



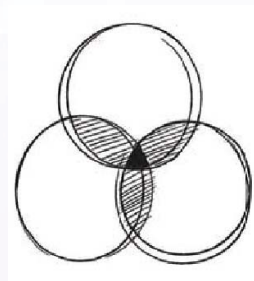
Technical  
Expertise



Our  
Approach



Our  
Technology



The right  
sinergy  
between  
waste, energy  
and environment



Our technologies  
**BIOGAS**  
**BIOMETHANE**  
**WASTE TO ENERGY**  
**WASTEWATER TREATMENT**



**WT ENERGY**



WT ENERGY focuses on developing, acquiring and promoting new technologies to convert solid waste into energy respecting and improving the environment.

The proposed solutions are developed with a synergy of know-how by reputed technology partners, engineering teams, experts in waste-to-energy and are protected by international patents.

WT ENERGY tasks and responsibility is to promote these technologies worldwide offering a global service up to turnkey plant.

We work on project basis, to achieve the best ratio between investment and energy production.



**WT ENERGY**

## THE SOLUTIONS

WT ENERGY Technology, supported by International patents and Know-How, is able to produce biofuels and renewable energy from waste.

WT ENERGY Solutions			
Feedstock	Process	Products	Markets
			
Municipal Solid Waste	Pretreatment: Sorting, Recycling, Treatment	Recyclables, Glass, Metal, Aluminum	Recycling Industries
			
Biomass: Manure, Agriculture, Slaughter- houses, Agro-Industrial Waste	Anaerobic Digestion: Biowaste, Biomass, Agro-Industrial Waste	Biomethane, Compost, Water	Biofuels for transportation & Households / Businesses, Agriculture
			
Medical and Hospital, Chemicals, Industrial	VLE Steam Boiler: Input Waste Flexibility Msw, Medical Waste, Chemicals, Tyres	Electrical and Thermic Energy	Electrical Companies and District Heating



## PROJECT REFERENCES

**37** implemented projects in waste treatment and energy recovery:

- **BIOGAS PLANTS**  
*thermo-electrical power plants and biomethane plants*
- **LANDFILL ENVIRONMENTAL AND LANDSCAPE RECOVERY**
- **LANDFILL ENLARGEMENT AND MANAGEMENT**
- **THERMOELECTRICAL POWER PLANTS**  
*fuelled by biomass/refuse derived fuel*
- **THERMOELECTRICAL POWER PLANTS**  
*fuelled by medical waste*



**WT ENERGY**

LOCATION	TECHNOLOGY	CONSTRUCTION YEAR	INPUT MATERIAL	BIOGAS PRODUCTION	ELECTRICAL POWER
Faenza – Italy	VLE Steam Boiler BOP - biomass	1992	Agro industrial	-	6.2 MW
Savignano – Italy	VLE Steam Boiler BOP	1997	Agro industrial	-	1 MW
Bologna – Italy	Landfill gas captation	1998	MSW	700 m3/h	1.2 MW
Faenza – Italy	VLE Steam Boiler BOP - biomass	1999	Agro industrial	-	6.3 MW
Forlì – Italy	VLE Steam Boiler (very low emission)	2001	Hospital and medical waste	-	2.6 MW
Ravenna – Italy	Anaerobic digestion	2004	Anaerobic sludge	1,000 m3/h	2.1 MW
Faenza – Italy	VLE Steam Boiler BOP - biomass	2004	Agro industrial	-	15 MW
Rimini – Italy	Anaerobic digestion	2004	Sediment sludge from sewage	500 m3/h	1 MW
Forlì – Italy	Anaerobic digestion	2005	Sediment sludge from sewage	500 m3/h	1 MW
Frosinone – Italy	Anaerobic digestion	2006	Distillery waste	550 m3/h	1.7 MW
Padova – Italy	Anaerobic digestion	2007	Distillery waste	300 m3/h	0.6 MW
Forlì – Italy	Double system of post combustion	2007	Hospital and medical waste	-	3.2 MW
Siena – Italy	Anaerobic digestion	2007	Distillery waste	270 m3/h	0.6 MW
Chieti – Italy	Anaerobic digestion	2007	Distillery waste	400 m3/h	0.8 MW
Firenze – Italy	Anaerobic digestion	2007	Distillery waste	310 m3/h	0.6 MW
Ravenna – Italy	Anaerobic digestion	2008	Distillery waste	1,100 m3/h	1.2 MW
Forlì – Italy	VLE Steam Boiler BOP - biomass	2008	MSW - (RDF)	-	13 MW
Rimini – Italy	Pipeline construction BOP	2008	MSW - (RDF)	-	13 MW
Rimini – Italy	Anaerobic digestion	2008	Sediment sludge from sewage	170 m3/h	0.5 MW
Modena – Italy	VLE Steam Boiler BOP - biomass	2009	MSW - (RDF)	-	18 MW
Mantova – Italy	Anaerobic digestion	2009	Corn silage and hydro bios	500 m3/h	1 MW
Faenza - Italy	VLE Steam Boiler (very low emission)	2010	Agroindustrial + RDF	-	13.7 MW
Faenza - Italy	VLE Steam Boiler (very low emission)	2010	Industrial waste	-	10 MW
Cremona - Italy	Anaerobic digestion	2010	Biomass, manure, vegetation water	500 m3/h	1 MW
Perugia - Italy	Anaerobic digestion	2010	Corn silage	500 m3/h	1 MW
Cades de Penedes - Spain	Anaerobic digestion	2011	Distillery waste	350 m3/h	0.6 MW
Parma - Italy	VLE Steam Boiler BOP	2011	RDF	-	21 MW
Siena - Italy	Anaerobic digestion	2011	Biomass, manure, vegetation water	500 m3/h	1 MW
Cremona – Italy	Anaerobic digestion	2011	Biomass and manure	500 m3/h	1 MW
Perugia – Italy	Anaerobic digestion	2012	Corn silage	500 m3/h	1 MW
Ancona – Italy	Anaerobic digestion	2012	Corn silage	500 m3/h	1 MW
Siena – Italy	Anaerobic digestion	2012	Agricultural waste	500 m3/h	1 MW
Ravenna – Italy	Anaerobic digestion	2012	Sludge from agricultural waste	500 m3/h	1 MW
Santiago – Chile	Anaerobic digestion	2013	Distillery waste	500 m3/h	1 MW
Ciudad Real – Spain	Anaerobic digestion	2013	Distillery waste	-	1 MW
Chieti – Italy	Anaerobic digestion	2013	Corn silage	-	1 MW
Bologna – Italy	Anaerobic digestion	2014	Corn silage	500 m3/h	1 MW
Brindisi – Italy	Anaerobic digestion	2014	Agricultural waste and manure	60 m3/h	0.1 MW
Lokoja – Nigeria	Anaerobic digestion	2014	Distillery waste	-	1 MW



## Latest Project For Bio-Methanisation Plant

## Project under development to upgrade an existing composting plant to biomethane

We are developing a project to treat the following materials:

- 50,000 tons/year of organic fraction of the municipal solid waste
- 7,500 tons/year of wastewater treatment sludge
- 9,000 tons/year of municipal green waste



The biogas is converted in biomethane (3,7 mln Nm<sup>3</sup>/year) through the upgrading unit and injected into the national gas grid. The digestate from the anaerobic digestion process is composted together with the municipal green waste to obtain 8,000 tons/year of quality compost. A wastewater treatment plant for the process water is included.



A good example of how to transform a composting plant in a financially attractive venture.

Construction of a “waste to bio-methane” plant converting 35,000 tons/year of the organic fraction of the municipal solid waste (MSW).

Biomethane and quality compost for agriculture/gardening will be produced by the latest anaerobic digestion technologies together with a composting facility. It is an environmental sustainable technology accepted by environmental organizations such as Greenpeace.

A combined plant (anaerobic digestion + composting) is the best and most accepted solution by the worldwide ecological WTE trend.

### EXPECTED FINANCIAL RESULTS

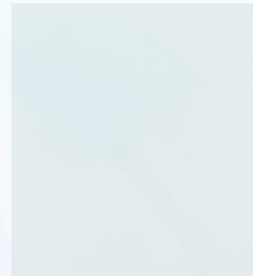
Capex (Total Investment)	10.4	Millions €
Equity	3.1	Millions €
Financing	7.3	Millions €
Average Annual Cash Flow (Ebitda)	5.0	Millions €
IRR Investment (Ebitda/Cash)	43	%
Payback Investment	2	years
IRR For Investors (Ebitda/Equity)	141	%
Useful Life	30	years



Our  
Partners



Our  
Headquarter



## What We Do

Leading Projects  
Marketing and Commercial Network  
Research  
Project Financing  
Feasibility Studies  
Engineering  
Supervision  
Training  
Procurement and Commissioning

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