

## 1. Plants currently under construction

<b>Lohja (Finland)</b>	<b>Start-up</b>	2nd half 2020
	<b>Type of Waste</b>	Biowaste, packaged organic commercial waste, food waste, forrest industry sludge, grease sludge
	<b>Capacity</b>	60.000 tons/year
	<b>Delivery</b>	Design, Installation and Commissioning of the Biogas Plant Lohja (M&E) including reception and pre-treatment lines for sludges, BTA® Hydromechanical Pre-treatment for biowaste and food waste, wet anaerobic digestion step, biogas storage and treatment, sanitation, dewatering and internal process water management
<b>Gello di Pontedera (Italy)</b>	<b>Start-up</b>	2nd half 2020
	<b>Type of Waste</b>	Biowaste (FORSU)
	<b>Capacity</b>	44.000 tons/year
	<b>Delivery</b>	Process engineering BTA® Process, construction supervision, planning and support of the commissioning and start-up

## 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:

<b>Topinoja (Finland)</b>	<b>Start-up</b>	2020
	<b>Type of Waste</b>	Sewage sludge, biowaste, commercial waste
	<b>Capacity</b>	35.000 tons/year
<b>Varenes (Canada)</b>	<b>Start-up</b>	2018
	<b>Type of Waste</b>	Source Separated Organics, commercial waste, grass ciplings, septage
	<b>Capacity</b>	51.000 tons/year

Northern Malta (Malta)	<b>Start-up</b>	2016
	<b>Type of Waste</b>	Municipal Solid Waste, bulky waste, manure and poultry dung
	<b>Capacity</b>	up to 162.000 tons/year
Zell am See (Austria)	<b>Start-up</b>	2013
	<b>Type of Waste</b>	Biowaste, food waste, commercial waste, sewage sludge
	<b>Capacity</b>	18.000 tons/year
Gijón (Spain)	<b>Start-up</b>	2013
	<b>Type of Waste</b>	Biowaste (FORM) and/or sewage sludge
	<b>Capacity</b>	25.000 tons/year
Toronto Disco Road (Canada)	<b>Start-up</b>	2013
	<b>Type of Waste</b>	Biowaste, food waste, commercial waste, sewage sludge
	<b>Capacity</b>	75.000 tons/year
Maresme (Spain)	<b>Start-up</b>	2013
	<b>Type of Waste</b>	Pre-treated Municipal Solid Waste
	<b>Capacity</b>	190.000 tons/year total input; 35.000 tons/year in wet pre-treatment
Toronto Dufferin (Canada)	<b>Start-up</b>	2012
	<b>Type of Waste</b>	Source Separated Organics (SSO)
	<b>Comment</b>	Delivery and installation of one complete additional digester (5.300 m <sup>3</sup> ) incl. extension of the existing plant control unit (works executed in the frame of an upgrading of the existing Toronto Dufferin Organics Processing Facility).

<b>Bredbury Parkway (UK)</b>	<b>Start-up</b>	2011
	<b>Type of Waste</b>	Municipal Solid Waste
	<b>Capacity</b>	110.000 tons/year total input; 86.000 tons/year in wet pre-treatment
<b>Suldouro (Portugal)</b>	<b>Start-up</b>	2011
	<b>Type of Waste</b>	Municipal Solid Waste
	<b>Capacity</b>	43.000 tons/year total input; 27.000 tons/year in wet pre-treatment
<b>Reliance Street (UK)</b>	<b>Start-up</b>	2010
	<b>Type of Waste</b>	Municipal Solid Waste
	<b>Capacity</b>	100.000 tons/year total input; 63.000 tons/year in wet pre-treatment
<b>Valorlis (Portugal)</b>	<b>Start-up</b>	2010
	<b>Type of Waste</b>	Municipal Solid Waste
	<b>Capacity</b>	50.000 tons/year total input; 30.000 tons/year in wet pre-treatment
<b>Castelleone (Italy)</b>	<b>Start-up</b>	2010
	<b>Type of Waste</b>	Biowaste, commercial waste, maize silage, pig and cow manure
	<b>Capacity</b>	100.000 tons/year total input; 26.000 tons/year in wet pre-treatment
<b>Granollers (Spain)</b>	<b>Start-up</b>	2010
	<b>Type of Waste</b>	Biowaste (FORM)
	<b>Capacity</b>	45.000 tons/year
<b>Mülheim (Germany)</b>	<b>Start-up</b>	2003
	<b>Type of Waste</b>	Biowaste, commercial waste
	<b>Capacity</b>	22.000 tons/year

Ieper (Belgium)	Start-up	2003
	Type of Waste	Biowaste, commercial waste
	Capacity	50.000 tons/year
Ko-Sung (Korea)	Start-up	2003
	Type of Waste	Biowaste, commercial waste
	Capacity	3.000 tons/year
Toronto (Canada)	Start-up	2002
	Type of Waste	Biowaste, commercial waste
	Capacity	25.000 tons/year
Villacidro (Italy)	Start-up	2002
	Type of Waste	Municipal Solid Waste incl. sewage sludge
	Capacity	45.000 tons/year
Mertingen (Germany)	Start-up	2001
	Type of Waste	Commercial waste
	Capacity	12.000 tons/year
Newmarket (Canada)	Start-up	2000
	Type of Waste	Biowaste, commercial waste and organic sludge
	Capacity	150.000 tons/year
Wadern-Lockweiler (Germany)	Start-up	1998
	Type of Waste	Biowaste, commercial waste
	Capacity	20.000 tons/year
Kirchstockach (Germany)	Start-up	1997
	Type of Waste	Biowaste
	Capacity	20.000 tons/year

Erkheim (Germany)	Start-up	1997
	Type of Waste	Biowaste, commercial waste
	Capacity	11.500 tons/year
Karlsruhe (Germany)	Start-up	1996
	Type of Waste	Biowaste
	Capacity	8.000 tons/year
Dietrichsdorf (Germany)	Start-up	1995
	Type of Waste	Biowaste, commercial waste, food waste
	Capacity	17.000 tons/year
Helsingør (Denmark)	Start-up	1991
	Type of Waste	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 pre-treatment:

Glasgow (Scotland)	Start-up	2017
	Type of Waste	Pre-treated Municipal Solid Waste (< 80 mm)
	Capacity	90.000 tons/year input wet pre-treatment
Burgos (Spain)	Start-up	2011
	Type of Waste	Pre-treated Municipal Solid Waste (< 90 mm)
	Capacity	25.000 tons/year input wet pre-treatment
	Comment	Refurbishment of existing Methanization Plant from Ecoparque Burgos including replacement of existing wet pre-treatment and supply of BTA Control System for the complete methanization line

Itzig (Luxembourg)	Start-up	2011
	Type of Waste	Biowaste, food waste
	Capacity	15.000 tons/year
Leoben (Austria)	Start-up	2009
	Type of Waste	Biowaste, kitchen waste, commercial waste
	Capacity	18.000 tons/year
Barcelona / Ecoparc I (Spain)	Start-up	2009
	Type of Waste	Biowaste, Municipal Solid Waste
	Capacity	245.000 tons/year total input; 50.000 tons/year in wet pre-treatment
	Comment	Refurbishment of existing plant including replacement of existing pre-treatment and gas mixing system in one of the digesters
Komoro (Japan)	Start-up	2005
	Type of Waste	Food waste
	Capacity	8.000 tons/year
Herrieden (Germany)	Start-up	2003
	Type of Waste	Biowaste, commercial waste
	Capacity	13.000 tons/year in wet pre-treatment
Parramatta (Australia)	Start-up	2003
	Type of Waste	Commercial waste, organic sludges
	Capacity	35.000 tons/year
Nara City (Japan)	Start-up	2003
	Type of Waste	Food waste
	Capacity	1.500 tons/year

<b>Verona (Italy)</b>	<b>Start-up</b>	2002
	<b>Type of Waste</b>	Municipal Solid Waste
	<b>Capacity</b>	150.000 tons/year total input; 70.000 tons/year in wet pre-treatment
<b>Pulawy (Poland)</b>	<b>Start-up</b>	2001
	<b>Type of Waste</b>	Municipal Solid Waste
	<b>Capacity</b>	22.000 tons/year in wet pre-treatment
<b>Kushima City (Japan)</b>	<b>Start-up</b>	2001
	<b>Type of Waste</b>	Commercial waste
	<b>Capacity</b>	about 1.000 tons/year
<b>Münster (Germany)</b>	<b>Start-up</b>	1997
	<b>Type of Waste</b>	Biowaste
	<b>Capacity</b>	20.000 tons/year
<b>Wels (Austria)</b>	<b>Start-up</b>	1997
	<b>Type of Waste</b>	Commercial waste, biowaste
	<b>Capacity</b>	15.000 tons/year
<b>Schwabach (Germany)</b>	<b>Start-up</b>	1996
	<b>Type of Waste</b>	Biowaste
	<b>Capacity</b>	12.000 tons/year
<b>Baden-Baden (Germany)</b>	<b>Start-up</b>	1993
	<b>Type of Waste</b>	Biowaste
	<b>Capacity</b>	5.000 tons/year
<b>Kaufbeuren (Germany)</b>	<b>Start-up</b>	1992
	<b>Type of Waste</b>	Biowaste
	<b>Capacity</b>	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 \*) were built by BTA on a turn-key basis:

<b>Montanera (Italy)</b>	<b>Start-up</b>	2009
	<b>Type of Waste</b>	Slurry, maize silage, cow dung
	<b>Capacity</b>	29.000 tons/year
<b>Chiusa Pesio (Italy)</b>	<b>Start-up</b>	2008
	<b>Type of Waste</b>	Cow manure and energy crops
	<b>Capacity</b>	625 kW
<b>Stockerau* (Austria)</b>	<b>Start-up</b>	2007
	<b>Type of Waste</b>	Maize silage
	<b>Capacity</b>	500 kW
<b>Raab* (Austria)</b>	<b>Start-up</b>	2007
	<b>Type of Waste</b>	Maize silage
	<b>Capacity</b>	500 kW
<b>Seckach* (Germany)</b>	<b>Start-up</b>	2006
	<b>Type of Waste</b>	Maize silage
	<b>Capacity</b>	500 kW
<b>Parndorf* (Austria)</b>	<b>Start-up</b>	2006
	<b>Type of Waste</b>	Maize silage
	<b>Capacity</b>	500 kW
<b>Echsenbach * (Austria)</b>	<b>Start-up</b>	2005
	<b>Type of Waste</b>	Maize silage
	<b>Capacity</b>	500 kW



Karlshof / Stadt München* (Germany)	<b>Start-up</b>	2000
	<b>Type of Waste</b>	Manure and maize silage
	<b>Capacity</b>	130 kW

### 5. Pilot Plants

Tochigi (Japan)	<b>Start-up</b>	1997 - 1998
	<b>Delivery</b>	Pilot plant
Garching (Germany)	<b>Start-up</b>	1986 - 1995
	<b>Delivery</b>	Construction and operation of pilot plant Garching. Continuous tests and research project to optimize the BTA <sup>®</sup> Process and prove its suitability for the organic fraction of different waste types from municipal, commercial and agricultural sources.