FOREWORD

OSHITA Hajime

President and CEO JFE Engineering Corporation



The world is now in the midst of rapid and extraordinary changes. In particular, the sense of crisis about climate change is spreading quickly at the global scale. In order to create an environment in which the younger generations that will be responsible for the future can live abundant lives, immediate proactive action is demanded of each and every one of us. The Japanese government has also declared that "Japan will achieve carbon neutrality by 2050." The government has positioned this field, where we had lagged behind other countries, in Japan's growth strategy, and has set out policies that will powerfully promote initiatives in this area.

In addition to the challenge of climate change, we also face many other issues that must be addressed. These of course include achieving the SDGs, which are common global goals, and promoting digital transformation (DX), and also the realization of a circular economy and reconstruction and efficient operation of social infrastructure. All of these issues require an urgent response.

Based on these social conditions and environment, JFE Engineering has defined its corporate purpose (a word that expresses the significance of existence) as "Creating, bearing and connecting the Foundation of Life — Just For the Earth." In other words, we believe that our Corporate Mission is to create a safe and secure society, to strongly support people's lives, and to pass this on to future generations.

As a "Special Issue on Engineering," this JFE Technical Report presents current topics in JFE Engineering's fields of technology for the demands of the times. The fields are, "Carbon neutrality" toward achieving a decarbonized society, "Waste to Resource" to realize a circular economy, "Combined utility service" for efficient operation of social infrastructure, "Key infrastructure" responding to needs for resilience and longer life in social infrastructure, and "DX" technological foundation for those technologies.

As a member of the JFE Group, JFE Engineering will continue to take on the challenge of technology development which contributes to the betterment of the global environment and respond to the needs of society based on the JFE Group's Vision of "Contributing to society with the world's most innovative technology." We look forward to hearing the opinions of all those concerned, and we sincerely request your continuing support.