



AD/Biogas New Investment Update

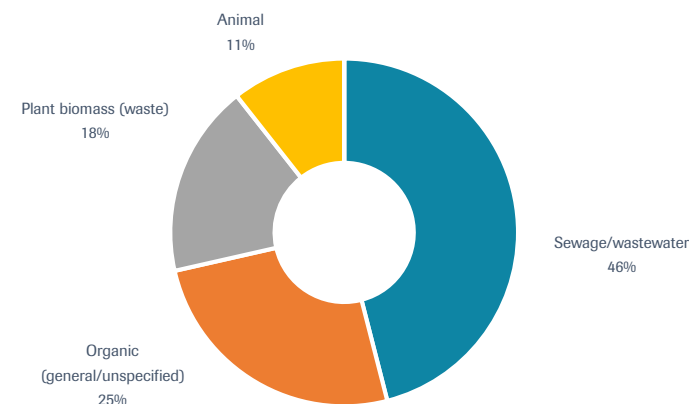
AcuComm reported on 11 new anaerobic digestion/biogas or landfill gas projects in September 2018.

These have a combined value of US\$123 million. Estimated annual feedstock tonnage is 335,542 tonnes, and power output is 19 MW, equal to an average of 95 tonnes per day and 2 MW per project.

Sewage/wastewater was the leading feedstock type for projects reported this month, accounting for US\$56 million, equal to 46% of the total.

The USA was the leading country in September 2018, accounting for one projects with a total value of US\$28 million.

Project Values by Feedstock Type (September 2018)



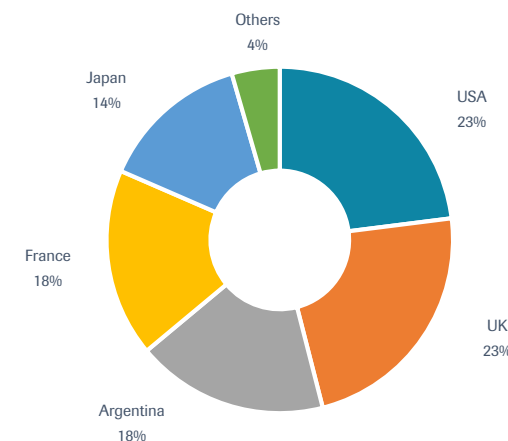
Source: AcuComm database, 30th September 2018

New AD/Biogas Projects Reported in September 2018

Project Description	Principal Waste Type	Location
Construction of a biogas plant at a sewage treatment works.	Sewage/wastewater	Bournemouth, Dorset, UK
Construction of a biogas treatment system.	Sewage/wastewater	Englewood, CO, USA
Construction of an AD plant utilising organic fraction of MSW as feedstock.	Organic (general/unspecified)	Machida, Tokyo Prefecture, Japan
Construction of an AD plant utilising organic fraction of MSW as feedstock.	Organic (general/unspecified)	Kagoshima, Kagoshima Prefecture, Japan
Construction of an AD plant utilising organic fraction of MSW as feedstock.	Organic (general/unspecified)	Miyazu, Kyoto Prefecture, Japan
Commissioning of a biogas feed-in facility.	Organic (general/unspecified)	Dümmer, Parum, Germany
Construction of a biogas plant.	Animal	Kampen, Kop van Overijssel, Netherlands
Construction of an AD plant to be fed with manure and slurry.	Animal	Vire-Normandie, Calvados, France
Construction of a 2.4 MW biogas plant.	Plant biomass (waste)	Pergamino, Argentina
Construction of a 2 MW biogas plant.	Plant biomass (waste)	Venado Tuerto, Argentina
Construction of a 72 tpd AD plant.	Organic (general/unspecified)	Limoges, Haute-Vienne, France

Source: AcuComm database, 30th September 2018. Click the project description for more information on each project.

Leading Countries by Value (September 2018)



Source: AcuComm database, 30th September 2018



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This brings the total for the twelve month period (ended September 2018) to 169 projects, worth US\$3,609 million or US\$21 million each on average.

Total feedstock capacity for these projects is 9,368 million tonnes, equal to 55,431 tonnes on average and 173 tonnes per day per project.

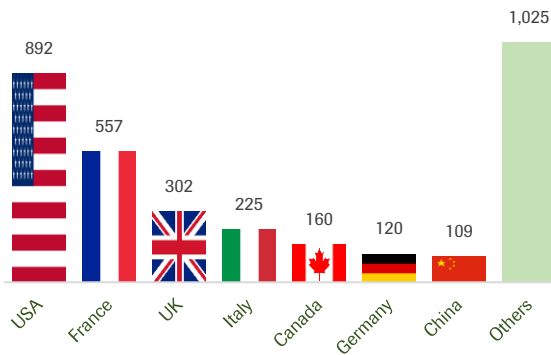
Total power generation is 581 MW, equal to 3 MW per project.

All AD/Biogas/Landfill Gas Projects Reported by Feedstock Type (October 2017 to September 2018)

	Projects	Value (US\$m)	Average Value (US\$m)	Capacity (tonnes)	Average Capacity (tonnes)	TPD	Power (MW)	Average Power (MW)
Animal	40	559	14	3,970,977	99,274	310	117	3
Food	17	280	16	881,937	51,879	162	38	2
MSW	2	51	25	157,142	78,571	246	3	1
Organic (general/unspecified)	34	592	17	1,952,423	57,424	179	110	3
Plant biomass (waste)	22	222	10	914,645	41,575	130	64	3
Plant biomass (non-waste)	4	39	10	189,740	47,435	148	10	2
Sewage/wastewater	37	1,605	43	1,301,051	35,164	110	126	3
Wood	-	-	-	-	-	-	-	-
Landfill Gas	13	260	20	n/a	n/a	n/a	114	9
Total	169	3,609	21	9,367,916	55,431	173	581	3

Source: AcuComm database, 30th September 2018. See www.acucomm.net for more details

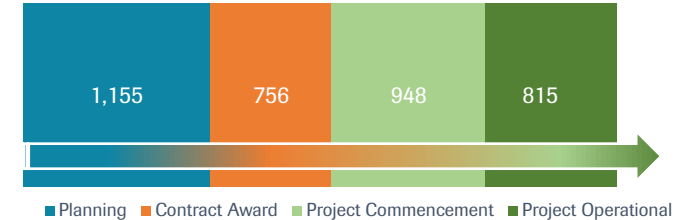
Leading Countries for AD/Biogas Investment (US\$m)



Source: AcuComm database, 30th September 2018. Opportunities exist across the world. In the last twelve months, the USA has accounted for US\$892 million or 26% of the total. The European market accounts for US\$1,520 million or 41%. Leading European markets are Denmark, France, Germany, France, the Netherlands and the UK.

Investments worth US\$815 million (22%) are operational, while US\$948 million (26%) are under construction. The largest proportion are in various stages of planning/contract award, at US\$1,912 million or 52% of the total.

Recent Project Values by Operational Stage (US\$m)



The heatmap to the right displays the locations of all the AD/Biogas projects currently held in the AcuComm database since 2012, where a location is known. The darker the colour the greater the overall level of investment.