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EPC Contractor: MVV Umwelt Asset GmbH
Boiler & Grate Supplier: Standardkessel Baumgarte GmbH

Worldwide Market Share Analysis of Thermal Waste Treatment Plants

Excerpt

2020 Edition

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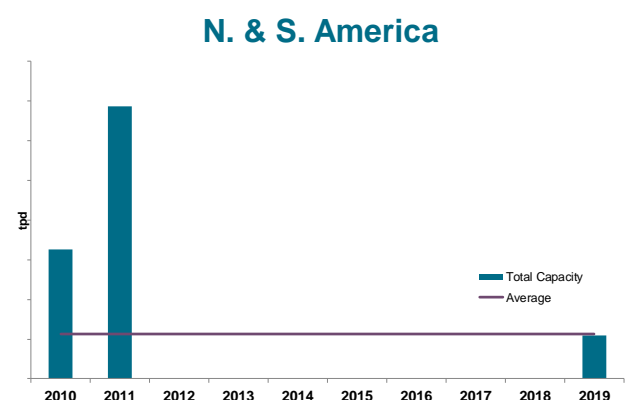
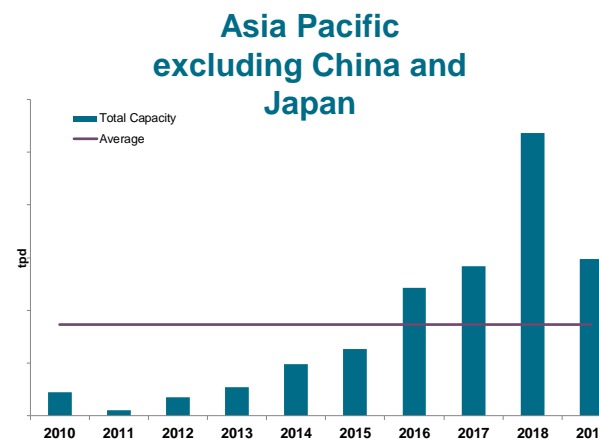
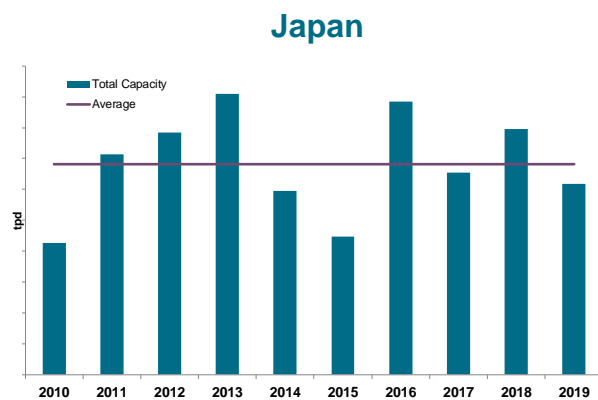
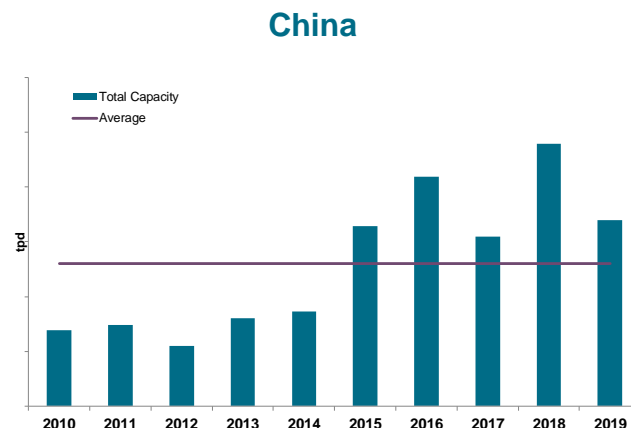
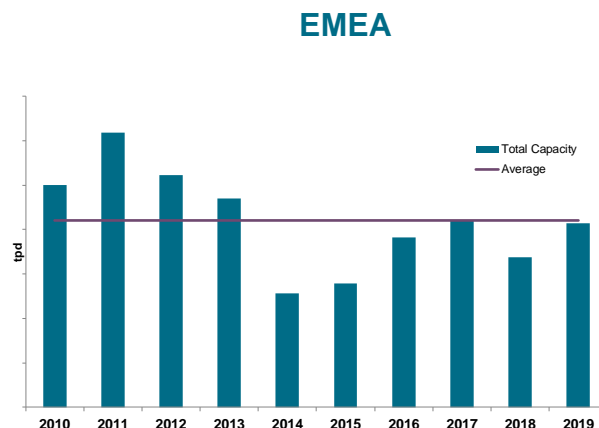
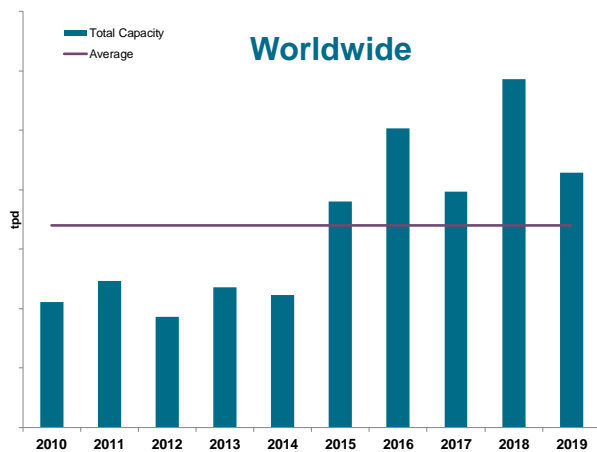
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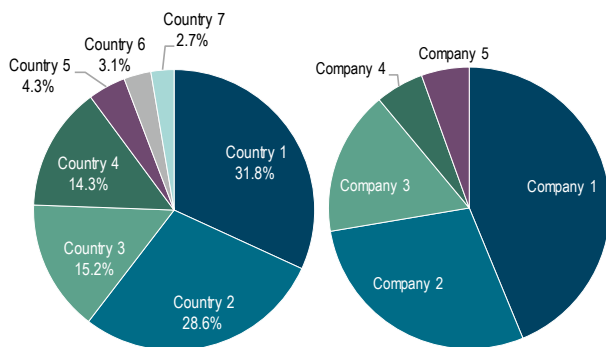
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10-Year Annual Award Volumes 2010 - 2019

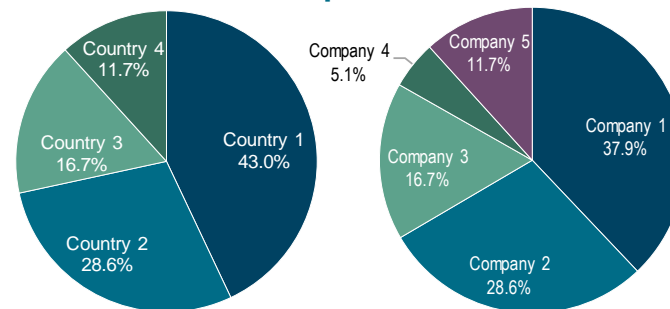


2019 Awards by Country and Supplier

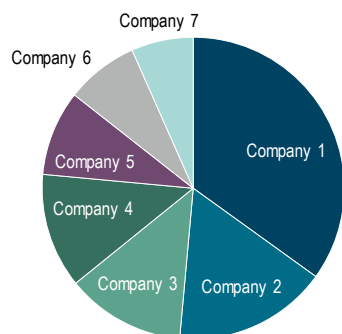
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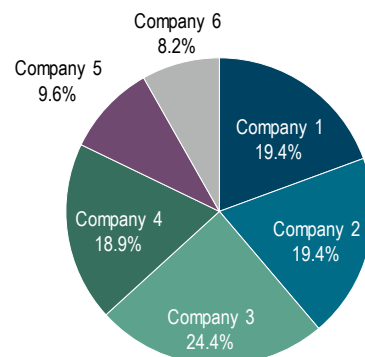
Asia Pacific excluding China & Japan



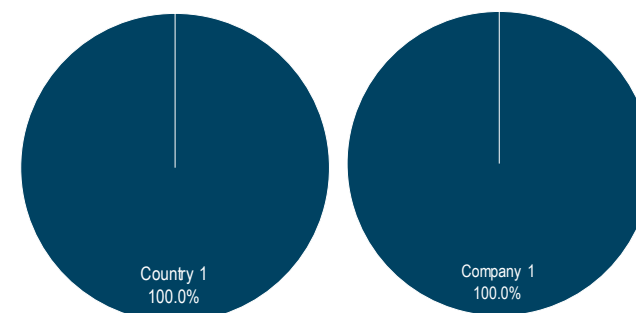
China



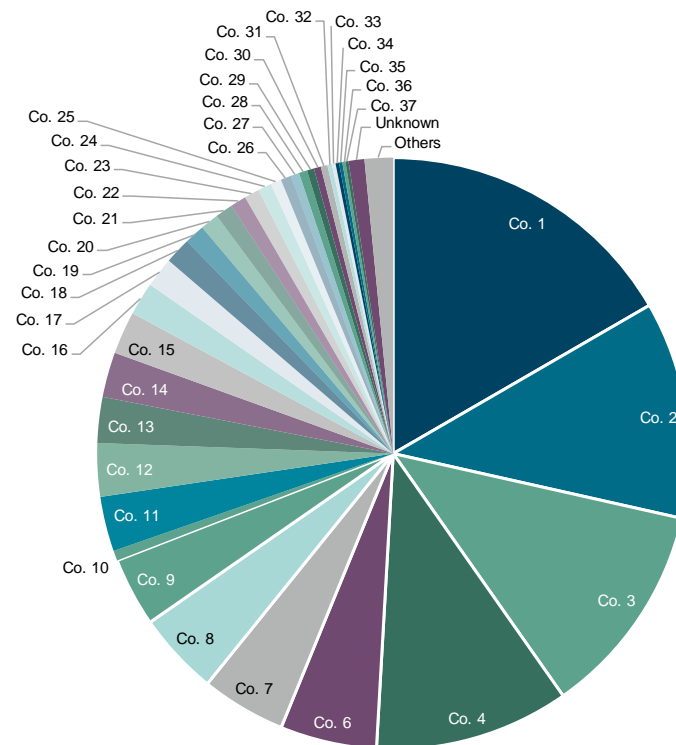
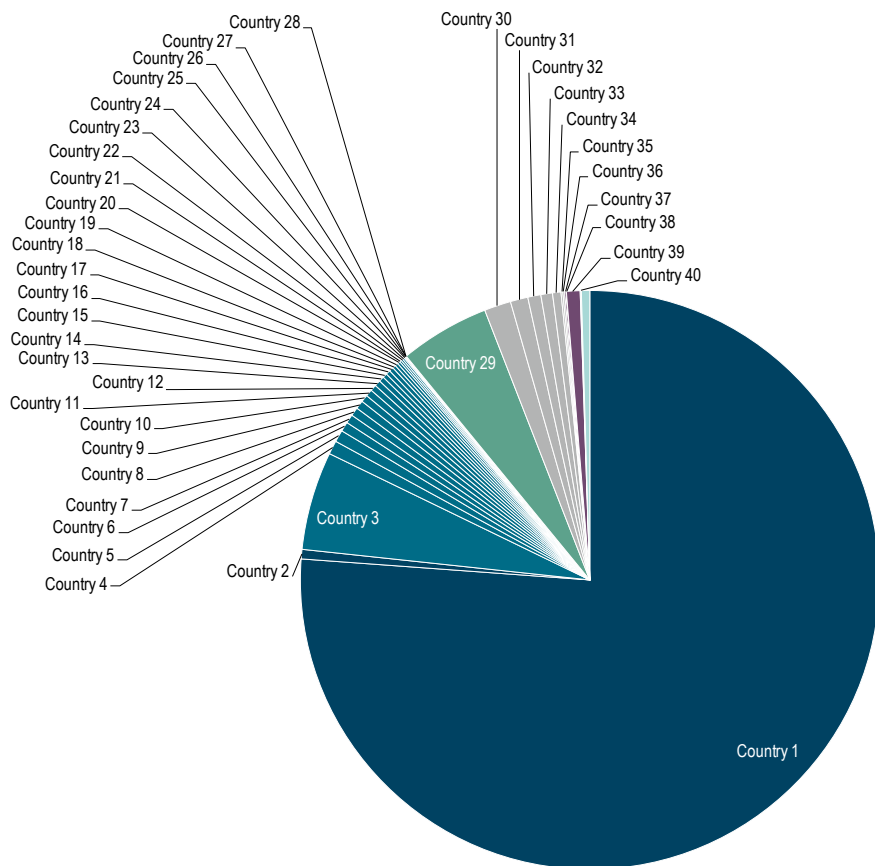
Japan



N. & S. America



Worldwide Awards 2010 – 2019 by Country and by Supplier



Excerpt from Actual Report – Plant / Award List by Supplier 2017-2019

Region	Country	Location	Owner / Customer	Supplier	Fuel	New / Extension / Replacement / Revamping	Scope of Project	Thermal System (all information per process line)			APC System			Award Year	Startup Year
								Type	# of Units (process lines)	Capacity per line (t/h)	Type	Details	Supplier		
China	China	Shahe City, Hebei Province	Shuangji Cement	Amul Corch Kawasaki Engineering Co., Ltd. (ACE) - JV between KHI & Corch Cement	MSW	New	Design, Equipment, Installation Furnace installed next to cement production line	CCK Corch Kawasaki KHI F&B operation	1	125				2016	2017
China	China	Ningguo City, Anhui Province	Ningguo Corch Cement	Amul Corch Kawasaki Engineering Co., Ltd. (ACE) - JV between KHI & Corch Cement	MSW	New	Design, Equipment, Installation Furnace installed next to cement production line	CCK Corch Kawasaki KHI F&B operation	1	125		LNH		2016	2017
China	China	Santai	China Science Group	Batcock & Wilcox Valund	MSW	New	Design	Valund Grate	2	21				2018	2019
China	China	Miayang	China Science Group	Batcock & Wilcox Valund	MSW	New	Design	Valund Grate	1	21				2018	2019
China	China	Civil amendment 2	China Science Group	Batcock & Wilcox Valund	MSW	New	Design	Valund Grate	1	31				2018	2019
China	China	Shenzhen	East Shenzhen Energy Environment Co. Ltd.	Batcock & Wilcox Valund	MSW	New	Design and equipment	DynaGrate®	6	36				2016	2018
EU/EA	Sweden	Boden	Bodens Energi AB (BEAB)	Batcock & Wilcox Valund	MSW	Extension	Grate, furnace, boiler, combustion control	DynaGrate®	1	13				2016	2019
EU/EA	United Kingdom	Gloucestershire	Gloucestershire County Council	Batcock & Wilcox Valund	MSW	New	Equipment	DynaGrate®	1	235		US		2016	2019
China	China	Suzhou Upgrading Project (VII), Jiangsu	People's Gate of Suzhou Municipality, Jiangsu Province	China Everbright	MSW	Upgrade	BOT	Grate	6	31.25				2018	TBC
China	China	Jujiang Project, Jiangsu Province	Acquisition	China Everbright	MSW	New	BOT	Grate	3	31.25				2018	TBC
China	China	Yancheng Waste-to-energy Project ("Yancheng Project"), Jiangsu Province		China Everbright	MSW	New	PPP	Grate	1	56.33				2018	TBC
China	China	Danyang Waste-to-energy Project ("Danyang Project"), Jiangsu Province - Phase I		China Everbright	MSW	New	BOT	Grate	1	41.67				2018	TBC
China	China	Jiuxiang Waste-to-energy Project ("Jiuxiang Project"), Shandong Province - Phase I		China Everbright	MSW	New	PPP	Grate	1	41.67				2018	TBC

TBC: to be checked

Excerpt from Actual Report – Plant / Award List by Country 2017-2019

Region	Country	Location	Owner / Customer	Supplier	Fuel	New / Extension / Replacement / Revamping	Scope of Project	Thermal by steam (all information per process line)			APC by steam			Award Year	Start-up Year
								Type	# of Units (process lines)	Capacity per line (t/h)	Type	Details	Supplier		
Oceania	Australia	Kairns, 40km south of Path	Developed by Macquarie Capital and Phoenix Energy / Acciona Consortium	Keppel Seghers	MSW	New	Core equipment, design and technical services for the plants furnace, boiler and flue gas treatment	Air-cooled grate	2	45.66	Semi-dry + AC		Keppel Seghers	2018	2021
EMEA	Belgium	Beringen	Bionerga	Ternseccanica	RDF	Replacement of Houthalen Plant	Turnkey (design & construction)	Grate	1	22.83	Dry			2018	2019
EUSA	Belgium	ICD Charleroi, Portée Loup	Local authority	VINCI (JV with Engie Fabric, SAU G&S - (now part of Evrasore Group)	MSW	Replacement Line 3	New line	Roller grate	1	7.3	34 Dry	Sodium bicarbonate and activated carbon, Nitro flux pellets SCR, Low temperature	VING	2018	2018
China	China	Hóngshū II	江苏润源环保股份有限公司 Ru-Sound Environmental Resource Co., Ltd.	Wuxi boiler (HTZ licensee)	MSW	New	License for grate system by HTZ	Grate	1	16.67				2018	To be announced
China	China	Xūpǔ	江苏润源环保股份有限公司 Ru-Sound Environmental Resource Co., Ltd.	Wuxi boiler (HTZ licensee)	MSW	New	License for grate system by HTZ	Grate	1	16.67				2018	To be announced
China	China	Suzhou Upgrading Project (VI), Jiangsu	"Piggyback" Govt of Suzhou Municipality, Jiangsu Province	China Everbright	MSW	Upgrade	BOT	Grate	6	31.25				2018	TBC
China	China	Jiujiang Project, Jiangsu Province	Acquisition	China Everbright	MSW	New	BOT	Grate	3	31.25				2018	TBC
China	China	Yancheng Waste-to-energy Project ("Yancheng Project"), Jiangsu Province		China Everbright	MSW	New	PPP	Grate	1	58.33				2018	TBC
China	China	Danyang Waste-to-energy Project ("Danyang Project"), Jiangsu Province - Phase I		China Everbright	MSW	New	BOT	Grate	1	41.67				2018	TBC
China	China	Jiuxiang Waste-to-energy Project ("Jiuxiang Project"), Shandong Province - Phase I		China Everbright	MSW	New	PPP	Grate	1	41.67				2018	TBC
China	China	Gezhuang Town, Dengfeng, Henan Province (Phase I)	Dengfeng Municipal Housing Bureau Rural Development Bureau	Dynareon Holding Group Co., Ltd.	MSW	New	BOT	Dynareon multi-stage pellet grate	1	33.17				2018	TBC
China	China			Dynareon Holding Group Co., Ltd.	MSW	New	BOT	Dynareon multi-stage pellet grate	1	33.17				2018	TBC
China	China	Qiaoyi Town, Wangcheng District, Changsha City, Hunan Province - Phase II	Hunan Junxin Environmental Protection Group	Hilachi Zosen Corporation (HTZ)	MSW	New	Combustion	Air-cooled grate	6	35.42	Semi-dry	SNCR, rotary absorber, activated carbon injection, BF		2018	2021

TBC: to be checked