

September 2nd 14:20 PM to 15:50 PM

Plenary Symposia I (90min.)

Revitalization efforts by manufacturing and energy industries in Japan after the Great East Japan Earthquake in March 2011

Coordinator : Toshihiro Kanai (Kobe University)

Presentation 1: Takeo Kikkawa (Hitotsubashi University) "The Japanese Energy Industries after Fukushima Disaster"

Presentation 2: Takahiro Fujimoto (University of Tokyo) "Overcoming Crises by Capability Building : Some Cases of Japanese Manufacturing Sites, or "Genba" "

Abstract

After the devastating earthquake hit Japan, we have witnessed the various kinds of reconstruction efforts, which are in essence combination of emergent and planned activities in the area. This symposium deals with reactions for restoration after the disaster focusing on energy and manufacturing industries from comparative perspectives, inviting two distinguished presenters who are experts in these two industries.

The first presenter, Kikkawa discusses options for Japan's electric power industry after Fukushima Disaster. The nuclear accident at Tokyo Electric Power's Fukushima Daiichi Nuclear Plant, in the wake of the Great East Japan Earthquake on March 11, 2011, has prompted Japan to fundamentally review its energy policy. With the review still ongoing, the levels of public interest in the electric industry and nuclear power reform are at an all-time high. If such a serious accident can occur, then surely Japan's electric industry and nuclear power policy need to change. At the same time, however, merely condemning the government and TEPCO (Tokyo Electric Power Company) is no way to bring about constructive reform. With that in mind, the aim of this presentation is to set out a positive direction for the electric power industry and nuclear power reform. To resolve issues facing any industry or company, you need to start applying the right principles and theories, whilst also taking into account the historical context. This article uses the contemporary application of business history in order to do just that. Following a brief look at the dynamic development of Japan's electric power industry from the 1880s onwards, we will take a look at the best options for restructuring the electric power industry and reforming Japan's nuclear power policy.

The second presenter, Fujimoto, argues that even the unprecedented devastation of the Great East Japan Earthquake should not compromise the basic

principle of designing industrial supply chains that achieve competitiveness and robustness simultaneously. He argues against the psychological overreaction that tends to emphasize the latter alone. Manufacturing firms must identify the “weak links” in their supply chains in terms of dependence, visibility, substitutability and portability. After critically evaluating proposed changes to damaged supply chains such as adding inventory, adopting standardized parts, physically duplicating line production and equipment, and evacuating whole facilities, Fujimoto argues that for manufacturers in high-cost countries like Japan in this era of intensifying global competition, such changes are only appropriate when they simultaneously sustain supply chain competitiveness. As an alternative measure to make a chain more robust without significantly adding product costs, he also proposes “virtual dual sourcing,” in which the firm facing supply chain disruptions caused by a disaster must carefully choose either to quickly recover a damaged line or transfer critical design information to a substitute line. In his argument, effective implementation of the virtual dual solution will require simultaneously enhancing the design information’s portability, the supplier’s visibility, and the firm’s capabilities at process recovery and production substitution.

Followed by these presentations is the dialogue by the presenters and their reactions to the questions raised by the participants facilitated by Kanai whose research interests resides in transformational leadership, entrepreneurial networking, and OD including process facilitation, thus serving as a coordinator of the session.