

3 - 5 October 2025

Milan , Italy

An Analysis of Sustainability and Twin Transition Awareness in Turquality Supported Plastic Companies

Merve Tatar*Gaziantep University, Turkey*

Abstract

This study aims to analyze the sustainability and twin transition—encompassing green and digital transformation—awareness of plastic companies supported under the Turquality program. Within the framework of the United Nations Sustainable Development Goals, environmental, social, economic, and digital indicators were examined using a content analysis approach. Data were obtained from the most recent sustainability reports of nine Turquality-supported plastic companies, based on the indicator frameworks developed by Feil et al. (2019) and Mahboub et al. (2023). The content analysis was conducted using MAXQDA, and the findings reveal that these companies are gradually adapting to the twin transition process. Technologies such as artificial intelligence (AI), the Internet of Things (IoT), and automation are making positive contributions to sustainability performance. However, in some cases, digital strategies aimed at managing environmental impacts remain underdeveloped. In terms of environmental sustainability, notable progress has been observed in areas such as energy efficiency and waste management. On the social dimension, the focus has primarily been placed on employee health, workplace safety, and job satisfaction. In conclusion, twin transition awareness among Turquality-supported firms is on the rise. Nevertheless, it requires further reinforcement through more comprehensive strategies, particularly across environmental, social, and digital dimensions. In this context, public policy interventions and intersectoral collaborations are recommended as essential and complementary components to ensure a more effective and sustainable transformation.

Keywords: Turquality, Sustainability, Twin Transition, Digitalization, Plastic Industry, Content Analysis