

## Sendai Declaration of Sewerage Works Disaster Risk Reduction

On March 17 and 18, 2015, we sewerage professionals assembled in Sendai City, Miyagi Prefecture, currently recovering from the Great East Japan Earthquake and Tsunami of March 11, 2011. We express our deepest sympathies to the many victims of this earthquake and tsunami disaster and our gratitude for the great outpouring of support from around the world to the affected areas.

Until now we have conducted various disaster risk reduction measures. Although it is impossible to fully prevent damage in the event of such unprecedented disasters as the Great East Japan Earthquake and Tsunami, we have confirmed that it is possible to greatly mitigate impacts through taking preliminary “hard” measures such as the earthquake proofing of sewerage facilities, securing equipment, materials and fuel for use in emergencies, and formulating BCP, and also implementing “soft” measures such as providing mutual assistance and training human resources when disasters occur, and that it is possible to achieve rapid restoration depending on the success of the initial response and emergency countermeasures. Today, in view of the growing global risks posed by large-scale disasters, it is necessary to further strengthen and enhance hard and soft countermeasures.

Furthermore, from the restoration and reconstruction following the disaster, we have learned the importance of returning valuable resources such as energy and biomass from sewers to the local community and contributing to global environmental conservation and sustainable society through implementing energy saving measures and utilizing renewable energy.

By widely sharing the various examples, experiences and lessons of post-disaster restoration and reconstruction at the 2015 Sendai Symposium on Sewerage Works Disaster Risk Reduction, we hope to further the cause of disaster risk prevention and mitigation. For this reason, we need to actively convey information and conduct international cooperation from now on. At the same time, we must actively implement sewerage initiatives geared to mitigating the human, social, economic, and environmental losses that are caused by disasters.

From this viewpoint, we make the following declarations to the world concerning the reduction of disaster risks in sewerage systems.

1. We will contribute to the construction of a robust society through continuing to promote hard measures for sewerage networks and facilities such as the earthquake proofing and tsunami proofing in light of the lessons of the Great East Japan Earthquake and Tsunami.

[Declaration concerning the importance of “hard” disaster countermeasures]

2. We will strive to secure, develop and maintain human resources in the sewerage sector and mitigate the impacts of large-scale disasters through mutual aid.

[Declaration concerning the importance of “soft” disaster countermeasures]

3. We will quickly restore sewerage functions at times of disaster and provide the valuable resources of sewerage systems for supporting the regeneration and reconstruction of communities and industries.

[Declaration concerning the importance of restoring facilities in the short-term to medium-term]

4. In conducting restoration and reconstruction, we will contribute to the realization of sustainable society through promoting energy saving initiatives and the utilization of renewable energy.

[Declaration concerning the importance of facilities restoration and the approach to sewerage systems in the long term]

5. We will contribute to the realization of safe and congenial societies in the world through broadly sharing and providing our experiences and lessons of sewerage damage, restoration and reconstruction, and actively involved international cooperation concerning technology and know-how for reduction of disaster risks.

[Declaration concerning the importance of information sharing and international cooperation]