

# FEW FACTS AT A GLANCE

1. Japanese paper mills peaked in the year 2005. (35 million tons)
2. In 2018 Production of paper was 26 million tons in 2018. Per capita consumption is 220 kgs
3. The population is decreasing. (2010 -126 million, in 2019 – 124 million)
4. Consumption of Newsprint, writing and printing paper is decreasing. Packaging and sanitary paper are growing.
5. Japan collects >82 % wastepaper and consume > 64% waste paper. Rest is virgin pulp either produced locally or imported.
6. Thus Japan has 3.7 million tons excess of wastepaper till 2017 available for export. China was biggest importer of their wastepaper. However, since 2018 it has been affected badly due to restriction on import of wastepaper by China. Japan has 2.7 million tons of wastepaper mostly OCC available for export.
7. Despite very low price of OCC @ US\$ 30/ ton they are finding it hard to export it due to geographical location leading to high sea freight.
8. Though prices of imported wastepaper are lower, the paper mills in Japan do not import wastepaper and instead support local administration by buying wastepaper, locally at a higher price (OCC - around JPY 15/ KG or US\$ 1.4/KG)
9. On other hand local newsprint publishers buy newsprint from local paper mills at a higher rate than imported paper.
10. Who controls artificial price of both locally collected wastepaper or newsprint remains unexplained?
11. Segregation of waste at first point and its handling is mind boggling. Hats off to Japanese for working in national interest at every stage. No untreated waste is sent to dumping yard. Every thing is incinerated. Given below is chart of incineration plant that operates in the heart of Tokyo. The quality of air discharged is of very high standard. The plant looks like a resort rather than disposal point for garbage. It handles 600 TPD of waste and has been built with German technology at a cost of Rs 2000 Cr. Several such plants operate in Japan.







## Pollution control standards by Incineration Plant

		Regulated Maximum Values	Self-imposed Maximum Values
Fly ash		0.04g/m <sup>3</sup> N	0.01g/m <sup>3</sup> N
Hydrogen chlorides		700mg/m <sup>3</sup> N 430ppm	10ppm
Sulfur oxides (regulated total emissions)		369m <sup>3</sup> N/day 61 ppm	10ppm
Nitrogen Oxides	Regulated total emissions	16.6m <sup>3</sup> N/hour 83ppm	—
	Regulated concentration	250 ppm	50 ppm
Mercury		50μg/m <sup>3</sup> N	—
Dioxins		0.1ng – TEQ/m <sup>3</sup> N	—
Waste water		10pg – TEQ/L	—

Notes : ● Corrected to 12% O<sub>2</sub>, dry.

- The concentration appearing in parentheses has been provided only for comparison purposes with the self-imposed maximum value.

