# **Waste Business Monitor**

The only source of "real time" trend data analysing global waste plant developments



Waste > Renewables > Energy > Profit

### ALL DATA CURRENT AT

### **MARCH 2016**

Issue Number

019

**Date of Publication** 

### April 2016



### In this month's report...

### The latest waste plant developments in March 2016

- Latest Monthly Projects by Facility Type and Feedstock
- Latest Monthly Capacity by Facility Type and Feedstock
- Latest Power Generation Projects Listed by Facility Type and Feedstock
- Latest Country Focus Top Ten Countries with number and value of projects listed
- Completion Date Focus



# Essential for waste equipment manufacturers, operators and service companies

# **Explanatory Notes**



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# Welcome to Waste Business Monitor.

Welcome to your complimentary issue of AcuComm's Waste Business Monitor (WBM).

WBM provides an ongoing and comprehensive analysis of current projects in the global waste industry, enabling you to establish the level of activity in the different sectors of the waste industry around the world. The data in is taken from AcuComm's Business Database. This is a database of projects compiled and maintained by us on a daily basis. The information in it – and therefore in Waste Business Monitor – is not readily available from any other source.

### WBM is organised in the following sections:

The first section examines new projects reported in the latest month. It looks at the overall number and value of these, and then divides them in two ways. Each project is allocated a principal facility type, such as anaerobic digestion, gasification plant or WtE incineration plant.

Secondly, each project is allocated a principal feedstock type, such as municipal solid waste, plant biomass or food for example. Then, the waste capacity and power generation capacity of each project is examined. After this, we look at which countries are most active, and when projects are reported as being likely to complete.

I hope Waste Business Monitor is useful to you. If you have any questions or queries, or if you have a project which you would like to see included in our Business Database – free of charge – then please do get in touch

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# AcuComm

# **Projects This Month: March 2016**

**Overview** 

Number of New Projects by Month

AcuComm reported on 71 new/updated waste projects in March 2016. This takes the annual number (since April 2015) to 1,008, and the total overall since January 2015 to 1,269. The database as a whole contains 3,961 active project investments.

# Each new waste project represents ongoing investment of an average of around US\$63 million.



The total estimated value of these new projects is US\$3,554 million. This takes the total estimated value of projects reported since April 2015 to US\$58,256 million. The average estimated value of a waste project over this period is US\$58 million.



Estimated Total Value of New Projects (US\$m)



Incineration with energy recovery projects form the largest number in March 2016, accounting for 21 or 29.6% of the total. This was followed by anaerobic digestion and recycling projects with 11 projects each, or 15.5% of the total.



WtE incineration is the leading facility type by estimated value, at US\$1,931 million, or 54.3% of the total. This was followed by biofuel with US\$591 million, or 16.6% of the total.



# **Quarterly Project Data Comparison**

Key Indicators for January 2016 to March 2016

	Jan-16	Feb-16	Mar-16	Quarterly Total
Number of new projects	74	69	71	214
Total estimated value (US\$ millions)	4,648	5,091	3,554	13,293
Average value (US\$ millions)	63	74	50	62
Estimated waste capacity (tonnes)	16,440,787	16,081,646	14,281,368	46,803,802
Average annual capacity per project (tonnes)	222,173	233,067	201,146	218,709
Estimated power generation (MW)	892	974	1,000	2,867
Average MW per project	12	14	14	13

# Projects by Number and Estimated US\$ Value



This page compares data on projects reported in the current month, compared with the previous two months. This provides a comparison of the most recent data, and also a quarterly total. The size of the circles in the bottom left graph represents the total estimated project values, as reported in the table on this page.

# Average annual capacity per project





Average MW per project

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## Latest Monthly Projects by Facility Type (March 2016)

	Projects	With Value (US\$m)	Reported Value (US\$m)	Total Estimated Value (US\$m)	Average value (US\$m)
Anaerobic Digestion	11	8	104	184	17
Biofuel	6	2	99	591	99
Biogas	4	1	22	111	28
Gasification	1	1	5	5	5
Incineration (energy recovery)	21	5	354	1,931	92
Incineration (no energy recovery)	1	1	10	10	10
Integrated Facilities (IWMF)	1	1	50	50	50
Landfill	4	2	21	53	13
MBT	1	0	0	24	24
Recycling	11	6	69	128	12
Waste Processing	6	2	26	149	25
Others	4	1	111	318	80
Total	71	30	871	3,554	50

# Average Value of Projects, Mar 2016 (US\$m)



# Latest Monthly Projects by Facility Type % of Total (March 2016)

		% of Total Estimated
	% of Total Projects	value
Anaerobic Digestion	15.5	5.2
Biofuel	8.5	16.6
Biogas	5.6	3.1
Gasification	1.4	0.1
Incineration (energy recovery)	29.6	54.3
Incineration (no energy recovery)	1.4	0.3
Integrated Facilities (IWMF)	1.4	1.4
Landfill	5.6	1.5
MBT	1.4	0.7
Recycling	15.5	3.6
Waste Processing	8.5	4.2
Others	5.6	8.9
Total	100.0	100.0

# Projects By Facility Type, Mar 2016



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In terms of waste feedstock type, MSW was the leading category in March

value of US\$1,403 million (39.5% of the total).

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### Latest Monthly Projects by Feedstock Type (March 2016)

2016. MSW accounted for 24 projects (33.8% of the total) with an estimated

	Dmiante	With Value	Reported	Total Estimated	Average value
Animal	Projects	(US\$111)			(03311)
Clinical	4	2	20	74	10
Construction (Demolition	0	0	0	-	-
construction/Demonition	2	0	0	12	b
e-waste	0	0	0	-	-
Food	2	2	18	18	9
Gas	2	1	6	165	83
Glass	0	0	0	-	-
Hazardous	2	1	10	22	11
Heat	1	0	0	11	11
Industrial	3	1	13	55	18
Metals	0	0	0	-	-
MSW	24	10	349	1,403	58
Oil	0	0	0	-	-
Organic (general/unspecified)	9	2	30	655	73
Paper	0	0	0	-	-
Plant Biomass (non-waste)	1	1	95	95	95
Plant Biomass (waste)	4	3	23	112	28
Plastics	1	0	0	36	36
Radioactive	1	1	111	111	111
Rubber	0	0	0	-	-
Sewage/wastewater	4	2	56	117	29
Wood	11	4	131	666	61
Other	0	0	0	-	-
Total	71	30	871	3,554	50

Wood was the other principal feedstock in March 2016. This accounted for 11 projects, equal to US\$666 million or 18.7% of the estimated value.



## Latest Monthly Projects by Feedstock Type (% of Total)

	% of Total Projects	% of Total Estimated Value
Animal	5.6	2.1
Clinical	-	-
Construction/Demolition	2.8	0.3
e-Waste	-	-
Food	2.8	0.5
Gas	2.8	4.7
Glass	-	-
Hazardous	2.8	0.6
Heat	1.4	0.3
Industrial	4.2	1.5
Metals	-	-
MSW	33.8	39.5
Oil	-	-
Organic (general/unspecified)	12.7	18.4
Paper	-	-
Plant Biomass (non-waste)	1.4	2.7
Plant Biomass (waste)	5.6	3.2
Plastics	1.4	1.0
Radioactive	1.4	3.1
Rubber	-	-
Sewage/wastewater	5.6	3.3
Wood	15.5	18.7
Other	-	-
Total	100.0	100.0



# Projects By Feedstock Type, March 2016

General municipal waste accounts for a significant part of waste throughput, although it is by no means the only feedstock.





# **Latest Monthly Capacity**

For the 71 projects listed in March 2016, AcuComm estimates total waste capacity to be 14.3 million tonnes. This is equal to an average of 206,976 tonnes per project, and an average of 647 tonnes per day per project.

WtE incineration was the largest facility type in terms of capacity, amounting to 5.7 million tonnes, or 40.2% of the total. This was followed by recycling with 2.7 million tonnes (18.7%).

# Estimated Waste Capacity of Projects Listed by Facility Type (March 2016)

		Estimated Annual Capacity	Average Annual Capacity	Average Tonnes Per
	Projects	(tonnes)	(tonnes)	Day
Anaerobic Digestion	11	495,226	45,021	141
Biofuel	6	1,939,999	323,333	1,010
Biogas	4	219,419	54,855	171
Gasification	1	167,568	167,568	524
Incineration (energy recovery)	21	5,736,393	273,162	854
Incineration (no energy recovery)	1	36,390	36,390	114
Integrated Facilities (IWMF)	1	270,711	270,711	846
Landfill	4	1,076,851	358,950	1,122
MBT	1	65,000	65,000	203
Recycling	11	2,670,228	242,748	759
Waste Processing	6	811,222	135,204	423
Others	4	792,361	264,120	825
Total	71	14,281,368	206,976	647

Incineration with energy recovery represented 40.2% of estimated new capacity in March 2016. The largest is a two-year maintenace project for a Covanta WtE plant in Lorton, VA, USA.

# Estimated Capacity by Facility Type, % of Total (March 2016)

	% of Total Reported
	Capacity
Anaerobic Digestion	3.5
Biofuel	13.6
Biogas	1.5
Gasification	1.2
Incineration (energy recovery)	40.2
Incineration (no energy recovery)	0.3
Integrated Facilities (IWMF)	1.9
Landfill	7.5
MBT	0.5
Recycling	18.7
Waste Processing	5.7
Others	5.5
Total	100.0

Biofuel 13.6%

# % Capacity by Facility Type, March 2016

A major retrofit has been announced for the material recovery facility in Sharjah, United Arab Emirates. This is due to become operational in early 2017.



Recycling 18.7% MSW accounted for just over 6.0 million tonnes of capacity in March 2016, equal to 42.2% of the total, and an average of 785 tonnes per day. The other major feedstock categories were organic materials, plant biomass and wood.



## Latest Monthly Projects by Feedstock Type (March 2016)

	Projects	Annual Capacity (tonnes)	Average Annual Capacity (tonnes)	Average Tonnes Per Day
Animal	4	191,546	47,886	150
Clinical	0	0	-	-
Construction/Demolition	2	997,294	498,647	1,558
e-Waste	0	0	-	-
Food	2	88,584	44,292	138
Gas	2	0	-	-
Glass	0	0	-	-
Hazardous	2	127,557	63,778	199
Heat	1	384,694	384,694	1,202
Industrial	3	422,128	140,709	440
Metals	0	0	-	-
MSW	24	6,028,059	251,169	785
Oil	0	0	-	-
Organic (general/unspecified)	9	1,443,554	160,395	501
Paper	0	0	-	-
Plant Biomass (non-waste)	1	748,324	748,324	2,339
Plant Biomass (waste)	4	1,294,465	323,616	1,011
Plastics	1	22,974	22,974	72
Radioactive	1	384,694	384,694	1,202
Rubber	0	0	-	-
Sewage/wastewater	4	145,307	36,327	114
Wood	11	2,002,190	182,017	569
Other	0	0	-	-
Total	71	14,281,368	206,976	647



become operational in early 2017.



# Reported Capacity by Feedstock, % of Total (March 2016)

	Capacity as % of Total
Animal	1.3
Clinical	-
Construction/Demolition	7.0
e-Waste	-
Food	0.6
Gas	-
Glass	-
Hazardous	0.9
Heat	2.7
Industrial	3.0
Metals	-
MSW	42.2
Oil	-
Organic (general/unspecified)	10.1
Paper	-
Plant Biomass (non-waste)	5.2
Plant Biomass (waste)	9.1
Plastics	0.2
Radioactive	2.7
Rubber	-
Sewage/wastewater	1.0
Wood	14.0
Other	-
Total	100.0

# % Capacity by Feedstock, March 2016



Municipal Solid Waste accounted for 42.2% of waste capacity in projects covered in the Business Finder database in March 2016.





# **Latest Power Generation**

In March 2016, estimated annual power generation amounted to 1,000 MW in total. 81.4% of this was from WtE incineration with most of the remainder coming from biofuel, worth 7.1% of the total.

Incineration amounted to 21 projects with total estimated generation of 814 MW, equal to 39 MW per plant. Biofuels amounted to six projects, with total estimated output of 71 MW, or 24 MW per plant.

# Estimated Power Generation of Projects Listed by Facility Type (March 2016)

	Projects	With Reported MW Generation	Estimated Annual MW Generation	Average MW Generation
Anaerobic Digestion	11	11	33	3
Biofuel	6	3	71	24
Biogas	4	4	16	4
Gasification	1	1	6	6
Incineration (energy recovery)	21	21	814	39
Incineration (no energy recovery)	1	0	0	-
Integrated Facilities (IWMF)	1	1	19	19
Landfill	4	1	6	6
MBT	1	0	0	-
Recycling	11	0	0	-
Waste Processing	6	0	0	-
Others	4	2	35	18
Total	71	44	1,000	23



WtE incineration, whether standalone or as part of an integrated facility, continued to dominate the reported power generation of projects in March 2016.

# Latest Estimated Power Generation by Facility Type, % of Total (March 2016)

	% of Total Projects
Anaerobic Digestion	3.3
Biofuel	7.1
Biogas	1.6
Gasification	0.6
Incineration (energy recovery)	81.4
Incineration (no energy recovery)	-
Integrated Facilities (IWMF)	1.9
Landfill	0.6
MBT	-
Recycling	-
Waste Processing	-
Others	3.5
Total	100.0





% MW Generation by Facility Type, Mar 2016

In March 2016, 81.4% of proposed power generation was through incineration, principally using wood, plant biomass, other organic materials and MSW as feedstocks.



# Latest Estimated Power Generation of Projects Listed by Feedstock Type (March 2016)

		With Reported MW	Estimated MW	Average MW
	Projects	Generation	Generation	Generation
Animal	4	4	11	3
Clinical	0	0	0	-
Construction/Demolition	2	0	0	-
e-Waste	0	0	0	-
Food	2	2	5	2
Gas	2	2	40	20
Glass	0	0	0	-
Hazardous	2	0	0	-
Heat	1	1	2	2
Industrial	3	1	6	6
Metals	0	0	0	-
MSW	24	8	211	26
Oil	0	0	0	-
Organic (general/unspecified)	9	8	72	9
Paper	0	0	0	-
Plant Biomass (non-waste)	1	1	6	6
Plant Biomass (waste)	4	4	124	31
Plastics	1	0	0	-
Radioactive	1	0	0	-
Rubber	0	0	0	-
Sewage/wastewater	4	2	6	3
Wood	11	11	518	47
Other	0	0	0	-
Total	71	44	1,000	23

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# Latest Estimated Power Generation by Feedstock Type, % of Total (March 2016)

	MW Generation as % of Total
Animal	1.1
Clinical	-
Construction/Demolition	-
e-Waste	-
Food	0.5
Gas	4.0
Glass	-
Hazardous	-
Heat	0.1
Industrial	0.6
Metals	-
MSW	21.0
Oil	-
Organic (general/unspecified)	7.2
Paper	-
Plant Biomass (non-waste)	0.6
Plant Biomass (waste)	12.4
Plastics	-
Radioactive	-
Rubber	-
Sewage/wastewater	0.6
Wood	51.8
Other	-
Total	100.0

Biomass and wood-based materials whether waste products or grown specially - are increasingly being used as a fuel for providing domestic power for heat and light.





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# **Latest Country Focus**

The USA was the leading country in March 2016 in terms of new projects reported, with 14 in total. This was followed by the UK with seven and Canada with five.

In terms of estimated value, the USA was the leader, with US\$879 million or 24.7% of the total. This was followed by Canada and the UK with US\$286 million and US\$258 million respectively.



Significant waste investments occur not only in developed markets, but across the developing world.

## Top Ten Countries (number of projects listed), March 2016

	Projects	% of Total
USA	14	19.7
UK	7	9.9
Canada	5	7.0
Sweden	4	5.6
Croatia	3	4.2
Australia	3	4.2
Norway	2	2.8
Japan	2	2.8
Germany	2	2.8
Denmark	2	2.8
Subtotal	44	62.0
Others	27	38.0
Total	71	100.0

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# Top Ten Countries (estimated value of projects listed), March 2016

	US\$ millions	% of Total
USA	879	24.7
Canada	286	8.0
UK	258	7.3
Kuwait	235	6.6
Sweden	171	4.8
Russia	151	4.3
Denmark	150	4.2
Croatia	122	3.4
France	119	3.3
Estonia	111	3.1
Subtotal	2,482	69.8
Others	1,072	30.2
Total	3,554	100.0



### Leading Countries, Number of Projects, March 2016



### Leading Countries, Value of Projects, March 2016



# **Operational Date Focus**

Of the 71 projects reported on in March 2016, nine are already in operation, valued at US\$400 million. A further 16 are estimated to become operational in 2016, worth a total of US\$592 million. For 2017, 16 projects are expected to become operational, worth US\$629 million.

# Projects by Estimated Operational Date (March 2016)

	Number of	
	Projects	Value (US\$ millions)
Already operational	9	400
Q4-2015	0	n/a
Q1-2016	0	n/a
Q2-2016	3	91
Q3-2016	0	n/a
Q4-2016	13	501
Q1-2017	2	20
Q2-2017	3	147
Q3-2017	3	64
Q4-2017	8	399
Q1-2018	4	80
Q2-2018	2	43
Q3-2018	8	512
Q4-2018	8	390
2019+	8	907

Once work starts, the average project takes around 18 months to become operational. Most, however have on-going operational requirements for much longer.

### Estimated Value of Investments by Operational Date, 2016-2019 (US\$ millions)







# Latest Monthly Project Listings, March 2016

Country	Summary	Link
Australia	Construction of a C&D recycling plant.	http://www.acucomm.net/business-finder/4032
Australia	Construction of a 1.5 MW waste heat-to-power plant.	http://www.acucomm.net/business-finder/4047
Australia	Construction of an AD plant.	http://www.acucomm.net/business-finder/4054
Austria	Development of a biomass heating plant.	http://www.acucomm.net/business-finder/4090
Azerbaijan	Development of transfer stations.	http://www.acucomm.net/business-finder/4076
Brazil	Construction of a 270 MW biomass facility.	http://www.acucomm.net/business-finder/4057
Bulgaria	Rehabilitation of municipal landfill.	http://www.acucomm.net/business-finder/4075
Canada	Material recovery facility upgraded with optical sorters.	http://www.acucomm.net/business-finder/4026
Canada	Proposed development of a C\$180 million waste-to-energy plant.	http://www.acucomm.net/business-finder/4049
Canada	Development of a biorefinery.	http://www.acucomm.net/business-finder/4066
Canada	Expansion of a landfill.	http://www.acucomm.net/business-finder/4071
Canada	Development of a waste-to-diesel refinery.	http://www.acucomm.net/business-finder/4083
China	Construction of a hazardous waste treatment facility.	http://www.acucomm.net/business-finder/4053
China	Phase I of the construction of a 120 MW biomass plant.	http://www.acucomm.net/business-finder/4069
Croatia	Construction of two 5 MW biomass plants.	http://www.acucomm.net/business-finder/4030
Croatia	Construction of a 2.4 MW AD plant.	http://www.acucomm.net/business-finder/4037
Croatia	Construction of a 1 MW AD plant.	http://www.acucomm.net/business-finder/4039
Denmark	Development of a biomass-fired district heating network.	http://www.acucomm.net/business-finder/4061
Denmark	Development of a waste collection system and waste terminal.	http://www.acucomm.net/business-finder/4086
Dominica	Development of two biomass projects.	http://www.acucomm.net/business-finder/4045
Estonia	Establishment of a nuclear waste repository.	http://www.acucomm.net/business-finder/4042
Finland	Construction of a 120 MWth biomass dust combustion plant.	http://www.acucomm.net/business-finder/4088
Finland	Opening of a 3 MWth biomass plant.	http://www.acucomm.net/business-finder/4091
France	Construction of a 33,800 tpa AD plant.	http://www.acucomm.net/business-finder/4024
France	Construction of a 26.5 MWth biomass plant.	http://www.acucomm.net/business-finder/4064
Germany	Expansion of a mechanical biological treatment facility.	http://www.acucomm.net/business-finder/4060
Germany	Opening of a recycling centre.	http://www.acucomm.net/business-finder/4065

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# Latest Monthly Project Listings, March 2016 (cont.)

Country	Summary	Link
India	Construction of three C&D waste recycling plants.	http://www.acucomm.net/business-finder/4085
Jamaica	Construction of a 10 mgpy biofuel plant.	http://www.acucomm.net/business-finder/4051
Japan	Construction of a carbon fibre recycling demonstration plant.	http://www.acucomm.net/business-finder/4033
Japan	Construction of a wood-fuelled biomass plant.	http://www.acucomm.net/business-finder/4082
Kuwait	Installation of two biofuel units.	http://www.acucomm.net/business-finder/4021
Lithuania	Development of mechanical and biological waste treatment facilities.	http://www.acucomm.net/business-finder/4062
Malawi	Construction of a waste management facility.	http://www.acucomm.net/business-finder/4044
Netherlands	Construction of a 2.5 MW AD plant.	http://www.acucomm.net/business-finder/4020
Netherlands	Construction of a sludge drying facility.	http://www.acucomm.net/business-finder/4023
New Zealand	Upgrading of biogas units at two wastewater treatment plants.	http://www.acucomm.net/business-finder/4040
Norway	Installation of a biogas plant at paper mill.	http://www.acucomm.net/business-finder/4079
Norway	Development of a biomass plant to supply 10 GWh of steam.	http://www.acucomm.net/business-finder/4084
Poland	Construction of an 18,000 tpa dry AD plant.	http://www.acucomm.net/business-finder/4067
Russia	Construction of a 1,000 tpd WtE facility.	http://www.acucomm.net/business-finder/4034
Spain	Installation of an effluent treatment line with anaerobic biogas production.	http://www.acucomm.net/business-finder/4028
Spain	Installation of a new treatment line.	http://www.acucomm.net/business-finder/4070
Sudan	Construction of a hazardous waste incinerator.	http://www.acucomm.net/business-finder/4080
Sweden	Development of a modular WoodRoll plant.	http://www.acucomm.net/business-finder/4031
Sweden	Installation of a new biomass boiler.	http://www.acucomm.net/business-finder/4055
Sweden	Modernisation of a pulp mill to increase renewable energy output.	http://www.acucomm.net/business-finder/4059
Sweden	Installation of a biomass-fuelled boiler plant.	http://www.acucomm.net/business-finder/4074
UK	Development of a waste-to-liquids project.	http://www.acucomm.net/business-finder/4027
UK	Construction of a 19.8 MW biomass plant.	http://www.acucomm.net/business-finder/4038
UK	Construction of a 30,000 tpa AD plant.	http://www.acucomm.net/business-finder/4048
UK	Construction of a 30,000 tpa AD plant.	http://www.acucomm.net/business-finder/4050
UK	Construction of a 1 MW AD plant.	http://www.acucomm.net/business-finder/4072
UK	Construction of a 0.5 MW AD plant.	http://www.acucomm.net/business-finder/4073

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Country	Summary	Link
UK	MRF upgrade.	http://www.acucomm.net/business-finder/4077
United Arab Emirates	Retrofitting of a material recovery facility.	http://www.acucomm.net/business-finder/4058
USA	Development of a facility converting MSW into fuel pellets.	http://www.acucomm.net/business-finder/4022
USA	Upgrading of a sewage plant to produce fertiliser and electricity.	http://www.acucomm.net/business-finder/4025
USA	Development of a plastics-to-oil products facility.	http://www.acucomm.net/business-finder/4029
USA	Upgrading of a baghouse.	http://www.acucomm.net/business-finder/4035
USA	Upgrading of a waste-to-energy facility.	http://www.acucomm.net/business-finder/4036
USA	Proposed landfill gas-to-energy project.	http://www.acucomm.net/business-finder/4041
USA	Expansion of a landfill site.	http://www.acucomm.net/business-finder/4043
USA	Proposed construction of a waste-to-energy plant.	http://www.acucomm.net/business-finder/4052
USA	Development of a biofuel plant using duckweed.	http://www.acucomm.net/business-finder/4063
USA	Development of a Waste Mall incorporating various facilities.	http://www.acucomm.net/business-finder/4068
USA	Single-stream recycling system installed at MRF.	http://www.acucomm.net/business-finder/4078
USA	Development of a facility to recover metals from incinerator ash.	http://www.acucomm.net/business-finder/4081
USA	Development of an animal waste biogas plant.	http://www.acucomm.net/business-finder/4087
USA	Construction of a methanol plant.	http://www.acucomm.net/business-finder/4089
Zimbabwe	Development of a US\$68 million waste-to-energy plant.	http://www.acucomm.net/business-finder/4046



# Top Five Projects in March 2016, by Estimated Value (US\$ millions)

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- 2 Canada
- 3 USA
- 4 USA
- 5 **USA**

235 Installation of two biofuel units.

- 160 Proposed development of a C\$180 million waste-to-energy plant.
- 159 Construction of a methanol plant.
- 151 Proposed construction of a waste-to-energy plant.
- 151 Upgrading of a waste-to-energy facility.

# Top Five Projects in March 2016, by Reported Waste Capacity (tonnes)

IUSA993,368 Upgrading of a baghouse.India821,250 Construction of three C&D waste recycling plants.United Arab Emirates500,000 Retrofitting of a material recovery facility.China500,000 Phase I of the construction of a 120 MW biomass plant.Russia365,000 Construction of a 1,000 tpd WtE facility.



# Top Five Projects in March 2016, by Reported Power Generation (MW)

- 1 Brazil
- 2 Finland
- 3 USA
- 4 China
- 5 **USA**

- **270** Construction of a 270 MW biomass facility.
- 120 Construction of a 120 MWth biomass dust combustion plant.
- 80 Upgrading of a baghouse.
- 60 Phase I of the construction of a 120 MW biomass plant.
- 40 Upgrading of a waste-to-energy facility.



Click the flag for more information on each project



- www.acucomm.net