

Circular Economy in Climate-related Disclosures

Hirotsugu Kitada

Associate Professor

Faculty of Business Administration

Hosei University

Tokyo, Japan

kitada@hosei.ac.jp

Masaatsu Takehara

Masaatsu Takehara

Specially appointed Associate Professor

Faculty of Sustainability Study

Hosei University

Tokyo, Japan

masaatsu.takehara.17@hosei.ac.jp

Abstract

Investor interest in the Circular Economy (CE) is growing. Investment in CE has exceeded \$1.3 trillion, and the issuance of related equity funds and sovereign debt has increased several-fold each year after 2018. One of the reasons investors are interested in CE is that it is expected to contribute to the climate change mitigation. It has been noted that while about 55% of the world's greenhouse gas emissions are derived from energy use, the remaining 45% come from product manufacturing and food production. Conversion of energy use is not sufficient to limit temperature rise to below 2°C, which is currently a mainstream action for climate change under Paris Agreement. This gap can be resolved through transition to CE. The TCFD recommendation, a disclosure framework for climate-related information, recommends disclosing the development of CE-related solutions in the climate-related opportunities section. Recently, the International Financial Reporting Standards Foundation and governments have been working together to promote mandatory disclosure of climate-related information. Understanding the CE information in climate-related disclosures is therefore important for the process of transition to CE. The purpose of this study is to clarify how CE information is addressed in corporate climate-related disclosures. Textual analysis is employed as the research method for this purpose, and the analysis is complemented by interview research. Among the companies registered with TCFD Supporters, those belonging to the chemical industry were selected for the analysis, and it was found that 55 of 94 companies disclosed TCFD information. This is because these companies deal with the production of plastics, which are a major point of contact for CE and climate-related information, especially in the short term. We, first, analyze textual data from the TCFD disclosures of these companies and, based on these results, interview individual companies. The results of the analysis showed that 14 companies explicitly used the term CE in their TCFD disclosures to refer to their activities, including 6 Japanese companies, 2 US companies, 3 EU companies, and 3 other companies. However, there were also some companies that disclosed similar activities, such as alternative material and recyclability, in their TCFD reports even though they don't use the term CE, what they are promoting is actually CE. Therefore, the diffusion of the CE concept in the description of corporate sustainability strategy is still limited. Regarding the descriptions of CE, firstly, the provision of alternative materials (e.g., biomass raw materials) and recycling technologies related to plastics were mentioned as strategically important CE-related business opportunities in the chemical industry. Some companies explained this in relation to transition risks through changes in legislation and consumer trends, indicating that companies understood the impact of future social changes on the expansion of their CE business. Second, some companies are emphasizing CE within the group's business strategy. These companies do not limit their CE initiatives to sustainability activities, but is seen as a factor that will affect corporate performances and strategies in the medium to long term.

Keywords

Circular Economy, Climate-Related Disclosure, TCFD, Text Analysis

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Biographies

Hirotsugu Kitada is currently an associate professor at Faculty of Business Administration, Hosei University, Tokyo, Japan. He received Ph.D. in Business Administration from Kobe University in 2012, and started to work as an lecture at Faculty of Business Administration, Hosei University, Japan. In 2012, he joined the RIEB as an associate professor. He is also currently serving as an invited researcher at KDDI Research, Inc. He is also currently serving as expert for ISO/TC323 (Circular economy) and served as expert for ISO/TC207 (ISO14007, Guidelines for determining environmental costs and benefits). His research interests involve sustainability management including social and environmental sustainability reporting, and he has published some papers on them in international peer reviewed journals.

Masaatsu Takehara is currently a specially appointed associate professor at Faculty of Sustainability, Hosei University, Tokyo, Japan. He completed his doctoral course at the Graduate School of International Social Sciences, Yokohama National University in 2017. Prior to Hosei university, he led various CSR/corporate sustainability initiatives at Microsoft Japan and Sompo Japan Insurance company.