

REFERENCES

1. Plants currently under construction

Bredbury Parkway (UK)	Start-up 2 nd half 2011
Input:	Pre-treated Municipal Solid Waste (< 80 mm)
Capacity:	86.000 tons/year
Delivery:	Engineering services , BTA Hydromechanical Pre-treatment, SCADA PLC, commissioning and start-up supervision
Burgos (Spain)	Start-up 2 nd half 2011
Input:	Pre-treated Municipal Solid Waste (< 90 mm)
Capacity:	25.000 tons/year
Delivery:	Turnkey refurbishment of methanisation plant incl. replacement of the existing pre-treatment. Implementation of BTA Control System
Maresme (Spain)	Start-up 1 st half 2011
Input:	Pre-treated Municipal Solid Waste
Capacity:	35.000 tons/year
Delivery:	Engineering, BTA Hydromechanical Pre-treatment* , heat exchanger and BTA Control System
Suldouro (Portugal)	Start-up end of 2010
Input:	Municipal Solid Waste
Capacity:	43.000 tons/year
Delivery:	Engineering, BTA Hydromechanical Pre-treatment, gas mixing system, design and key components, composting and wastewater treatment, BTA Control System, supervision of plant assembly and start-up
Reliance Street (UK)	Start-up 4 th quarter 2010
Input:	Pre-treated Municipal Solid Waste (< 40 mm)
Capacity:	63.250 tons/year
Delivery:	Engineering services , BTA Hydromechanical Pre-treatment, SCADA PLC, commissioning and start-up supervision
Itzig (Luxemburg)	Start-up 4 th quarter 2010
Input:	Biowaste, Kitchen Waste,
Capacity:	15.000 tons/year
Delivery::	Engineering; waste reception and mechanical / hydromechanical pre-treatment unit (on turnkey basis)

Valorlis (Portugal)	Start-up Summer 2010
Input:	Municipal Solid Waste
Capacity:	50.000 tons/year
Delivery:	Engineering, BTA Hydromechanical Pre-treatment, gas mixing system, design and key components, composting and wastewater treatment, BTA Control System, supervision of plant assembly and start-up
Castelleone (Italy)	Start-up beginning 2010
Input:	Biowaste, commercial waste, maize silage, pig and cow manure
Capacity:	100.000 tons/year
Delivery:	Engineering services, BTA Hydromechanical Pre-treatment*, BTA Process Control System, start-up assistance
Granollers (Spain)	Start-up 2 nd half 2009
Input:	Biowaste, Municipal Solid Waste
Capacity:	45.000 tons/year
Delivery:	Engineering services, BTA Hydromechanical Pre-treatment* and construction/start-up assistance

* in co-operation with our licensee Biotec Sistemi S.r.l.

2. Plants designed according to the BTA®-Process

The following plants have been designed according to the overall BTA®-Process incl. digestion. BTA provided general engineering services, key components and construction / start-up assistance:

Mülheim (Germany)	Start-up 2003
Input:	Biowaste, commercial waste
Capacity:	22.000 tons/year
Ypres (Belgium)	Start-up 2003
Input:	Biowaste, commercial waste
Capacity:	50.000 tons/year
Ko-Sung (Korea)	Start-up 2003
Input:	Biowaste, commercial waste
Capacity:	3.000 tons/year
Toronto (Canada)	Start-up 2002
Input:	Biowaste, commercial waste
Capacity:	25.000 tons/year

Villacidro (Italy)	Start-up 2002
Input:	Municipal Solid Waste incl. sewage sludge
Capacity:	45.000 tons/year
Mertingen (Germany)	Start-up 2001
Input:	Commercial waste
Capacity:	12.000 tons/year
Newmarket (Canada)	Start-up 2000
Input:	Biowaste, commercial waste and organic sludge
Capacity:	150.000 tons/year
Wadern-Lockweiler (Germany)	Start-up 1998
Input:	Biowaste, commercial waste
Capacity:	20.000 tons/year
Kirchstockach (Germany)	Start-up 1997
Input:	Biowaste
Capacity:	20.000 tons/year
Erkheim (Germany)	Start-up 1997
Input:	Biowaste, commercial waste
Capacity:	11.500 tons/year
Karlsruhe (Germany)	Start-up 1996
Input:	Biowaste
Capacity:	8.000 tons/year
Dietrichsdorf (Germany)	Start-up 1995
Input:	Biowaste, commercial waste, food waste
Capacity:	17.000 tons/year
Helsingør (Denmark)	Start-up 1991
Input:	Biowaste
Capacity:	20.000 tons/year

3. Plants provided with BTA Hydromechanical Pre-treatment or parts thereof

For the following plants BTA provided general engineering services, key components and construction/start-up assistance, mainly for the BTA Hydromechanical Pre-treatment:

Leoben (Austria)	Start-up 2009
Input:	Biowaste, kitchen waste, commercial waste
Capacity:	18.000 tons/year
Barcelona / Ecoparc I (Spain)	Start-up 2009
Input:	Biowaste, Municipal Solid Waste
Capacity:	50.000 tons/year Refurbishment of existing plant including replacement of existing pre-treatment and gas mixing system in one of the digesters
Komoro (Japan)	Start-up 2005
Input:	Food waste
Capacity:	8.000 tons/year
Herrieden (Germany)	Start-up 2003
Input:	Biowaste, commercial waste
Capacity:	13.000 tons/year
Parramatta (Australia)	Start-up 2003
Input:	Commercial waste, organic sludges
Capacity:	35.000 tons/year
Nara City (Japan)	Start-up 2003
Input:	Food waste
Capacity:	1.500 tons/year
Verona (Italy)	Start-up 2002
Input:	Municipal Solid Waste
Capacity:	70.000 tons/year
Pulawy (Poland)	Start-up 2001
Input:	Municipal Solid Waste
Capacity:	22.000 tons/year
Kushima City (Japan)	Start-up 2001
Input:	Commercial waste
Capacity:	about 1.000 tons/year
Tochigi (Japan)	Operating time 1997-1998 Pilot plant

Münster (Germany)	Start-up 1997
Input:	Biowaste
Capacity:	20.000 tons/year
Wels (Austria)	Start-up 1997
Input:	Commercial waste, biowaste
Capacity:	15.000 tons/year
Schwabach (Germany)	Start-up 1996
Input:	Biowaste
Capacity:	12.000 tons/year
Baden-Baden (Germany)	Start-up 1993
Input:	Biowaste
Capacity:	5.000 tons/year
Kaufbeuren (Germany)	Start-up 1992
Input:	Biowaste
Capacity:	2.500 tons/year

4. Agricultural Biogas Plants

The following agricultural plants have been designed according to BTA technology. BTA provided general engineering services and key components. The plants marked with *) where built by BTA on a turn-key basis:

Montanera (Italy)	Start-up 2009
Input:	Slurry, maize silage, cow dung
Capacity:	29.000 tons/year
Chiusa Pesio (Italy)	Start-up 2008
Input:	Cow manure and energy crops
Capacity:	625 kW
Stockerau (Austria)*	Start-up 2007
Input:	Maize silage
Capacity:	500 kW
Raab (Austria)*	Start-up 2007
Input:	Maize silage
Capacity:	500 kW
Seckach (Germany)*	Start-up 2006
Input:	Maize silage
Capacity:	500 kW

Parndorf (Austria)*	Start-up 2006
Input:	Maize silage
Capacity:	500 kW
Echsenbach (Austria)*	Start-up 2005
Input:	Maize silage
Capacity:	500 kW
Karlshof/Munich City (Germany)*	Start-up 2000
Input:	Manure and maize silage
Capacity:	130 kW

5. Pilot Plant Garching / Germany

1986-1995 Construction and operation of pilot plant Garching
Continuous tests and research project to optimize the BTA Process and prove its suitability for the organic fraction of different waste types from municipal, commercial and agricultural sources.

For further information please visit our Website: www.bta-international.de