Public Engagement Activities of the Tomakomai CCS Demonstration Project

Chiyoko Suzuki**, Mayumi Fuji*, Yoshihiro Sawada*, Jiro Tanaka*

*Japan CCS Co., Ltd., SAPIA TOWER 21F, 1-7-12 Marunouchi, Chiyoda-ku, Tokyo 100-0005 Japan

Abstract

The Tomakomai CCS Demonstration Project has been conducted over an eight-year period from JFY(*)2012 through 2019 by Japan CCS Co., Ltd. (JCCS) in Tomakomai City, Hokkaido Prefecture, Japan, under commissioning by the Ministry of Economy, Trade and Industry of Japan (METI). From JFY2018, the project has been under the commissioning of New Energy and Industrial Technology Development Organization (NEDO) with subsidies from METI. As the project is being conducted close to the center of Tomakomai, a large industrial city with a population of over 171,000, extensive public engagement is being carried out. (*Japanese fiscal year: April of calendar year to March of following year)

The starting point of our public engagement activities is the concept that there are three dimensions to public acceptance of CCS ((Wüstenhagen et al (2007)); socio-political (broad, general level), community (acceptance by local stakeholders) and market (consumers and investors).

As it was very clear that the most importance objective from JCCS’s perspective was the successful and smooth completion of the Tomakomai Project, we concentrated our efforts on securing the trust of the local community through sustained communication, as well as risk communication on such topics as CO₂ leakage and induced seismicity. We divided the target audience by age group; children, working adults, and senior citizens, and tailored our public outreach program in order to effectively disseminate information to each group.

Our public outreach activities between the years JFY2012 and 2019 have comprised panel exhibitions, exhibits at environmental conferences, site tours, lectures, forums for local residents, and experiment classes for schoolchildren. We have also maintained an information disclosure system in the city hall of Tomakomai.

A key point in the implementation of our activities was to create highly visual, easy to understand materials that would draw public attention and help us provide people with clear, accurate information and context.

In order to nurture trust with our audiences, our approach was; first, sharing correct information based on current CCS technology; second, maintaining constant, thorough cooperation with the local government; third, avoiding a one-way flow of information by encouraging conversation with all parties; fourth, designing our activities to create a

** Corresponding author. Tel.: +81 3 6268 7387, E-mail address: chiyoko.suzuki@japanccs.com
personal connection with the audience; fifth and last, planning all of the above mentioned approaches in consideration of the benefits to the local communities.

Tomakomai was chosen as the site for the demonstration project from among 115 candidate sites in Japan as a result of a site selection process between JFY2008 and 2011. Another site on the Pacific coast in northeast Japan had been considered the prime candidate; however, it was downgraded on account of the Great East Japan (Fukushima) Earthquake of March 2011. Facing a situation in which public trust in government projects was at a low, we diligently engaged each stakeholder in order to obtain their consent. A survey of the residents of Tomakomai found that their main concerns were information disclosure, safety of CO$_2$ storage, and dissemination to the young generation, which were reflected in our public outreach activities. A key factor was the strong support of the local government, which formed the Tomakomai CCS Promotion Association in April 2010, during the selection process to attract the CCS demonstration project to Tomakomai City. The association was chaired by the mayor of Tomakomai, and comprised all the major local industries including the fishery cooperatives. An expert committee concluded that Tomakomai was suitable as the demonstration site. The Tomakomai project is recognized as a case of the central government, local community, and private sector working closely together in carrying out a CCS project.

Our activities and public acceptance of CCS in Japan were subjected to a serious trial by the occurrence of a major earthquake in September 2018, 30km from the Tomakomai project site. In accordance with our emergency response procedures, we promptly disclosed data which clearly indicated that the reservoir was unaffected by the earthquake. We also convened an expert review meeting comprising prominent scientists in the relevant fields, who confirmed that the injected CO$_2$ was intact, and that there was no relationship between the CO$_2$ injection and the earthquake. The results were summarized and posted on our website.

Over the course of the project, we have gone out to the international community to actively communicate information and our learnings at meetings and conferences. Recently, JCCS is also reaching out to other organizations to pursue collaboration with a view to share information in order to accelerate the deployment of CCS.

Acknowledgments: The authors would like to express special thanks to METI and NEDO for their kind permission to disclose information on the Tomakomai CCS Demonstration Project.

Keywords: CCS; Tomakomai, public acceptance, public outreach