilience.**
- To mitigate supply chain disruption risks stemming from overreliance on specific countries, **circular value chains are being built to minimize outflow of resources beyond borders** and secure critical raw materials (CRM) within the region.
- Companies are accelerating the shift toward business models that incorporate circularity from the design phase onward and upcycling models using renewable feedstocks derived from waste within the region to ensure **stable access to secondary resources (recycling ≠ circular).**

## Keys to Success: Three Drivers of Transformation

1. Alignment of regulations and markets: EU regulations creating markets and turn CE into an economically rational choice (**strategic use of public procurement, stimulating consumer preference**)
2. **Industry-Government-Academia Ecosystem:** A collaborative framework involving government (framework development), large corporations (initiative leadership), **startups (innovation)**, and public institutions (funding support and consumer awareness)
3. Transparency through data sharing: **Ensuring product traceability** via data-sharing platforms such as Catena-X and implementation of the Digital Product Passport (DPP)

## Implications and Opportunities for Japan

- Strengthening crisis management for mineral resources and advancing CE across entire value chains are urgent priorities. It is essential to balance industrial competitiveness and resource security.
- Transitioning to CE-based business models—designed for circularity from the outset—and securing domestic circular resources will become key sources of competitiveness.
- **Europe expresses the expectation for cooperation with Japan.** This presents an opportunity for deeper strategic collaboration with Europe and participation in international standardization efforts.



**“Throw the ball as far as possible”** (Mr. Schmidt, Global Sustainability Officer of BMW)

**“We don’t take the easy path”** (Mr. Nidermark, Board Member of BDI)