

**“WASTE TO ENERGY TECHNOLOGIES
AND GLOBAL APPLICATIONS FOR 21st CENTURY”**

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Today worldwide, one of the main factors contribute in the development of quality of life in both developing and developed metropolitan cities and urban/rural areas, is the advancing of sustainable waste management and waste to energy. For that reason the education of policy/decison makers, governmental authorities , public & private sector (local industry) is crucial in order to inform the local society how to divert illegal dumping of municipal solid waste, which causes adverse effects in human health and daily life due to underground water & air pollution.

Around 1.4 billion tons of Municipal Solid Waste (MSW) are annually produced worldwide . An estimated 250 million tons of them (MSW) are worldwide treated thermally (mainly combustion process in moving grates) in approximately 2000 Waste To Energy Plants to produce electricity and heat and some times cooling. This relevant global industry is usually called waste-to-energy (WTE) and is rapidly growing. An estimated 350 WTE facilities were built, during the first 1.5 decade of the 21st century, mostly in Europe and East Asia . In China 250 WTE Plants already operate and

another 260 Plants are under construction (the booming WTE business worldwide) .

Waste-to-Energy is one of the most stringently regulated and controlled industrial activity and achieves very low emissions comparing with other industrial sources. It is together with recycling complimentary to treat waste that could not be avoided and to divert waste from illegal dumpsite and landfills. With the current state of the art modern new built WTE Plants in all continents (Europe, USA& Canada, LAC countries, Asia and Africa and Australia) the NIMBY syndrome (Not in My Back Yard) will be replaced by PIMBY (Please in My Back Yard) and every simple citizen will be happy to have such a state of the art sustainable waste management & waste to energy plant in its neighbourhood since the real emissions and environmental effects are really negligible and convert these state of the art Plants from Industrial Buildings to very attractive touristic places improving the quality of life and social acceptance of this developing industry, contributing also in renewable energy sources (replacing fossil fuels). The current presentation will analyze the Global WTE technologies & applications for 21st century. Important Benefits for contribution to renewable energy sources for Cuba will be analyzed .

Find more information in the new published book :

<https://www.crcpress.com/Waste-to-Energy-Technologies-and-Global-Applications/Kalogirou/p/book/9781138035201>