WTERT (China)

PROGRESS REPORT

(2009-2010)

http://www.wtert.cn
AGENDA

- WTERT China website
- Testing Research on MSW in CWTERT
- Current research work in CTWERT
- Government supports
WTERT-China web was resumed in June, 2010. The website was updated under the instruction of Prof. Themelis. The website reports on the latest scientific research progress on WTE, informs the public about the WTE concepts and technologies, and provides a scientific basis for government decision-making.

**Major sections:**
- Policies & Regulations
- Scientific literatures
- News & Events
- Technology Frontier
- Public discussion
I. MSW in China

(I). MSW management in China Major Problem Facing

– 1). MSW yield increases continually
  • Total transported: 154 million tons (2008);
  • Centralized processing: about 100 million tons (66.8%)

– 2). A serious shortage of processing capacity
  • MSW Landfills plants: 407
  • MSW Composting plants: 14
  • MSW Incineration plants (WTE): 74
  • Incineration capacity: 51,600 tons/day (2008)

(Source: China Urban Construction Statistics Yearbook – 2009)
(II) Characteristics of MSW in China

- No sorting and separate collection of MSW;
- All kinds of waste are collected mixed together. A lot of industrial waste, construction waste and medical waste are mixed with MSW;
- MSW in China has more water and ash content. Its calorific value is very low (e.g. the calorific value of MSW in CQUST is twice of that of Tongxing WTE Plant);
- The southern MSW has higher calorific value than the northern;
- MSW has low organic content (< 30%) relatively. But it gradually increased, and the growth rate achieved 5% per year.
(III) Testing on MSW composition by CWTERT

- Complete typical MSW composition and characteristics tests with seasonal change in China
- Started to accumulate MSW database in China

### A sample of MSW composition (Chongqing)

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Current research work

- MSW pretreatment
- WTE hydraulic system
- Numerical analysis of MSW moving on the grate
- Evaluating different grates
- MSW gasification process
- Emission pollution control technologies
Work on the public concerns on WTE

- C-WTERT actively researches the social issues related to WTE. These studies provide strong support for government decision-making.
  - An example of sustainable economy support policy: the policy support on WTE industry in China;
  - WTE support policies: Study of international experience in waste management;
  - Research on policy to encourage MSW source separation in Chongqing

- Held an academic forum in May 2010
The public in China are concerned about the dioxin emissions from WTE plants. To release the pressure from the public, the Ministry of Environmental Protection (MEP) and China International Consulting Co. are putting a wide investigation on the impacts of WTE emissions. C-WTERT participates in this investigation.
Thanks!

Welcome to C-WTERT & Chongqing University of Science and Technology (CQUST)