

1. Technology	2.4 Others (including resource recovery, rivers, and forests)
2. Project Name	2.4.76 Development of international standards for water use in overseas industrial production
3. Keywords	Water reclamation, development of international standards, desalination of seawater
4. Objectives	<p>The objective of this project, which began in fiscal 2016, is to grasp the trend of development of international standards for TC224/WG12 “efficient water management” and TC8/SC13/WG3 “seawater desalination,” which are related to industrial production activities outside Japan, and submit proposals for improvement and utilization. In particular, we propose revisions to standards and utilization of them, so that developed standards will not produce disadvantages for production activities of Japanese enterprises and excellent technologies for using water will be evaluated appropriately.</p>
5. Contents/ Results	<p>“Efficient water management” was proposed by Singapore based on the SS577 standards enforced domestically in 2013, for developing international standards for authorization. The standards obligate business operators to constantly set goals, design plans, execute and revise them, so that they will save water. Regarding the reuse of water for saving water, Japan proposed an additional note that the standards of TC282 “water reuse” can be referred to. The above standards were issued as international standards for authorization in July 2019, and enforced and utilized mainly in Singapore. Regarding “seawater desalination,” the guidelines for “the quality of water for production,” which were developed based on a proposal from China, were issued as international standards in October 2021. From the development stage, Japan sent comments while cooperating with related staff in the country, and removed disadvantageous contents for Japan. Furthermore, the standards for “nomenclature” proposed by China in fiscal 2022 were developed, and issued as international standards in 2024.</p> <p>In fiscal 2024, too, we grasped the trend of use and application of standards for authorization of “seawater desalination,” shared information with related groups in Japan, and conducted surveys for promoting the utilization of related standards and technologies for reusing water. Regarding the “desalination of seawater,” Japan submitted comments about “methods for testing the performance of RO and NF membrane elements,” which are being developed based on a proposal from China, and continued activities for removing disadvantages for Japan in cooperation with related people in the country.</p>
6. Reference	This project is a voluntary project of Water Reuse Promotion Center.