

POWER GENERATION

NON-FOSSIL FUEL POWER GENERATION (BIOMASS – WASTE)

| YEAR | PROJECT | DESCRIPTION | CLIENT |
|-------------|---|---|---|
| 2016 - 2017 | Buenos Aires Villa 31 Integrated Plant : MBT and WTE | Feasibility study and Preliminary design, related to the development of the Construction and Operation of MBT and WTE facility . MSW: 18.000 ton/year. Electrical power capacity: approx. 0,7 MWe | AESA Aseo y Ecologia SA Buenos Aires - Argentina |
| 2016 | Buenos Aires Villa Soldati WTE Plant | Feasibility Study and Preliminary design, related to the development of the Construction and Operation of WTE Plant MSW: 930.000 ton/year. Electrical power capacity: approx. 115 MWe | AESA Aseo y Ecologia SA Buenos Aires - Argentina |
| 2015-2016 | Mkuze South Africa | Owner Engineering for Design & Construction of Biomass Energy Plant (sugar cane). | Building Energy SpA - Milano |
| 2015 | Mexico City Work in progress | Preliminary design, feasibility study - MSW: 930.000 ton/year. Electrical power capacity: approx. 115 MWe | International Operator |
| 2015 | Guelma WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Guelma Province | Wilaya de GUELMA - Algerie |
| 2015 | Ouargla WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Ouargla Province | Wilaya de OUARGLA - Algerie |
| 2015 | Oum El Bouaghi WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Oum El Bouaghi Province | Wilaya de OUM EL BOUAGHI - Algerie |
| 2015 | Ghardaia WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Ghardaia Province | Wilaya de GHARDAIA - Algerie |
| 2015 | Bordj Bou Arreridj WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Bordj Bou Arreridj Province | Wilaya de BORDJ BOU ARRERIDJ - Algerie |
| 2015 | Mostaganem WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Mostaganem Province | Wilaya de MOSTAGANEM - Algerie |
| 2015 | Tamanrasset WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Tamanrasset Province | Wilaya de TAMANRASSET- Algerie |
| 2015 | Portogallo WTE Plant | Preliminary design, feasibility study MSW: 200.000 ton/year. Electrical power capacity: approx. 20 MWe | VEOLIA Dalkia - Portugal |

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| 2015 | Djelfa - WTE Plant Work in progress | Feasibility Study & Final Design, Management and Supervision of the Construction concerning a WTE plant for Djelfa Province | Wilaya de DJELFA - Algerie |
| 2015 | Adrar - WTE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Adrar Province | Wilaya de ADRAR - Algerie |
| 2015 | Ain Temouchent - WtE Plant Work in progress | Final Design, Management and Supervision of the Construction concerning a WTE plant for Ain Temouchent Province | Wilaya de AIN TEMOUCHENT - Algerie |
| 2014 | Algeri - WTE Plant Work in progress | Feasibility Study & Final Design, Management and Supervision of the Construction concerning a WTE plant for ALGERI Province MSW: 350.000 ton/year | Ministry of Environment and Territory Democratic and Popular Republic of Algerie |
| 2014 | Annaba WtE Plant Work in progress | Feasibility Study & Final Design, Management and Supervision of the Construction concerning a WTE plant for ANNABA Province MSW: 150.000 ton/year | Ministry of Environment and Territory Democratic and Popular Republic of Algerie |
| 2014-2015 | Taranto WtE Plant Work in progress | Technical and administrative consulting for definition and design of revamping activities, to improve the plant reliability and efficiency. MSW: 73.000 ton/year Electrical power capacity: 3,7 MWe | AMIU Spa –Comune di Taranto |
| 2013 | Buenos Aires Avellaneda WTE Plant | Preliminary design, feasibility study MSW: 150.000 ton/year Electrical power capacity: 11 MWe | PROACTIVA MEDIO AMBIENTE VEOLIA Group |
| 2013 | Costa Rica WTE Plant | Preliminary design, feasibility study MSW: 550.000 ton/year Electrical power capacity: 40 MWe | PROACTIVA MEDIO AMBIENTE VEOLIA Group |
| 2013 | Scarlino (GR) WTE Plant | Technical and Process assistance for improvement and optimization of fluidized bed combustion and gas cleaning treatment | SCARLINO ENERGIA – UNIECO Group |
| 2012 | Macomer (NU) WTE Plant | Final design for Tender participation concerning the Construction and Operation & Maintenance (Project Financing) of a new WtE plant. MSW: 65.000 ton/year. Electrical power capacity: 6,7 MWe | VALORIZA SERVICIOS MEDIOAMBIENTALES – SACYR VALLEHERMOSO GROUP |
| 2012 | Schio (VI) WTE Plant | Preliminary design for tender participation Preliminary evaluation of execution planning and implementation of boiler and grate repair works and revamping of flue gas cleaning systems – line n. 1. MSW: 24.000 ton/year Electrical power capacity: 2,4 MWe | UNIECO Soc. Coop. |

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| 2009 -2012 | Verona Ca' del Bue Plant New WTE Plant (Grate) | Preliminary and Final Design of WTE Plant in the framework of a Contract for Construction and Operation & Maintenance (Project Financing) of a new WTE. MSW: 190.000 ton/year Electrical power capacity: 24 MWe | URBASER S.A. - Madrid ACS group |
| 2012 - 2015 | Verona Ca' del Bue Plant MBT & WTE Plant (Fluidized Bed) | Preliminary and Final Design for the Revamping of an existing MSW treatment plant composed by: <ul style="list-style-type: none"> - MSW treatment for recyclables recovery and Refuse Derived Fuel production, - anaerobic digestion of source collected organic waste & energy production by biogas - fluidized bed combustion lines (two lines) MSW: 156.000 ton/year Electrical power capacity: 1 MWe (biogas) | URBASER Srl URBASER S.A. - Madrid Group |
| 2012 | Busto Arsizio (VA) WTE Plant | Preliminary design for Tender participation - Revamping and Operation & Maintenance of an existing plant for waste to energy production MSW: 128.000 ton/year Electrical power capacity: 16 MWe | AMBIENTE 2000 FALCK GROUP |
| 2012 | Piemonte – Biomass plant | Technical assistance for EPC Contract definition 5 MWe biomass plant | ENEXILO s.r.l. |
| 2012 | Val d'Aosta – Technical assistance | Technical assistance for EPC Contract definition – district heating system in Val d'Aosta | CVA S.p.A. |
| 2012 | Gasification plant | Basic design for a 1 MWe biomass gasification plant | VOLTAGGIO ENERGIE Srl |
| 2012 | France (Ivry) – WTE | Preliminary design for tender participation Design and construction of a waste gasification plant for power and heat production RDF: 100.000 tons/y Electrical power capacity: 10 MWe | JFE - SCT |
| 2011 | Sesto Fiorentino (FI) – WTE Plant | Preliminary design for tender participation – Construction and Operation & Maintenance (Project Financing) of a new plant for power production. MSW: 136.000 ton/year Electrical power capacity: 18,2 MWe | VEOLIA Servizi Ambientali Tecnitalia Spa |
| 2011 | Aosta – WTE | Preliminary design for tender participation - Design and construction of a waste gasification plant for power and heat production - MSW: 70.000 tons/y- Electrical power capacity: 7 MWe | JFE - SCT |
| 2011 | Salerno WTE Plant | Preliminary design for tender participation – Construction and Operation & Maintenance (Project Financing) of a new plant for power production- MSW: 300.000 ton/year Electrical power capacity: 28,3 MWe | DE VIZIA TRANSFER S.P.A. – TERMOKIMIK S.P.A. |

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| 2011 | Massa Martana Biomass plant | Basic design for a 1 MWe biomass plant | STE ENERGY S.p.A. |
| 2010 | Umbria Biomass plant | Basic design for a 11 MWe biomass plant | IBI/SIRTIS |
| 2010 | Puglia Biomass plant | Basic design for a 25 MWe biomass plant | D'APPOLONIA |
| 2010 | Toscana Biomass plant | Basic design for a 8 MWe biomass plant | D'APPOLONIA |
| 2010 | Piemonte Biomass plant | Offer Preparation for a 1 MWe biomass plant | PRISMA S.p.A. |
| 2009 | Sicilia Biomass plant | Engineering management for a 12 MWe biomass plant | SOLENIA / SIRAM |
| 2009 | Piemonte Biomass plant | Engineering management for a 8,5 MWe biomass plant | SOLENIA / SIRAM |
| 2009 | Lombardia Biomass plant | Preliminary design for a 7 MWe biomass plant | BDC / SIRAM |
| 2008 | Friuli Biomass plant | Basic design for a 13,50 MWe biomass plant | OMNIA ENERGIA s.r.l. |
| 2008 | Lombardia Biomass plant | Technical specification for a 2,2 MWe biomass plant | TECHPROM s.r.l. |
| 2008 | Lazio Biomass plant | Preliminary design for a 13,50 MWe biomass plant | GREEN ENERGY s.r.l. |
| 2007 | Sardegna Biomass plant | Technical assistance for a 13,50 MWe biomass plant | SIRTIS s.r.l. |
| 2006 | Ottana (NU) WTE Plant | Preliminary Design of Waste & Biomass power plant RDF (Refuse Derived Fuel): 215.000 ton/year Biomass: 160.000 ton/year Electrical power capacity: 40 MWe | URBASER SA - ACS Group De Vizia Transfer S.p.A. |
| 2008 | Piemonte Biomass plant | Owner engineer for a 3 MWe biomass plant | EnTer s.r.l. |
| 2008 | Toscana Biomass plant | Preliminary design for a 13,5 MWe biomass plant | TIRRENO POWER S.p.A. |
| 2007 | Avellino WTE Plant | Preliminary design for tender participation – Construction and Operation & Maintenance (Project Financing) of a new plant for power production - RDF (Refuse Derived Fuel): 432.000 ton/year Electrical power capacity: 50 MWe | URBASER S.A. - ACS Group/ DE VIZIA TRANSFER S.p.A. |

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| 2007 | Sicilia Biomass plant | Bid Technical specification for a 13,50 MWe biomass plant | FATA EPC S.p.A. |
| 2007 | Piemonte Biomass plant | Owner engineer for a 3 MWe biomass plant | VOLTAGGIO ENERGIA srl |
| 2007 | Sicilia Biomass plant | Bid Technical specification for a 13,50 MWe biomass | SADELM I S.p.A. |
| 2007 | Lazio Biomass plant | Bid Technical specification for a 13,50 MWe biomass | SADELM I S.p.A. |
| 2007 | Liguria Biomass plant | Owner engineer for a 3 MWe biomass plant | EnTER s.r.l |
| 2007 | Liguria Biomass plant | Feasibility study for a 3 MWe biomass plant | TIRRENO POWER S.p.A |
| 2008 | Piemonte Biomass plant | Owner engineer for a 3 MWe biomass plant | EnTer s.r.l |
| 2006 | Liguria Biomass plant | Basic and detailed design for combined gas and biomass plant | FERRANIA s.r.l. |
| 2006 | Liguria Biomass plant | Basic and detailed design for a 5 MWe biomass plant | SINERGIA s.r.l. |
| 2006 | Piemonte Biomass plant | Basic and detailed design for a 3,5 MWe biomass plant | VOLTAGGIO ENERGIA s.r.l. |
| 2006 | Valencia - Spain Green plant | Technical specification for order issue of a 12 MWe power plant (chicken manure fuelled) | FATA EPC S.p.A. |
| 2006 | Toscana Olive husk green plant | Basic design for a 5 MWe olive husk power plant | FATA EPC S.p.A. |
| 2005-2006 | Augusta (SR) WTE Plant | Preliminary and final design of a plant for power production fed with RDF (CDR) RDF (Refuse Derived Fuel): 500.000 ton/year Electrical power capacity: 56 MWe | PIANIMPIANTI S.p.A. |
| 2005-2006 | Casteltermini Agrigento WTE Plant | Preliminary and final design of a plant for power production fed with RDF (CDR) RDF (Refuse Derived Fuel): 360.000 ton/year Electrical power capacity: 36,5 MWe | PIANIMPIANTI S.p.A. |
| 2005-2006 | Palermo WTE Plant | Preliminary and final design of a plant for power production fed with RDF (CDR) RDF (Refuse Derived Fuel): 500.000 ton/year Electrical power capacity: 56 MWe | PIANIMPIANTI S.p.A. |

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| 2005 | Emilia Romagna Biomass thermal plants | Feasibility study for several biomass thermal plants in Emilia Romagna | COSEA s.r.l. |
| 2005 | Switzerland Biomass plant | Plant technical specification for a 10 MWe biomass plant in Ticino | NRG A.G. |
| 2005 | Alto Lazio Biomass plant | Basic and detailed design for a 10 MWe biomass plant | BI-LAB s.r.l. |
| 2004 | Lombardia Biomass plant | Basic and detailed design for a 10 MWt power plant | TECHPROM s.r.l. |
| 2004 | Biomass plant | Basic and detailed design for a 10 MWt biomass power plant "reference plant" | TECHPROM s.r.l. |
| 2001-2003 | Sicilia Cogenerating plant | Basic design for a 21 MWe CDR cogenerating plant | TECNAL s.r.l. |
| 2001-2003 | Sicilia Cogenerating plant | Basic design for a 40 MWe CDR cogenerating plant | ASTER S.p.A. |
| 2001-2003 | Liguria Cogenerating green plant | Feasibility study for a 7 MWt cogenerating green plant | COMUNITÀ MONTANA |
| 2001-2003 | Ticino Biomass plant | Basic Design for a 10 MWe biomass plant | NRG A.G. |
| 2001-2003 | Emilia Romagna Cogenerating plant | Feasibility study for a 35 MWe cogenerating plant based on Gas Motors and Biomass boiler | BUSI S.p.A. |
| 2001-2003 | Piemonte Cogenerating plant | Feasibility study for a 12 MWe cogenerating plant based on Gas Turbine and Biomass boiler | CARLO GAVAZZI IMPIANTI S.p.A. |
| 2001-2003 | Lombardia Cogenerating green plant | Feasibility study for a 7 MWt cogenerating green plant | CARLO GAVAZZI IMPIANTI S.p.A. |
| 2001-2003 | Sardegna Green plant | Basic Design for a 10 MWe green plant | ARES s.r.l. |
| 2001-2003 | Spain Green plant | Basic Design for a 12 MWe green plant (chicken manure fuelled) in Catalugna, Spain | ASTER S.p.A. |
| 2000/2003 | Colleferro II (RM) WTE Plant | Preliminary and final design of a plant for power production fed with RDF (CDR) - 200.000 ton/year Electrical power capacity: 22 MWe | E.P. SISTEMI srl |

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|-----------|---|--|--------------------------------|
| 1998/2000 | San Vittore del Lazio (FR) WTE Plant | Preliminary and final design of a plant for power production fed with RDF (CDR)- 100.000 ton/year Electrical power capacity: 10,5 MWe | E.A.L.L. s.r.l. – Orvieto (TR) |
| 1998/2000 | Maratta (TR) WTE Plant | Preliminary and final design of a plant for power production fed with biomass, 100.000 ton/year Electrical power capacity: 12 MWe | TERNI EN.A spa |
| 2008 | Piemonte Vegoil plant | Bid technical specification for a 18 MWe vegoil plant (vegetable oil) | SEI S.p.A.. |
| 2008 | Terni - Production of electric energy supplied from renewable sources | Construction of a plant for power production fed by renewable sources Technical- Economic feasibility Study | UMBRA DUE SERVIZI srl |
| 2007 | Toscana Vegoil plant | Basic design for a 25 MWe vegoil plant | FATA S.p.A. |
| 2007 | Puglia Vegoil plant | Basic design for a 25 MWe vegoil plant | ECOLOGICA S.p.A. |
| 2006 | Toscana Vegoil plant | Feasibility study for 25 MWe vegoil plant | FATA EPC S.p.A. |
| 2006 | Piemonte Vegoil plant | Basic design for 25 MWe vegoil plant | FATA EPC S.p.A. |
| 2006 | Genoa Vegoil plant | Basic design for a 1MWe vegoil plant | AMICO S.p.A. |