



Protecting the environment and natural resources, combating climate change and promoting sustainable environmental practices are all strategic factors in planning, developing and executing our business operation. It is Canvest's precise responsibility to ensure continuous and safe operation, especially during the outbreak of COVID-19 pandemic, by applying best available technologies and strictly complying with all relevant environmental regulations and standards. We pledge to promote the conservation and effective utilisation of resources, including water, fuel and other natural resources. We put significant attention to achieving minimal pollution and waste generation from our projects. During the Reporting Period, some of our operating WTE projects attained ISO9001, ISO14001 and OHSAS18001/ISO45001 management system certifications.

AIR EMISSIONS

Our main operation involves incineration which produces emissions that may have potential negative environmental impacts to the surrounding area. Being a by-product generated from the incineration process, flue gas is comprised of a variety of air pollutants, namely particulate matter, heavy metals, persistent organic compounds, acid and other gases. Therefore, we have rigid continuous emission monitoring system (CEMS) of flue gas to ensure we are compliant with applicable regulations such as *Emission Standard of Air Pollutants for Boilers (DB 44/765-2019)*. The incineration process is controlled with intricate temperature control system and advanced flue gas treatment technologies in accordance to the Group's standardised procedures such as the *Operation Environmental Control Procedure* and *Production and Operation Management Procedure*. As the concerns towards climate change related issues have grown in recent years, we strive to continually improve our air emission control technologies to follow the trend of increasingly stringent national and international emission standards. At the same time, we have also reduced carbon emissions in accordance with long-term goals to meet the timeline of the United Nations' SDGs.

Technical Upgrade to Further Reduce Emissions

Due to the complex nature of the types of wastes received at Zhanjiang WTE plant, the flue gas generated from the incineration process is highly acidic with high content of hydrogen chloride (HCl) and sulphur dioxide (SO₂). Following the success of mixing deacidifying agent with MSW at the Laibin WTE plant, Zhanjiang WTE plant had launched a pilot test in late 2019 to assess the applicability of utilising deacidifying agent such as calcium oxide (CaO) in reducing the emissions of HCl and SO₂.

Different from mixing of white mud into MSW at the Laibin WTE plant, the incinerators at Zhanjiang WTE plant were retrofitted to allow injection of CaO into the combustion chamber. CaO would react with the flue gas in the combustion chamber and serve as a pre-treatment of flue gas by reducing the production of acidic gases prior to the flue gas treatment process. After the retrofitting works, positive results were shown as a high rate of deacidification was achieved, which allowed the operators to better control the air emission level. Furthermore, the consumption of chemical agents used in the flue gas treatment process and production of fly ash also significantly reduced.

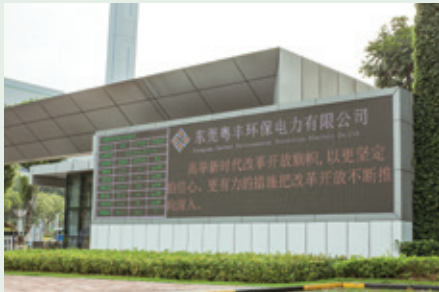
In 2020, certain number of other WTE projects had also retrofitted the incinerators to allow injection of CaO into the combustion chamber.



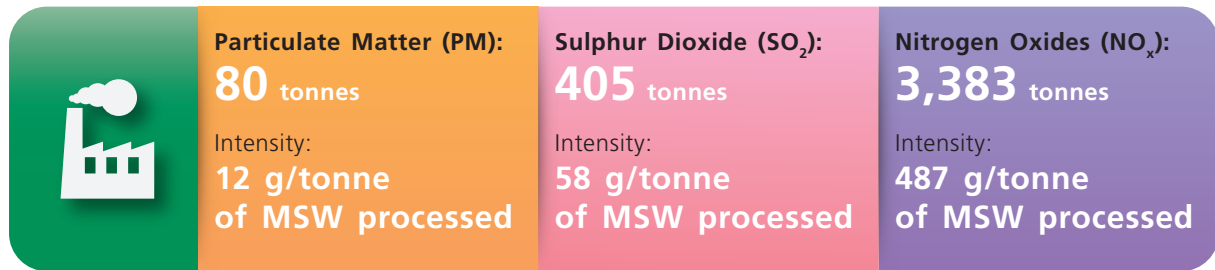


Public Disclosure of Emissions Data

Adhering to the principle of information transparency within the Group, real-time flue gas emission data are displayed at the gate of each of our operating plants. Such information is also accessible via our corporate website to encourage public supervision, further demonstrating our unwavering commitments to our society and environment.



Air Emission from Operating Projects in 2020



WASTE MANAGEMENT

As one of the leading waste management operators, it is our responsibility to avoid generation of waste during our operation via efficient management measures and maximise recovery of useful materials. The majority of the wastes consist of fly ash from flue gas treatment, bottom ash from the incineration processes, and sludge from wastewater treatment processes. We adhere to the Group's *Operation Environmental Control Procedure* and *Production & Operation Management Procedure* for the control measures on all effluents, hazardous and non-hazardous waste resulting from our operations, thus reducing waste generation and pollution to surrounding environment. Nevertheless, we will continue to explore measures to further reduce waste generation in our daily operations and improve our waste management performance.

Fly Ash Treatment Measures

Fly ash contains high content of heavy metals and dioxins, therefore require specialised treatment and storage procedures in accordance with the *Standard for Pollution Control on Hazardous Waste Storage (GB18597-2001)*. As air is drawn through the baghouse, particulate matter from the combustion gases as well as chemicals added for air quality control including activated carbon and lime are removed and are then discharged from the bottom of the baghouse as fly ash. Chelating agent and cement are added to stabilise and solidify the fly ash before disposal at designated landfill as required by the *Standard for Pollution Control on Landfill Site of Municipal Solid Waste (GB16889-2008)*.