

COMPLETION REPORT

QUACH THI XUAN

VIETNAM ZERO WASTE ALLIANCE

Waste Incineration and Solid Waste Management in Japan - Lessons Learned for Vietnam

Many countries in the world have been facing with the solid waste crises. However, in some countries, waste management systems have achieved big succeeds that a developing country like Vietnam could learn from. One of those countries is Japan. The study of “Waste incineration and solid waste management in Japan – lessons learned for Vietnam” explored deeply the history of waste management in Japan, the process of waste incineration adoption, its economic, social, and environmental impacts, from which lessons learned were withdrawn for Vietnam.

Japan had ever experienced with the problem of municipal waste during 1960s and 1970s when population and economic grown rapidly. There was a shortage of landfills, especially in the large cities. The “War against Waste” in the Tokyo Metropolitan in 1971 heightened the awareness that waste was a serious issue for daily life. As a result, people recognized the importance of government organizations and residents working together to improve waste management.

In 1980s, lack of landfills also made it difficult to prevent combustible waste from being landfilled without incineration. However, there was an increasing concern among residents that the incineration of wastes containing plastic would produce dioxins and the flue gases from plants would harm the health of nearby residents. Anxiety about dioxins generated by waste incinerators increased residents' concern over incineration facilities, providing impetus to opposition movements against the construction of incinerators. Japan’s waste management strategy was changed, incineration was no longer the first choice, its priorities were (1) reduce, (2) reuse, (3) recycle, (4) thermal recovery, and (5) proper disposal.

Japanese Government had issued different versions of waste management acts, one after another, the Waste Management Act in 1991, the Law Concerning Special Measures against Dioxins (1999), Food Recycling Act (2000), and Revision of the Waste Management Act (2000) which promoted 3R and discouraged waste incineration. As a result, of particular note, (i) the amount of final disposal waste reduced from 20 million tons in 1980 to 4.6 million tons in 2012 for municipal waste and from 91 million tons in 1985 to 12 million tons in 2011 for industrial waste [MOE,2014]; the number of

incinerators decreased, from 1318 in 2005 to 1221 in 2010 and to 700 in 2019 (ii) the emissions of dioxins and dioxin-like compounds in Japan were successfully reduced from 5,000 grams in 1997 to 64 grams in 2004 [UNEP,2013].

The waste crisis in Vietnam now is in a similar situation with that of Japan in 1980s, experiences of Japan should be learned by Vietnam may include:

1. Completing the legal framework, strictly adopting the “Polluter-Pays Principle”, implementing policies to reduce waste such as single-use plastic ban, extended producer responsibility, scrap import limitation, and encouraging circular economy with priority of food waste composting;
2. Properly applying waste sorting at source and comprehensive implementing 3Rs as soon as possible;
3. Properly disposing of solid waste and phasing out of waste incineration;
4. Mobilizing the consensus and participation of the people and stakeholders in the implementation of policies on solid waste management.

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)	
Date:	Sep. 15 th , 2021
Venue:	Zoom- online
Name of Conference:	The Gaia-BFFP AP Media Fellowship-Vietnam - 2021
Title of presentation:	The Current Waste Incineration in Vietnam
Presenter:	Quach Thi Xuan
Planned Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)	
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Venue:	Zoom- online and/or offline-workshops organized by Vietnam Zero Waste Alliance
Name of Conference:	Workshop related to waste incinerations
Title of presentation:	Waste Management and Waste Incineration in Japan – lessons learned for Vietnam
Presenter:	Quach Thi Xuan
Book (Publisher and Date of the Book, Title and Author of the Book, etc.)	