Japan: summary data

Summary Data

Population (millions)	126
GDP (US$ billions)	5,106
GDP Per Person (US$)	40,408
Estimated Annual Waste Generation (million tonnes)	44.3
Per Person Annual Waste Generation (kg)	351

Source: AcuComm database, February 2017 www. acucomm.net

AcuComm currently lists 101 waste projects in Japan. These have a total value of US$11,258 million, or US$111 million each.

Incineration (with energy recovery) is the leading project type, accounting for US$8,542 million or 76% of the total. This is followed by integrated/mixed facilities, accounting for US$1,283 million or 11% of the total.

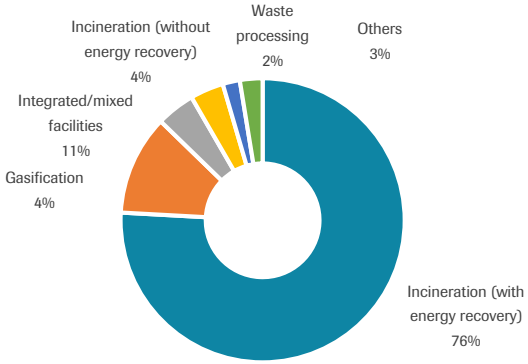
The total estimated capacity of these projects is 13.2 million tonnes. This is equal to 130,607 tonnes per project on average, and 408 tonnes per day per project (using a standard 320-day year).

This capacity is equal to 30% of Japan's estimated annual waste generation, at 44.3 million tonnes or 351 kg per person.

Power generation is a component of 86 projects, or 85% of the total. Total actual or planned generation is 1,680 MW, equal to 20 MW per project on average.

Japan, Feedstock Capacity (million tonnes)

Japan, Leading Tech Types (US$m)



Summary of Active Waste Projects

Number	101
Of which, power-generating	*86*
Total Value (US$m)	11,258
Average Value (US$m)	111
Capacity (million tonnes)	13.2
% of Estimated Generation	30
Average Annual Feedstock Capacity (tonnes)	130,607
Average Tonnes Per Day Per Project	408
Power Generation (MW)	1,680
Average Power Generation (MW)	20

US$m Value By Feedstock Type:

MSW	11,012
e-Waste	0
Food	37
Glass	0
Metals	49
Paper	0
Plastics	161
Rubber	0

US$m Value By Tech Type:

Anaerobic Digestion	26
Biofuel	110
Biogas	11
Gasification	494
Incineration (with energy recovery)	8,542
Incineration (without energy recovery)	429
Integrated/mixed facilities	1,283
Landfill	52
MBT	0
Other	0
Recycling	92
Waste processing	220

Source: AcuComm database, February 2017 www. acucomm.net

Japan: five year outlook

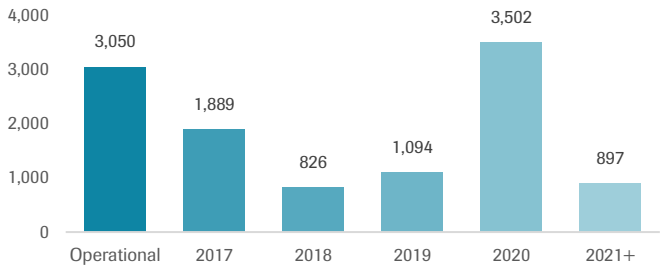
Waste investments totalling US$8,208 million are expected to become operational over the next few years. This is currently expected to peak in 2020 at US$3,502 million.

Planned additional capacity is 11.3 million tonnes, of which 3,448,080 tonnes (30% of the planned total) is estimated for 2020.

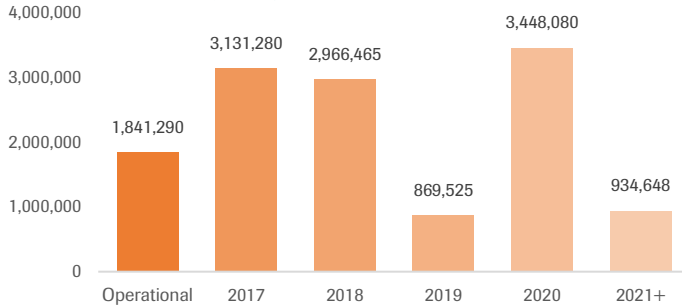
Planned additional power generation is 1,308 MW, of which 1,198 MW (92% of the planned total) is due to come into operation before 2021.

Around 27% of projects by value, and 14% by tonnage capacity, is in projects which are already operational.

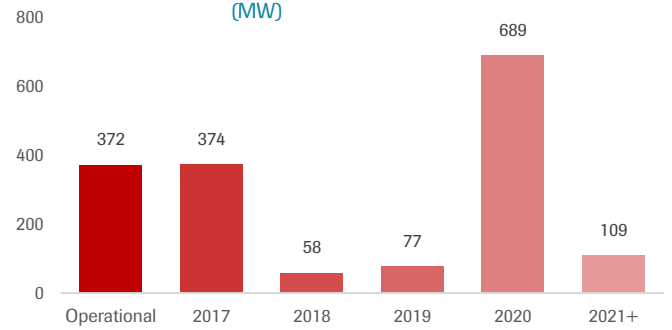
Japan, Value of Investments by Operational Date (US$m)



Japan, Capacity of Investments by Operational Date (tonnes)



Japan, Power Gen. of Investments by Operational Date (MW)



Japan, Projects by Date of Operational Status

	Operational	2017	2018	2019	2020	2021+
Number	28	22	11	7	27	6
Of which, power-generating	*24*	*19*	*8*	*6*	*24*	*5*
Value (US$m)	3,050	1,889	826	1,094	3,502	897
Average Value (US$m)$	109	86	75	156	130	150
Feedstock Capacity (tonnes)	1,841,290	3,131,280	2,966,465	869,525	3,448,080	934,648
Average Feedstock Capacity (tonnes)	65,760	142,331	269,679	124,218	127,707	155,775
Average Tonnes Per Day Per Project	206	445	843	388	399	487
Estimated Power Generation (MW)	372	374	58	77	689	109
Average Power Generation (MW)	15	20	7	13	29	22

Source: AcuComm database, February 2017 www. acucomm.net