

Project	Year	Client	Location	Industries	Objects	Activities	Scope of works	Description
476/25	2025	ECO+ECO	Fusina (VE)	Waste to energy	Complete system	Consulting	Technical-functional test	System functional testing of the efw plant
475/25	2025	MARTIN GmbH	Ferrara	Waste to energy	Boiler	Consulting	Research work	Optimization of the CO2 concentration for the carbon capture from a Waste-to-Energy plant
474/25	2025	Investanas JSC	Vilnius - LT	Waste to energy	Furnace and Boiler	Whole project	Project of a new plant	Design of a boiler with integrated grate for the combustion of e waste/RDF to energy plant 11 MWt
473/25	2025	FAR POLYMERS	Filago (BG) IT	General industry	Complete system	Detailed engineering	Project of a new plant section	Detailed engineering, new air recirculation system.
472/25	2025	FMI Process Italia	Varedo (MB) IT	Sewage treatment plant	Complete system	Basic engineering	Expertise	Energy audit of a fluidised bed organic slurry combustion system
471/25	2025	BEA-SPA	Desio (MI) IT	Waste to energy	Flue gas cleaning system	Whole project	Revamping	W.T.E. is committed to study and project a new gas recirculation system to up grade the existing the combustion control system
470/25	2025	FAR POLYMERS	Filago (BG) IT	General industry	Complete system	Feasibility study	Revamping	Analysis of the existing recovery system and study of the optimisation of the process, considering the economical impact of a new solution
469/24	2024	BEA-SPA	Desio (MI) IT	Waste to energy	Complete system	Basic Engineering	Revamping	Analysis of control system and performance's optimisation of the incineration plant 21x2 lines
468/24	2024	ENERGY-ON	Kaunas (LT)	Waste to energy	Boiler	Feasibility Study	Project of a new plant section	Preliminary design and layout of a boiler with integrated grate for the combustion of e waste/RDF to energy plant 11 MWt
467/24	2024	POLIMI Politecnico di Milano	Milano (MI) IT	Educational	Complete system	Educational	Training	
466/24	2024	NADARA	Trezzo d.A.(MI) IT	Waste to energy	Complete system	Consulting	Documental study	Engineering consulting services
465/24	2024	KANADEVIA-Inova	ZURICH (CH)	Waste to energy	Complete system	Consulting	Documental study	Engineering consulting services
464/24	2024	FICHTNER ITALIA SpA	Genova (GE) IT	Waste to energy	Complete system	Consulting	Engineering for permitting	Support for the preparation of the Technical Paper, Optimization of the performance of the wte plant analysis of the reduction of environmental impact, life extension of main components, Capex-opex
463/24	2024	ALCOPLAST	Vercelli (VC) IT	General industry	Complete system	Feasibility study	Revamping	Feasibility study and technical documents for the revamping of the existing incineration plant including cogenerative thermal cycle
462/24	2024	AGSM AIM s.p.a.	Verona (VR) IT	Sewage treatment plant	Complete system	Engineering services	Engineering for permitting	The Client requires the text of the OTNOC (Other Than Normal Operating Condition) to be submitted to the public Authorities for the project of the Sewage sludge treatment plant to be realized in Verona.
461/24	2024	MASCIANI SPA	Cuvio (VA) IT	General industry	Boiler and flue gas cleaning system	Feasibility Study	Revamping	The Owner of a textile industrial firm needs a feasibility study of a new boiler and its gas cleaning system. The CHP installed and operating giving power to the production process is fed by biomass; W.T.E. was appointed to enhance the performances of the combustion and of the emissions of gases consequently. The study offers possible improvement scenarios to secure and maintain the application of the BAT
460/24	2024	TERMOKIMIK SPA	Milano (MI) IT	Waste to energy	Thermal cycle	Detailed engineering	Revamping	Engineering activities related to detailed design: modification of the thermal cycle and to connect new distric heating station.

459/24	2024	FICHTNER ITALIA SpA	Genova (GE) IT	Waste to energy	Complete system	Feasibility Study	Engineering for permitting	Preliminary feasibility study for a waste to energy plant with mass flow rate of 160.000 t/y pro-line.
458/23	2023	Investanas JSC	Vilnius - LT	Waste to energy	Complete system	Whole project	Project of a new plant	Investanas JSC (Vilnius) has assigned W.T.E. Waste to Energy Srl to design a complete incineration plant, including the basic and detailed design of a furnace-boiler system (tail-end type), a flue gas cleaning system, a fly ash handling and storage system, and all other auxiliary systems. Main data: 11,5 MWth capacity 100 % MCR; LHV from 7 to 14 MJ/K; Waste throughout 2.4-4 t/h; pre-heating air
457/23	2023	MGF Ingegneria Srl	Fusignano (RA) IT	Waste to energy	Furnace	Basic Engineering	Project of a new plant	Thermodynamical calculation for basic engineering of the new afterburner and the new recovery boiler to be installed on the inceneration plant of the aeroport- Elmas (CA).
456/23	2023	AGSM AIM s.p.a.	Verona (VR) IT	Sewage treatment plant	Complete system	Engineering services	Engineering for permitting	The Client requires a report on OPEX related to the project of the Sewage sludge treatment plant
455/23	2023	AXIS Engineering	Vilnius - LT	Biomass to energy	Combustion grate	Consulting	Documental study	Consultation for Combustion Grate Functionality. Assessment of Adaptability of an Existing Biomass Grate for New Fuel Applications.
454/23	2023	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Complete system	Process design/innovation	Research work	Management of technical trials for the treatment of contaminated materials for the destruction of contained toxic matrices.
453/23	2023	AGSM AIM s.p.a.	Verona (VR) IT	Sewage treatment plant	Complete system	Basic engineering	Engineering for permitting	Assignment for the design of a system for the drying of organic sludge (110,000 t/y) and their combustion to be implemented within the area of the old waste-to-energy plant located in Ca' del Bue."
452/23	2023	PRIMA SRL - Falck Renewables Spa	Trezzo d.A.(MI) IT	Waste to energy	Complete system	Engineering services	Engineering for permitting	Technical report on maintenance interventions to be carried out in the upcoming two-year period.
451/23	2023	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Complete system	Engineering services	Engineering for permitting	Contract for the production of the documentation necessary for the renewal of the operating permit for the A.AM.P.S. waste-to-energy plant.
450/23	2023	ALFA LAVAL	Suisio (BG) IT	General industry	Boiler	Feasibility study	Research work	Experimental recovery boiler project installed downstream of a pyrolysis process.
449-444/23	2023	VOMM SPA	Rozzano (MI) IT	Sewage treatment plant	Complete system	Basic engineering	Project of a new plant	Development of several projects for process and design of new waste to energy and sludge treatment plant.
443/23	2023	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Complete system	Feasibility study	Revamping	Phase 1 of the project: Energy and economic estimate of the value of the bled steam from the turbine of a cogeneration plant fed by biomasses . Phase two: delivery of basic engineering for an exchange system of steam with an industrial plant nearby the CHPP.
442/23	2023	FICHTNER ITALIA SpA	Genova (GE) IT	Waste to energy	Complete system	Consulting	Revamping	Assistance to due diligence related to already existing waste-to-energy plant, delivering analysis of Capex, Opex and KPI
441/23	2023	PRIMA SRL - Falck Renewables Spa	Trezzo d.A.(MI) IT	Waste to energy	Boiler and flue gas cleaning system	Basic engineering	Revamping	Design and implementation of burners control logic installed in the post- combustion of two lines in waste-to-energy plant. Expertises about refractory and Condenser malfunctioning.
440/22	2022	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Complete system	Engineering services	Engineering for permitting	Support and direct drafting of all the documents required by law in order to obtain the review of the authorisation (A.I.A. Italian document) of the operating WtE plant (expertise, review overhaul and complement of documentation, compliance with the BAT). New design of the pumping station of the water feeding system.
439/22	2022	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Complete system	Whole project	Research work	recirculation engineering
438/22	2022	CONFIDENTIAL	IT	General industry	Complete system	Whole project	Research work	After the pre-feasibility study, the Owner of an important Lombard Company appointed W.T.E. to develop the basic engineering for an innovativ and experimental pirolysis plant fed with waste of its production process, focusing on saving energy and safety procedures.
437/22	2022	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Complete system	Engineering services	Research work	TEST in the HTC reactor of recipes for the treatment of the fly-ashes outcoming from the incineration plant owned by Eco-center in Bolzano

436/21	2021	LEDOGA SRL - Gruppo Silvateam	S.Michele M.vi (CN) IT	Biomass to energy	Complete system	Basic engineering	Project of a new plant	The basic engineering of a new CHPP 4MWt+3MWt was to include the study of the energetic optimization of the thermal sources available to the company and the project of the distribution of the heat within the internal industrial network.
435/21	2021	SILVATEAM NEW TECH SRL- Gruppo Silvateam	S.Michele M.vi (CN) IT	Biomass to energy	Complete system	Basic engineering	Project of a new plant	After obtaining the authorization from Public Authority, the Client needs the basic engineering of the new thermal power plant fed with biomasses, including a new feeding system and the current energy consumption.
434/21	2021	CONFIDENTIAL	IT	General industry	Complete system	Feasibility study	Research work	An important Lombard Company required the feasibility study of an innovative and experimental pyrolysis plant to be realised within the area of the main production plant.
433/21	2021	FALCK RENEWABLES	S.S.Giovanni (MI) IT	Waste to energy	Complete system	Feasibility Study	Revamping	Feasibility study to life extension and BAT adaptation of Trezzo incineration plant including engineering for organic slurry receiving, storage, and handling to co-combustion to two existing waste-to-energy lines
432/21	2021	SILVATEAM NEW TECH SRL- Gruppo Silvateam	S.Michele M.vi (CN) IT	General industry	District heating system	Engineering services	Engineering for permitting	The client wanted to obtain the necessary authorization to implement a district heating system supported by the engineering services provided by W.T.E. We provided all the thermodynamic calculations, a basic layout, and a comparison of pollutant emissions between the current plant configuration (using natural gas) and the scenario where biomass is used as fuel.
431/21	2021	YARA Environmental Technologies GmbH Italian Branch	Vienna AT	General industry	Boilers and flue gas cleaning system	Engineering services	Engineering for permitting	Consulting to get INAIL approval for the revamping of the pressure parts modification of three utility boilers installed on the Ilva steel mill plant (Taranto) in the ambit of the delivery of three new gas cleaning systems
430/21	2021	FALCK RENEWABLES	S.S.Giovanni (MI) IT	Waste to energy	Complete system	Feasibility Study	Revamping	Preliminary feasibility study to life extension and BAT adaptation of Trezzo incineration plant including preliminary engineering for organic slurry receiving, storage, and handling to co-combustion to two existing waste-to-energy lines
428/21	2021	LEAP scarl	Piacenza (PC) IT	General industry	Rotary kiln	Feasibility study	Project of a new plant	Preliminary engineering, feasibility study and design of a rotary kiln system, including energy recovery and multistage gas cleaning system. The micro-plant would be meant to treat RDF derived from the recycling of lead-acid batteries
427/21	2021	Tecnorefractories Srl	Erba (LC) IT	General industry	Furnace	Feasibility study	Project of a new plant section	Preliminary engineering of a heating system to dry refractory lining following automatically an assigned thermal profile.
426/21	2021	REDECAM GROUP SPA	S.S.Giovanni (MI) IT	Biomass to energy	Flue Gas Cleaning System	Engineering services	Revamping	Following the previous engineering services provided, Redecam Group asked to W.T.E. to update the flow control diagrams of the gas cleaning system of a biomass to energy plant
425/21	2021	POWERCROP-MACCHIAREDDU	Zola Predosa (BO) IT	Biomass to energy	Complete system	Consulting	Expertise	The Client required a technical expertise in order to clarify some controversial issues related to the failure of the system. W.T.E. has compared all running data, all reports, all previous investigations and has provided its advice, basing also on theoretical assumptions.
424/21	2021	ABET LAMINATI SPA	Bra (CN) IT	General industry	Complete system	Feasibility Study	Project of a new plant	Feasibility study of a new co-incineration plant to be installed in the industrial area
423/21	2021	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Feeding system	Design and supply	Research work	Due to the fact that W.T.E. is the inventor of the HTC plant, Eco research entrusted our company to realise and install a new feeding system fit for special material like polluted ashes and compounds.
422/21	2021	ACboilers Spa	Gallarate (VA) IT	Waste to energy	Boiler	Basic Engineering	Project of a new plant	W.T.E. has drawn up the preliminary dimensioning, with thermodynamic calculations, layout, assembly drawings, of a new boiler to be installed on the incineration plant of Créteil.
421/21	2021	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Thermal cycle	Design and supply	Revamping	Preliminary engineering, feasibility study, and design, with procurement, installation, and start-up assistance of a new turbine condenser water refrigeration system included pumping station and evaporating towers

420/20	2020	ACboilers Spa	Gallarate (VA) IT	Biomass to energy	Boiler and flue gas cleaning system	Consulting	Project of a new plant	Consulting on the special layout of the boiler and on the flue gas cleaning system to be installed on a biomass to energy plant.
419/20	2020	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Feeding system	Whole project	Project of a new plant section	In order to allow the test of different compounds of polluted materials, W.T.E. was required to study a new feeding system to be installed on the HTC plant.
418/20	2020	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Complete system	Engineering services	Maintenance Services	The HTC plant needs regular controls in order to maintain the efficiency of the whole system. W.T.E. is in charge of the tests and the implementation of the antifreeze system.
417/20	2020	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to energy	Boiler	Basic engineering	Troubleshooting and improvement project	Mechanical and thermodynamical text before the repair operation and the modification of the superheater SH2AT, in connection with the mechanical operators of the plant.
416/20	2020	ACboilers Spa	Gallarate (VA) IT	Waste to energy	Complete system	Basic engineering	Project of a new plant	Preliminary dimensioning of two boilers for incineration plants, whose space was pre-assigned. In this project W.T.E. was required to study the special layout of the boiler and the flue gas cleaning system, due to the mandatory design set by the client.
415/20	2020	NOOTER-ERIKSEN	Cardano a.C.(VA) IT	Power plant	Flue Gas Cleaning System	Engineering services	Offer engineering	Drafting documents as required for defining the offer price of four systems for storage and dosing the Ammonia installed on four Power plants- ENEL
414/20	2020	REDECAM GROUP SPA	S.S.Giovanni (MI) IT	Biomass to energy	Flue Gas Cleaning System	Engineering services	Project of a new plant	W.T.E. provided engineering services to Redecam Group in order to elaborate the flow control diagrams of the gas cleanign system of a biomass to energy plant
413/20	2020	ACboilers Spa	Gallarate (VA) IT	Biomass to energy	Complete system	Basic Engineering	Research work	Acboilers is a major Italian Boiler Manufacturer and needs from W.T.E. a technical support in preliminary design of biomass boilers featuring high efficiency and reliability that are fed with different mixtures of biomasses. The study analysed several configurations of the design and their criticalities related to the emissions, the corrosion, the fouling. The study provided possible solutions for the above criticalities.
412/20	2020	EUROPOWER -Sofinter Group	Gallarate (VA) IT	General industry	Thermal cycle	Engineering services	Offer engineering	The client required the cooperation of W.T.E. for the drafting of technical documents for the tender issued for the Upgrade of the trigeneration system installed in the area of the JRC in Ispra (VA).
411/20	2020	FALCK RENEWABLES	S.S.Giovanni (MI) IT	Waste to energy	Complete System	Basic Engineering	Revamping	Preliminary engineering for the revamping of the incineration plant in Trezzo s.A. including, in addition, a technical report on its conservation status and the feasibility study ex dlgs 50/2015.
410/20	2020	SERECO PIEMONTE SPA	Leinì (TO) IT	General industry	Rotary kiln	Engineering services	Documental study	Market analysis of the effective sanitation systems by thermal process for treatment of hospital waste.
409/20	2020	Acboilers Spa	Gallarate (VA) IT	Waste to energy	Boiler	Basic Engineering	Project of a new plant	Thermodynamic calculation and dimensioning of a boiler for a WtE plant.
408/20	2020	SERECO PIEMONTE SPA	Leinì (TO) IT	General industry	Remediation System	Feasibility Study	Project of a new plant	Preliminary engineering, feasibility study, and design of an industrial remediation system , including dry and wet gas cleaning section, for thermal treating of polluted industrial soil.
407/19	2019	SERECO PIEMONTE SPA	Leinì (TO) IT	General industry	Remediation System	Engineering services	Project of a new plant	Technical and economic alignment of the offers provided by suppliers of available industrial remediation systems for thermal treatment of polluted industrial soil. Preliminary comparison of the different industrial process and their feasibility.
406/19	2019	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to energy	Boiler	Consulting	Revamping	Expertise about the replacement of the Superheater named BP2 installed on the Biomass to energy plant, after technical alignment.

405/19	2019	ASA Azienda Servizi Ambientali	Livorno (LI) IT	Sewage treatment plant	Furnace	Basic engineering	Engineering for permitting	After a preliminary study to evaluate the co-combustion of sludge sewage and RSU-RDF in the incineration plant, W.T.E. was appointed to analyse in details the energetic performance of the plant. The aim was to verify the compliance with law and rules in force, focusing on energy recovery. The client, A.S.A.core business focuses on management of urban water, sludge digester and final disposal of residues slurry. The basic engineering was developed in order to obtain the approval of the Public Authority. By means of several mathematical simulations W.T.E. has evaluated, on yearly basis, the energy deliverable to the grid, proving that the efficiency was in compliance with Italian law prescriptions. All the fundamental parameters in combustion, gas cleaning system and energy recovery, were also evaluated verifying that all of them were within the allowed ranges.
404/19	2019	EUROPOWER -Sofinter Group	Gallarate (VA) IT	Waste to energy	Complete System	Basic Engineering	Revamping	W.T.E. carried out an engineering analysis of the incineration plant located in Fusina (VE), including furnace mass and energetic balances in all the characteristic points of combustion diagram, verifying the combustion parameters. W.T.E. has also designed the headers and nozzles of secondary air and gas recirculation. The plant shall be repowered reaching 20 MWth of MCR.
403/19	2019	LEDOGA SRL - Gruppo Silvateam	S.Michele M.vi (CN) IT	General industry	Complete System	Feasibility study	Up-grade	Conceptual study of the possible expansion and upgrading of a chemical plant for the extraction of vegetable tannin.
402/19	2019	Dal-Sterling Group Ltd	Alton Hampshire GB	General industry	Complete System	Engineering services	Expertise	Dal Sterling appointed W.T.E. to support an expertise about a litigation over a gas distribution network to be completed in Italy by an Italian company
401/19	2019	ASA Azienda Servizi Ambientali	Livorno (LI) IT	Sewage treatment plant	Sewage sludge treatment	Feasibility Study	Engineering for permitting	A.S.A. Azienda Servizi Ambientali is an Italian public company whose core business focuses on urban water complete systems both in Livorno and in neighbouring municipalities. A.S.A. primary area also includes sludge sewage digesters and final disposal of residue slurries. A.S.A. required W.T.E.' support to carry out a preliminary study to evaluate the co-combustion of sludge sewage and RSU-RDF in the incineration plant which operates in the same industrial area. W.T.E. had to verify potential plant capacity reduction and major inconvenience in furnaces, boilers, gas cleaning systems and thermal cycle due to additional water, ashes and other chemical contents in the mixed fuel to be sent to the combustion. The analysis intended also to focus the attention on complying with regional and national rules in the matter of pollutant emissions.
400/18	2018	PRIMA SRL - Falck Renewables Spa	Trezzo d.A.(MI) IT	Waste to energy	Complete System	Feasibility Study	Revamping	A major Italian company, operating in the field of incineration and renewable energy, required W.T.E. to study the life extension of boilers installed on an existing incineration plant. Later, the analysis was extended to the whole plant. W.T.E. carried out the study for residual useful life evaluation through an analysis of ordinary and extraordinary maintenance with interviews to plant personnel, a statistical analysis of boiler thickness and an analysis of most frequent plant failures. After this, conceptual designs to retrofit gas cleaning system and thermal cycle have been done. A comprehensive final technical report, including suggested improvements for components and process as well as the assessment of CAPEX and OPEX for maintenance and plant revamping has been delivered.

399/18	2018	INDUNOR- Silvateam Group	S.Michele M.vi (CN) IT	Biomass to Energy	Complete System	Whole project	Revamping	W.T.E. delivered basic and detailed engineering to upgrade an existing biomass boiler with 57 MWt at MCR and to build a new thermal cycle with a turbo-generator 14.5 MWe capacity. The project included also the revamping engineering of the existing boiler with the installation of a new superheater, able to deliver higher steam temperature, the extension of the existing economizer and a new combustion control system. All these systems and auxiliaries had to be connected to the existing chemical factory.
398/18	2018	SIA V.L.K.	Ventspils - LV	Waste to energy	Complete System	Feasibility Study	Project of a new plant	After an international public call for tender issued by Ventspils (LV) Authority, W.T.E. had assigned the job with the title: "Development of a construction design and technical specifications for the procurement of design, construction and supply of equipment within the boundaries of the project titled "Installation and Operation of a Refuse-Derived Fuel Regeneration Plant at 69 Talsu Street, Ventspils""."No atkritumiem ieguta kurinama regenerācijas iekartas uzstādīšana un ekspluatācija Ventspilī, Talsu ielā 69" The assigned job regarded a 10 MWth RDF furnace co-generative plant, providing thermal energy to local district heating and electric energy to the national grid. WTE delivered the Process Flow Diagram of the feeding system, of the furnace and the boiler, of the multi stage gas cleaning system and of the thermal cycle . W.T.E. carried out a sensitivity analysis on the plant's Net Present Value pertaining to energy price fluctuations. Moreover, preliminary equipment dimensioning, layout and sectional drawings, specifications and data sheets for all plant components and bid documents has been delivered. A preliminary budget price in both hypothesis, shopping around and EPC, has been evaluated. Due to a request of budget adjustment, the whole study had also been delivered for 8.5 MWth furnace capacity.
397/18	2018	INDUNOR- Silvateam Group	S.Michele M.vi (CN) IT	General industry	Complete System	Feasibility Study	Revamping	Silvateam Group is an Italian holding, world leader in the production of plant base extracts, since 1854. The job assigned included the study of biomass boiler revamping to improve steam characteristics and combustion, a new thermal cycle, a new gas cleaning system and a new biomass drying system.
396/18	2018	SATTA & BOTTELLI S.p.A.	Nerviano (MI) IT	General industry	Thermal cycle	Engineering services	Engineering for permitting	WTE has been in charge to develop technical documents in order to get the authorisation from Public Authority to use of a diathermic oil / steam boilers systems. The aim was to assure the compliance of the characteristics of existing components with parameters defined by law. SATTA & BOTTELLI, sited in the neirbourough of Milan, is a leader company in textile finishing whose work goes back in time.

395/18	2018	ECOLOGICA NAVIGLIO Spa	Robecchetto c.l. (MI) IT	Sewage treatment plant	Process & Combustion Control System	Basic engineering	Up-grade	Thanks to its know-how, W.T.E. was selected to deliver the study of the new control system of the existing sludge drying plant to improve safety procedure switching from originally manual operation to an automatic one. W.T.E. also provided the related HAZOP through process analysis and management interviews. Basing on a suitable mathematical model, automation procedures were simulated in order to control and monitor: - fumes recirculation fan; - scrubber cooling system with indication of the fouling trend in the heat exchanger; - consumption of drying drum motor; - capacity of sludge. Concerning water treatment, the activity realised also included : - engineering of P&IDs; - study of the automation logic of the sludge dewatering centrifuge washing; - study of the automation logic of the cooling system; - editing of the new logics and their integration into existing documents.
394/17	2017	REDECAM GROUP SPA	S.S.Giovanni (MI) IT	General industry	Flue Gas Cleaning System	Engineering services	Project of a new plant	W.T.E. provided engineering services to Redecam Group in the project of a new Flue Gas Cleaning System - dry type
392/17	2017	Terni Biomassa -Tozzi Group	Mezzano (RA) IT	Waste to energy	Boiler	Consulting	Expertise	Terni Biomassa Srl commissioned the analysis of the combustion process to W.T.E. in order to verify the capacity of the boiler fed by RDF.
391/17	2017	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Complete System	Design and supply	Research work	W.T.E.signed a contract with Eco research for the whole design and supply of a pilot plant, realized with moving skids, to test the HTC process. W.T.E realised this prototype basing on its own conceptual design for full-scale test. The HTC pilot plant consists of several packages which allow the slurry to be handled in safe way: slurries are heated, maintained at the appropriate conditions in a special reactor, cooled down and then discharged to filter. All the phases above follow a well-defined procedure which may be changed case by case according to the test results. The HTC plant is equipped with several security systems in order to avoid risks for the operators. Potential flows discharged from safety valves are conveyed towards an activated carbon filter to assure the maximum environmental safety. Pressure, temperature, normal and emergence procedures are automatically managed, regulated and controlled by a W.T.E. proprietary control logics.
390/17	2017	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Complete System	Consulting	Performance analysis	ECOSESTO SPA, owner of the biomass power plant (49MWth) operating in Rende (Italy), requested W.T.E. an economical and technical evaluation for the insertion of a flue gas by-pass on the low-temperature economiser. Scope of work was to analyse the performance reduction in order to allow the management to study the new solution.
385/17	2017	Exergy s.r.l.	Olgiate Olona (VA) IT	Waste to energy	Boiler	Consulting	Expertise	An Italian Joint venture delivered an ORC energy recovery system in the revamping project of an existing waste incineration plant. Some major problems were recorded after the start up. W.T.E. was required to evaluate the solution proposed by JV in order to avoid litigation with their Client.
384/17	2017	TERMOKIMIK SPA	Milano (MI) IT	Biomass to Energy	Boiler, Furnace	Basic engineering	Project of a new plant	Thermodynamic modelling of biomass 14 MWe plant
382/17	2017	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Boiler	Basic engineering	Offer engineering	Dimensioning of two economizer banks installed up-stream and down-stream a new SCR reactor for a coal power plant operating in Vasilikos.

381/17	2017	Eco Research	Bolzano (BZ) IT	Remediation pilot plant	Complete system	Feasibility Study	Research work	In 2017 W.T.E. signed a contract with Eco-Research Srl for the design a pilot plant for the HTC process (Hydro Thermal Carbonization) tested in lab, EU patent pending. The process allows the treatment and remediation of slurry and dust, containing dioxins and other toxic organic compounds, by keeping the product at very high temperature and pressure. W.T.E. delivered the whole project of a plant able to heat and pressurise, cool down and filter contaminated slurry or dusts in an automatic way. The original design conception was of a modular and transportable system.
380/17	2017	A2A Ambiente SpA	Brescia (BS) IT	Waste to energy	Complete System	Consulting	Expertise	Expertise on dismantlement and decommissioning of a 2500 t/d waste sorting plant. W.T.E. has been appointed by A2A-AMSA to study the decommissioning of the waste selection plant installed in the proximity of the wte plant of Milan, from technical and economical point of view.
379/17	2017	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Process and combustion control system	Basic engineering	Up-grade	Enhancement and Tuning Control Loops - The existing Combustion Control system was originally delivered by W.T.E. to Dister Energia for the biomass plant with 24 MWth of capacity operating in Faenza (FC).
378/17	2017	REDECAM GROUP SPA	S.S.Giovanni (MI) IT	General industry	Flue Gas Cleaning System	Engineering services	Project of a new plant section	Redecam Group Spa and W.T.E. signed an agreement concerning the provision of engineering services, precisely of the process engineering and technical consulting in the field of gas cleaning system (Sodium-bicarbonate Dry Flue Gas Cleaning System)
377/17	2017	A2A Ambiente SpA	Brescia (BS) IT	Waste to energy	Thermal cycle	Engineering services	Engineering for permitting	CE Certification of a lifting beam for turbine rotor handling.
375/16	2016	A2A Ambiente SpA	Brescia (BS) IT	Waste to energy	Ashes, Dust, Slag	Basic Engineering	Project of a new plant section	Project of auxiliary systems for the emergency transport of fly ashes to load trucks directly.
374/16	2016	FICHTNER ITALIA SpA	Genova (GE) IT	Solar plant	Complete System	Basic Engineering	Engineering for permitting	Fichtner Italia Spa commissioned W.T.E. the support engineering and the technical specifications for equipment to be installed in two integrated solar - biomass thermoelectric plants CSP, in Gela -Sicily (12 MWe) and in S.Quirico- Sardinia (10.8 MWe). WTE has elaborated functional specifications with design requirements related to the characteristics of biomass, Power block, BoP.
373/16	2016	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Complete System	Basic Engineering	Performance analysis	ECOSESTO Spa asked to W.T.E. to conduct an audit on energetic performance of the biomass to energy plant (16.5 MWe) operating in Rende(Calabria) in order to improve the energy efficiency of the plant. W.T.E.' aim was to achieve the optimisation of combustion process through increased flexibility; the final aim was to allow the combustion of biomass with low heating value content.
372/16	2016	A2A Ambiente SpA	Brescia (BS) IT	Waste to energy	Flue Gas Cleaning System	Basic Engineering	Project of a new plant section	The client, owner of the wte plant Silla2 in Milan, appointed W.T.E. to provide a solution for the treatment of the primary air, drawn from the refuse pit of the plant. WTE designed a system in two stages. A self-cleaning filter, operating as metallic sieves, was recommended. As the plant needed a deeper cleaning system a special bag house as second stage was dimensioned and recommended.
371/16	2016	GELSIA AMBIENTE SRL	Desio (MI) IT	Power plant	Complete System	Basic Engineering	Up-grade	The client, GELSIA Srl, is a public multi-utility. W.T.E. was appointed to find the best solution in order to improve the energy efficiency of an existing co-generation engine plant connected to the district heating network.
369/16	2016	PRIMA SRL - Falck Renewables Spa	Trezzo d.A.(MI) IT	Waste to energy	Thermal cycle	Basic Engineering	Up-grade	W.T.E. was appointed by Prima Srl, a Falck Renewables company, to study the optimization of the thermal cycle of the MSW plant, in Trezzo d'Adda, in order to power the future district heating network.

368/16	2016	INNOVATEC SPA	Milano (MI) IT	Sewage treatment plant	Complete System	Feasibility Study	Project of a new plant	Feasibility study of the revamping of an anaerobic sewage digestion plant to treat the organic fraction of MSW mixed with sludge. The project, owned by INNOVATEC Spa, included the integration of the new solution in the area of an existing waste water treatment plant, in Sardinia. The capacity of the plant after revamping was 18000 t/y of sludge sewage.
367/16	2016	TERMOKIMIK SPA	Milano (MI) IT	Waste to energy	Boiler	Basic engineering	Project of a new plant	Preliminary thermal dimensioning of a new boiler with capacity 49 MWth fed by RDF (Refuse Derived Fuel).
366/16	2016	Terni Biomassa -Tozzi Group	Mezzano (RA) IT	Waste to energy	Furnace	Consulting	Troubleshooting and improvement project	The Client, Terni Biomassa Srl, appointed W.T.E. to produce a technical advice about the premature failure of the refractory lining installed in the furnace and designed to burn paper pulper residues. Serious damages on the refractory lining of the combustion chamber were observed after few months of run. Main characteristics of the boiler: steam flow 20 t/h, pressure 50 bar, steam temperature 450°C.
364/16	2016	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Solar plant	Complete System	Basic Engineering	Performance analysis	ECOSESTO SpA appointed W.T.E. to assess the contribute of solar heat supplied to a conventional Rankine cycle in terms of delivered electric energy . A proper evaluation was required in order to obtain the corresponding fee from GSE, Italian energy Authority. Considering the inertia of solar heat at lower temperature than those used in biomass conventional cycle, an entropy analysis of the process was a necessary step in order to evaluate the actual contribute. A reliable evaluation allowed further estimation about the pro-quota energy consumption of common auxiliaries, a major disputed point with GSE. The methodology of entropic analysis adopted was innovative and has been presented to GSE as a different and more appropriate way to energy estimate in case of inlet heat in thermos-electric cycle at different temperature levels. Main characteristics of the plant: boiler MCR 49 MWth; maximum gross electrical energy deliverable 16.5 MWe; solar thermal power 6.6 MWth.
363/15	2015	SILVATEAM ENERGIA SRL	S.Michele M.vi (CN) IT	Biomass to Energy	Complete System	Feasibility study	Project of a new plant	Silvateam Energia commissioned to W.T.E. to develop a preliminary design of a waste biomass cogeneration plant, which included fuel handling, combustion system, boiler, thermal cycle and auxiliaries. The plant should deliver electric energy to the grid and MP steam to industrial processes. The boiler should be fed by industrial residues such as bark and exhausted wood chips from tannin extraction. Main future characteristics of the system: MCR 22 MWth, boiler efficiency over 90%, yearly service over 8200 h. For the above mentioned plant sections W.T.E. has delivered the combustion diagram, the energetic and mass balances, the design and engineering, the drawings of all plant sections and the technical description.
361/15	2015	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Solar plant	Thermal cycle	Consulting	Expertise	ECOSESTO Spa requested W.T.E. to give technical consulting concerning the calculation of feed in tariff after the start-up of the solar plant installed as an auxiliary system of the thermal cycle on the biomass plant in Rende (Calabria).
359/15	2015	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Complete System	Consulting	Expertise	W.T.E. updated all operational procedures, start-up, emergency shutdown procedures, etc. for each section of the Geofor Spa Incineration plant -Ospedaletto (Pisa).
358/15	2015	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Engineering services	Up-grade	The Client requested W.T.E. to provide mechanical and thermodynamic standardisation, performance test procedure and erection engineering analysis about boilers to be revamped by SCR deNOx systems, to treat flue gas released from a natural gas (gas turbine). W.T.E. delivered technical specifications for work instruction, SCR catalyst, ammonia injection, storage and dosing, ammonia grid, flow control unit, dosing and injection P&ID, commissioning, erection, performances, layout drawings. This activity was included in a larger R&D concerning SCR retrofitting to be realised on an horizontal HRSG.

357/15	2015	FLORIAN POWER	Riese S.PioX (VI) IT	General industry	Complete System	Engineering services	Engineering for permitting	Engineering services to receive GSE approval of the project related to a new cogenerative biomass to energy plant with of capacity 2.4 MWe . The plant would have been fed with residues of wood treatment produced in the main industrial process owned by Florian Legno Spa
356/15	2015	Carlo Gavazzi Impianti SpA	Marcallo (MI) IT	CCPP	Complete System	Engineering services	Project of a new plant section	Carlo Gavazzi Impianti Srl committed to W.T.E. to deliver P&I, basic and detailed engineering, control logics for a combined heat power plant supplied by Bonatti Group and installed on the oil refinery owned by SASOL, in Augusta (Italy). Main plant figures: gas turbine GE-LM2500; one-through heat recovery steam generator; steam turbine with bleeding steam -13 MWe; air condenser. W.T.E. delivered to CGI approx. 10000 h/y
355/14	2014	VENTSPILS SILTUMS	Ventspils - LV	Power plant	Boiler, Flue Gas Cleaning System	Feasibility Study	Project of a new plant section	SIA Ventspils Siltum, Multitutility of Ventspils City (Latvia) is in charge of managing the urban district heating. In 2014 Ventspils Siltum commissioned W.T.E. to carry out the technical-economic feasibility study to revamp an existing furnace-boiler, originally designed to be fed by coal following Russian technology. To reduce coal consumption W.T.E. studied the conversion to RDF and/or biomass. To comply with European Environmental Norms (EEN) the project of a new suitable air cleaning system was included in the scope of work. W.T.E. delivered: Performance analysis of revamped boiler to verify co-firing possibilities Boiler and auxiliaries revamping design to allow RDF firing, RDF/coal or RDF/biomass co-firing New gas cleaning system designed to be in compliance with European Environmental Norms (EEN) Check of the energetic efficiency of the revamped system Preliminary evaluation of furnace behaviour fed with different fuels mixtures Budget of the initiative
354/14	2014	OCIS INDUSTRIES SRL	Ostiglia (MN) IT	Biomass to energy	Boiler, ORC-Organic Rankine Cycle	Basic Engineering	Project of a new plant section	W.T.E. delivered several basic projects, including thermodynamic and fluidodynamic calculation for diathermic oil boilers, to OCIS, a boiler manufacturer located in Mantova.
353/14	2014	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Engineering services	Project of a new plant section	W.T.E. delivered to ALSTOM engineering services related to the new DeSOx system to be installed downstream a 320 MWe utility boiler on the coal power plant in Litoral Almeria (ES).
346/14	2014	Carlo Gavazzi Impianti SpA	Marcallo (MI) IT	Biomass to Energy	Complete System	Engineering services	Offer engineering	W.T.E. provided Carlo Gavazzi Impianti with process engineering to draft offers for new biomass plants in Macchiareddu, Russi, Casei Gerola , final client Enel Green Power . W.T.E. delivered engineering services for approx. 1000 h.
344/14	2014	ALPI SPA	Modigliana (FC) IT	General industry	Combustion grate	Supply	Maintenance Services	In almost twenty years of activity, W.T.E. delivered on many occasions spare parts for combustion grate (bars) to ALPI SPA one of the most important Italian wood industries located in Modigliana (FC).
342/14	2014	E.S.E. Srl	Milano (MI) IT	CCPP	Complete System	Engineering services	Expertise	W.T.E. provided engineering services to E.s.e. Srl in order to support this client in evaluating Air Condensers to be installed on two Combined Cycle Power Plant in Middle East countries.
341/13	2013	TURBODEN SRL	Brescia (BS) IT	Biomass to Energy	Complete System	Engineering services	Expertise	W.T.E. delivered approx 2000 h of engineering to Turboden SpA .
340/13	2013	ETS Srl	Cameri (NO) IT	Waste to energy	Complete System	Feasibility study	Project of a new plant	W.T.E. delivered preliminary engineering of a small scale Waste to Energy plant to be realised in a special urban context.

339/13	2013	Luino Energia Srl	Luino (VA) IT	Biomass to Energy	Complete System	Whole project	Project of a new plant	Luino Energia Srl commissioned several engineering activities to W.T.E. in order to receive permit for the erection of a biomass plant near the city of Luino. Main plant parameters: 100% MCR - 8.9 MWth €“ electric power at generator terminal 2.38 MWe. Scope of work included: - verifying the expected energy efficiency; - defining the process, layout of the new plant and main components; - delivering drawings; - defining the dimension of civil structures; - preliminary cost estimation of each plant sections.
337/13	2013	Carlo Gavazzi Impianti SpA	Marcallo (MI) IT	Biomass to Energy	Flue Gas Cleaning System, Thermal cycle	Engineering services	Offer engineering	Carlo Gavazzi Impianti requested W.T.E. to deliver engineering services in order to complete the documents for tender concerning the thermal cycle (27 MWe) and the flue gas cleaning system of a new biomass to energy plant. W.T.E. calculated energy and mass balances both in- and off-design and delivered Process Flow Diagrams.
336/13	2013	EDIPOWER SPA - Gruppo A2A	S.S.Giovanni (MI) IT	Power plant	Boiler, Flue Gas Cleaning System, Furnace	Feasibility study	Revamping	Feasibility study to convert a furnace, fed by diesel oil, to RDF (Refuse Derived Fuel), throughput 150 MWe. W.T.E. designed a mathematical model based on characteristics of existing boiler and suitable to describe air suspended fuel burning and energy recovery in combustion chamber. Reduced steam thermodynamic parameters were assumed in order for the boiler tubes to sustain corrosion phenomena. Following, the off-design boiler operations were evaluated. New models describing actual performance with oil were tuned and validated. These models have been used after positive tests to describe new configurations. The design of a new RDF warehousing, the RDF handling, the choose of new suitable burning systems were also included in the scope of work. The new fuel required a deep performance analysis about the gas cleaning system. A modification of the existing equipment with new sections has been engineered in order to comply to more stringent rules on environmental emissions. A budget price of the revamping was also delivered.
335/13	2013	Luino Energia Srl	Luino (VA) IT	Biomass to Energy	Complete System	Engineering services	Engineering for permitting	Engineering services to receive GSE permitting for a 2.4 MWe Biomass to Energy plant.
334/13	2013	GIA - ATENA	Vercelli (VC) IT	Waste to energy	Process and combustion control system	Engineering services	Revamping	ATENA, owner of the wte plant in Vercelli, decided for a short revamping and a new start up of the incineration plant after a long inactivity period. W.T.E., who previously delivered the automatic combustion control for the three lines of incineration, was in charge of the start-up assistance and of training new operators in using the combustion control system.
333/13	2013	ACEGAS-APS SpA - Gruppo Hera	Padova (PD) IT	Waste to energy	Thermal cycle	Basic engineering	Revamping	Basic and Detailed Engineering to adapt the steam turbine and the thermal cycle of Padua MSW incineration plant to the district heating. ACEGAS APS, owner, appointed W.T.E. to study and design the delivery of heat from the existing thermal cycle to the future district heating. The evaluation had to be done considering all existing furnaces load recorded throughout the year. Moreover, W.T.E. had to verify the turbine steam bleeding suitability to guarantee the required DH thermal load. On the base of turbine drawings and endoscopic analysis, W.T.E. designed the modifications to be done on the turbine bleed to supply the required thermal power within the turbine operational safety ranges.
332/12	2012	CreSM c/o Università Politecnica delle Marche	Ancona (AN) IT	General industry	Energy recovery	Feasibility study	Research work	ABET Laminati SpA had high energy consumption in the processes: through CRESM as third party, the Company appointed W.T.E. to study the optimization of the existing combustion process and a new co-generative thermal cycle. The processed fuels are industrial by-products, very reach in ashes, which frequently plug furnace and boiler. W.T.E. delivered a feasibility study that concerned a new boiler, tail end type, cleaned by automatic hammering, a thermal cycle with a counter pressure turbine and a new gas cleaning system

331/12	2012	ACEGAS-APS SpA - Gruppo Hera	Padova (PD) IT	Waste to energy	Process and combustion control system	Basic engineering	Expertise	Evaluation of combustion process and control system of MSW incineration plant owned by ACEGAS-APS SpA in Trieste. The scope of work was to identify potential causes of abnormal consumption of natural gas connected to CO over production in one of three furnaces. W.T.E. studied the trend of the combustion and elaborated several energetic balances identifying the cause of consumption in an excessively low adiabatic degree of the combustion chamber which was not entirely suitable for waste with existing characteristics and for partial loads. W.T.E. recommended some measures to solve the reported problem.
330/12	2012	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Boiler	Design and supply	Revamping	Engineering and delivering of a steam blowing line for a 30 t/h boiler operating on a cogeneration biomass plant.
328/12	2012	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Boiler, Combustion grate	Engineering services	Maintenance Services	Dister Energia SpA, owner of a cogeneration biomass plant 24 MWth, fed by waste biomasses (grapes, kernels, straw) needed extraordinary maintenance services on pressure parts. W.T.E. carried on replacements of tubes in the superheater and minor maintenance on the refractory.
327/12	2012	Carlo Gavazzi Impianti SpA	Marcallo (MI) IT	Biomass to Energy	Complete System	Engineering services	Offer engineering	Carlo Gavazzi Impianti required an evaluation of its proposal of a new Biomass to Energy plant 50 MWth redacted in order to participate in an ENEL GREEN POWER tender.
326/12	2012	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Complete System	Feasibility Study	Project of a new plant	Dister Energia commissioned to W.T.E. a feasibility study for a co-generative, biomass plant, with 50 MWth capacity, applying the BAT (Best Available Technology).
325/12	2012	ALSTOM Power Italia Spa	Milano (MI) IT	General industry	Flue Gas Cleaning System	Feasibility study	Project of a new plant section	ALSTOM Power Italia SpA commissioned to W.T.E. an analysis about dioxin and furan, generated during the melting process into the steel mill electric arc furnace (EAF). The study was integrated by a preliminary project of different abatement plant sections.
324/12	2012	MASCIONI SPA	Cuvio (VA) IT	General industry	Complete System	Consulting	Troubleshooting and improvement project	MASCIONI SPA, manufacturer of textile products, requested W.T.E. the analysis about the power self-consumption of a proprietary cogeneration power plant. The report was needed in the context of the negotiation with GSE concerning incentives (feed-in tariff) about renewable sources.
323/12	2012	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Basic engineering	Offer engineering	W.T.E. delivered engineering services to support ALSTOM Power in offer engineering of a wet flue gas desulphurization system to be installed on the existing power plant in Craiova.
322/12	2012	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	FurnaceBoiler	Supply	Maintenance Services	W.T.E. delivered several spare parts (thermocouple) to Dister Energia Spa. Frequent customers as Dister turn to W.T.E. for urgent specific supplies.
321/12	2012	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Boiler	Engineering services	Maintenance Services	Dister Energia Spa, owner of a biomass cogeneration plant, appointed W.T.E. for the boiler refractories maintenance and for the boiler cleaning.
319/12	2012	CITTERIO SPA	Sirone (LC) IT	General industry	Complete System	Basic engineering	Performance Analysis	W.T.E. was required to study and test: the maximum allowable thermal flux in a furnace fed by wood dusts the performance of HRSG the performance of the existing gas cleaning system and auxiliaries. The Client, Citterio SPA, is a well-known furniture manufacturer located in Sirone, Lecco.
318/12	2012	O.ME.R. SRL	Fonni (NU) IT	Biomass to Energy	Complete System	Feasibility study	Project of a new plant	The client OMER Srl was involved in the project of a new biomass to energy plant to be realised in Sardinia. The furnace thermal flux would be 49 MWth. W.T.E. prepared the prefeasibility study required for permitting.
317/12	2012	Distilleria D.E.T.A. Srl	Barberino V. (FI) IT	General industry	Thermal cycle	Preliminary study	Project of a new plant	Preliminary study of a new thermal cycle and steam turbine capacity 1MWe. The distillery, D.E.T.A. located in Barberino Val d'Elsa, wanted to use its grapes residues and lees for energetic purposes.

316/12	2012	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Basic Engineering	Revamping	The aims of the project in which ALSTOM involved W.T.E were: -the conversion of the Circulating Fluidized Bed (CFB), originally designed to operate on coal firing, to a fuel mix (predominantly biomass: green waste and forestry woodchip) and -the downgrade from 250 MWe to 170 MWe. The biomass plant was installed in France. Scope of work of W.T.E's engineering was to deliver process calculation and machinery dimensioning of the new Flue Gas Cleaning System.
313/12	2012	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Boiler	Design and supply	Revamping	Ecoesto Spa, a Falck Renewables's company, commissioned to W.T.E. the design and supply of a new hammers cleaning system to be installed on the biomass boiler of the power plant (49 MWth) located in Rende (Italy). W.T.E.'s scope of work was supplying and super visioning the installation of the new system replacing the one already existing but damaged.
312/12	2012	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Engineering services	QA/QC services	ALSTOM POWER Italia required the provision of QA/QC engineering services. The quality plan referred to a Project of an upgrading of desulphurisation system on an existing waste to energy plant (Brescia). The main scope of work included reducing emissions of sulphur oxides (SOx) at the stack and optimising the consumption of chemicals in the meantime. W.T.E. studied the applicability of internal quality management system procedures to specific projects. In a second phase W.T.E. issued a Project quality plan complying with ISO 10005.
311/12	2012	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Process and combustion control system	Supply	Maintenance Services	W.T.E. carried on a process equipment supply for the biomass plant owned by ECOSESTO Spa.
310/12	2012	HASCON Engineering	Legnano (MI) IT	Waste to energy	Flue Gas Cleaning System	Basic engineering	Project of a new plant section	W.T.E. studied and delivered to Hascon Engineering the dimensioning of a spray dryer and technical specifications of washing towers to be provided to foreign client.
309/12	2012	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Ashes, Dust, Slag	Engineering services	Maintenance Services	Functional testing of mechanical hammer cleaning system installed on a biomass to energy plant.
308/11	2011	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Process and combustion control system	Basic Engineering	Expertise	GEOFOR Spa, owner of the incineration plant in Pisa appointed W.T.E. to study the optimization of the combustion delivering a whole control system to reduce the emission of pollutants. The plant had 2 lines, 15 MWt each, fed by MSW/RDF. The implemented logic enhances the level of quality and quantity of combustion by means of a better distribution as well as quantitative control of the primary air under grates and of the control of the movement of the grate section which was automatically regulated on the base of waste characteristics.
307/11	2011	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Boiler	Engineering services	Maintenance services	Dister Energia Spa is the owner of a biomass plant with 24 MWth capacity, whose furnace was designed and constructed by W.T.E. Knowing W.T.E.'s reliability and timeliness in providing engineering services the Client requested a maintenance operation on SH and tube walls, including the issue of reports and final certifications for public Authorities.
305/11	2011	Ital Green Energy Srl - Gruppo MARSEGLIA	Monopoli (BA) IT	Biomass to Energy	Complete System	Feasibility study	Project of a new plant	The feasibility study elaborated by W.T.E. was commissioned by Ital Green Energy a Group Marseglia company with the purpose of receiving a preliminary description of a new cogeneration plant fed by a biomass mixture composed of olive-pomace and wood chips. The new plant would be positioned in the area of the holding in Monopoli (BA) and its capacity would be 90 MWe to be entirely sent to the national grid.

303/11	2011	MASCIONI SPA	Cuvio (VA) IT	General industry	sludge treatment	Feasibility Study	Expertise	A feasibility study was carried out to evaluate, both from economic and technical point of view the possibility to dry organic and industrial slurry to feed the 51.7 MWth coal boiler as an alternative to coal. Mascioni Spa, co-generative power station, Cuvio (VA): Some plant figures: -Maximum Continuous Rate (MCR): 51.7 MW -Maximum gross power at generator terminals (without bleeding full electric) 13.0 MWe -Maximum gross power at generator terminals (with bleeding full co-generation) 7.3 MWe + 31 MWth The study included: - boiler behaviour in case of dry slurry feeding - Identify the BAT (Best Available Technology) to dry slurry - Carry out preliminary balances, dimensioning and layout studies.
302/11	2011	ATZWANGER SPA	Bolzano (BZ) IT	Waste to energy	Boiler	Expediting	Project of a new plant	W.T.E. was appointed to carry out expediting, quality control and engineering review for the new fired boiler, 60 MWth of capacity, to be installed on the MSW incineration plant in Bolzano. The boiler was mainly manufactured in India.
299/11	2011	OCIS INDUSTRIES SRL	Ostiglia (MN) IT	Waste to energy	Boiler	Basic engineering	Project of a new plant section	Stress analysis calculation on boiler nozzles
298/11	2011	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Process and combustion control system	Basic engineering	Expertise	Tuning of a SNCR DeNOx system in a biomass plant - Faenza - Dister Energia.
297/11	2011	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Thermal cycle	Basic engineering	Project of a new plant section	W.T.E. designed a new lay out of wte cooling towers, also delivering structural design of related reinforced concrete platform. Client: A.Am.P.S. Spa Livorno
296/11	2011	VEOLIA- Vercelli Energia SpA	Vercelli (VC) IT	Waste to energy	Process and combustion control system	Basic engineering	Revamping	After the start-up of the MSW incineration plant in Vercelli and some years of running, , the plant management needed an additional support to optimize the combustion control system, previously delivered by W.T.E., due to the increased variability of the urban waste composition and higher heating value, caused by the spot presence of hazardous waste. Operators required for solutions to avoid furnaces damages and to prevent exceeding pollutant emission limits in case of waste composition fast changing. With further information on waste compositions W.T.E. elaborated and successfully implemented additional schemes and procedures in order to comply with Customer requests. The plant was owned by Vercelli Energia and managed by Veolia.
295/11	2011	ACEGAS-APS SpA - Gruppo Hera	Padova (PD) IT	Waste to energy	Furnace	Design and supply	Revamping	Design, engineering and installation of gas piping, regulating valves and five natural gas burners on lines 1 and 2 of the waste to energy plant owned by ACEGAS-Aps, in Padova.
293/11	2011	MONCADA ENERGY GROUP	Agrigento (AG) IT	Biomass to Energy	Boiler, Process & Combustion Control	Consulting	Expertise	Moncada Energia, owner of a biomass plant, capacity 15,3 MWth per 3 lines, asked to W.T.E. a consulting concerning the analysis of main problems arisen during the run and the review of the complete system with a new process combustion and control system. W.T.E. studied malfunctionings and delivered a preliminary project with improvements and budget.
289/11	2011	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Process and combustion control system	Basic engineering	Up-grade	Engineering development of booster fans and related control logics in two lines, fluidized bed, of municipal solid waste Incineration plant of Macomer (NU), plant managed by TOSSILO Spa.

288/11	2011	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Flue Gas Cleaning System	Design and supply	Revamping	W.T.E. obtained the contract for a major revamping of the MSW incineration facility owned by AEM Gestioni Srl, now a partner of A2A. The object of the tender was design, supply, install and start-up of: - high Dust SCR DeNOx unit, installed downstream of an existing SNCR system - insertion of a second boiler downstream first, in order to control rough gas temperature, - replacement of semidry lime absorber system with dry sodium bicarbonate, including mills and dosing system, - insertion of a gas-water economizer connected to the district heating network in order to optimize energy efficiency.
287/10	2010	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Process and combustion control system	Basic engineering	Up-grade	Development of a software for the predictive monitoring of boiler fouling to: adjust in real-time of the soot blowing cycles; predict concretions and build-up; schedule plant downtime for cleaning operation. W.T.E. provided software to process boiler bundles thermodynamic data in order to advice operators about fouling.
286/10	2010	STC Srl	Forlì (FC) IT	Sewage treatment plant	Combustion Control System	Design and supply	Project of a new plant	Design, engineering, start-up and testing of a new control system, to be applied on an anaerobic digestion plant, on following biogas handling and on related burners, already installed in a biomass furnace.
285/10	2010	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Feeding system, Furnace	Basic Engineering	Troubleshooting and improvement project	W.T.E. provided to the Client, TOSSILO Spa, the project of a new grinding & feeding system to be installed on the existing incineration plant, in Macomer (Sardinia). The new feeding system was required suitable for non sorted waste brought to the plant with large dimension. The project developed opted for a significant modification of the existing feeding system; technical specifications of a grinding machinery for bulky waste and a grinding one for irrecoverable waste were defined.
284/10	2010	DISTER ENERGIA SpA	Faenza (FC) IT	Biomass to Energy	Complete System	Engineering services	Training	W.T.E. organised a training course which would prepare the operators to the conduction of the plant. The course was focused on three items: combustion and control of pollutant emission; combustion diagram combustion control and steam production.
283/10	2010	STC Srl	Forlì (FC) IT	Biomass to Energy	Process and combustion control system	Consulting	Technical-functional test	Combustion tests at the start up plant
282/10	2010	MASCIONI SPA	Cuvio (VA) IT	Power plant	Boiler, Flue Gas Cleaning System, Thermal cycle	Whole project	Revamping	Mascioni S.p.A. (Cuvio-VA), an important Italian yarn-dyeing factory, appointed W.T.E. to design and engineer the way to substitute coal for PKS (Palm Kernel Shell) and dried sewage sludge in its 50 MWth boiler. The boiler had to deliver superheated steam (455 °C e 64 bar) to a co-generative thermal cycle, including a new full condensing turbine. A full electric configuration was preferred, although also a steam bleeding was considered, in order to support, if any, the industrial process. A yearly biomass consumption of 112000 t (8000 h/y) has been foreseen. In the ambit of the job W.T.E. has designed handling and feeding systems of new fuels, verified the combustion chamber shape and residence time, explored all the combustion auxiliaries suitability and delivered a project of a new gas cleaning system. The new power plant will be designed to operate independently from the main production process, therefore the installation of three auxiliary boilers (shell boilers) fed by natural gas was foreseen, in order to satisfy the need of steam from the facility, both for integration and emergency. These equipment will replace two old existing boilers.
281/10	2010	MASCIONI SPA	Cuvio (VA) IT	Power plant	FurnaceBoiler	Design and supply	Revamping	Design and installation of a new dust recirculation system

280/10	2010	ASJA Ambiente Italia	Rivoli (TO) IT	Biomass to Energy	Complete System	Feasibility study		Preliminary feasibility study for revamping of an obsolete Biomass to Energy plant
279/10	2010	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Furnace/Boiler	Feasibility study	Up-grade	Modifications of existing lines, with installation of booster fans. W.T.E. was ordered to deliver a feasibility study of the upgrade of booster fans allowing the discharge of combustion fumes, one fan for each line of the incineration plant with fluidised bed technology in Macomer. In the project the new fans are placed before the existing ones and put between the way out of bag filter and the entrance into the SCR reactor. W.T.E. delivered the control logics of the whole system.
278/10	2010	MASCIONI SPA	Cuvio (VA) IT	General industry	Process and combustion control system	Basic engineering	Troubleshooting and improvement project	W.T.E. was appointed to study the combustion process of an existing coal fired furnace, 50 MWth, in the aim to improve the efficiency. Due to the presence of unburnts in the ashes, the study included analysis and possible technical solutions allowing the maximum exploiting of energy content of the fuel. The furnace was installed on the power plant providing energy to the industrial area of MASCIONI Spa, textile manufacturer, in Cuvio (VA)
276/10	2010	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Process and combustion control system	Basic engineering	Troubleshooting and improvement project	W.T.E. delivered to TOSSILO Spa project of a new combustion control system in order to allow the maximum reduction of pollutant emission, especially CO and TOC emissions, of the incineration plant in Macomer operating with two fluidised bed furnaces. The analysis and tests made by W.T.E. specialists pointed out some critical aspects of the process (the lay out of the plant, existing control logics, load variation impacts) and technical proposals were reported to the Client.
275/10	2010	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Complete System	Feasibility study		TOSSILO Spa, owner of the MSW incineration plant in Macomer, appointed W.T.E. to draft the technical and economical prefeasibility study giving: - the lay out and the dimensioning of a new incineration plant with 30 MWth capacity, to be built in the area of the existing one, operating with two fluidised bed furnaces; - grate combustion system providing an yearly average thermal flux of 28 MW. W.T.E. delivered: a general lay out, a preliminary dimensioning of the main sections of the plant and their process three different solutions of lay out and sections.
273/09	2009	POWERCROP Spa- Gruppo Falck	S.S.Giovanni (MI) IT	Biomass to Energy	Complete System	Basic engineering	Engineering for permitting	W.T.E. was appointed to design and engineer a biomass plant, 18.7 MWe of capacity, in order to obtain public permission to build the plant and to deliver electric and thermal energy. This project was part of the initiative finalized to convert into an energy plant the Eridania-Sadam sugar mill, installed in Castiglion Fiorentino. The project included: biomass power station with 23 MWth and 7,5 MWe (full electric), fed by wood chips and oil seeds residues, with the possibility to deliver upto 8 MWth in co-generative running, reciprocating engine with 11,2 MWe capacity, fed by vegetal oil from sunflower seeds squeezing, sunflower seeds squeezing and handling system, auxiliary photovoltaic system
272/09	2009	ACTAGRI Srl - Falck Renewables Spa	S.S.Giovanni (MI) IT	Biomass to Energy	Complete System	Feasibility study		Comparison between the traditional HP steam Rankine cycle and ORC (Organic Rankin Cycle), with particular reference to small Biomass to Energy plants (1 MWe).
271/09	2009	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Complete System	Feasibility Study		A.Am.P.S., owner of the incineration plant in Livorno, ordered to W.T.E to develop the technical feasibility study of the removal of the existing steam condenser and of the erection of the new one with improved performances.

269/09	2009	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Complete System	Design and supply	Revamping	Ecosesto SpA, coordinated by Actelios Spa, ordered to W.T.E. the design and the supply of a superheated steam boiler and auxiliary equipment for a power plant, located in Rende (Italy), fed by wood chips and olive residues. The plant was undergoing a complete revamping system in order: 1) to increase efficiency of energy recovery and 2) to allow complying with the requirements of European Union regulations concerning the obtaining of the status of IAFR (Plant fed by renewable fuels) basing on Italian regulations. W.T.E. replaced the convective pass of existing boiler, supplying new convective bundles (economizers, evaporators, superheaters), designed according to the new operating conditions. Moreover, a new low temperature economizer was added. The air/fumes exchanger used to preheat combustion air has been replaced. A new shell and tube heat exchanger has been installed. Additional interventions concerned 1) the supply of a new thermo-physical degasser 2) improvements to the furnace and the radiating pass such as: replacement of the slag discharge hopper; renewal of the refractory lining.
268/09	2009	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Complete System	Whole project	Project of a new plant section	Detailed engineering, new slag transportation system
267/09	2009	ACTELIOS SPA- Falck Renewables Spa	S.S.Giovanni (MI) IT	Biomass to Energy	Complete System	Basic engineering	Engineering for permitting	Actelios Spa, company owned by Falck Renewables Spa, commissioned to W.T.E. Waste To Energy the design of a biomass cogeneration plant with 17 MWe-60 MWth capacity. Scope of the work was to obtain permitting named AIA and VIA from public authorities in Torremaggiore (FG) The high efficiency power plant would be fed by lignocellulosic biomass and would consist in a water steam Rankine cycle. The mixture of biomasses would be constituted by green cutting wood and miscellaneous of production wastes and by-products (trimming of vineyards and olive groves, pomace, grapes, straw) for a total amount of 190000 t/y. The energy produced would be delivered to the national grid at high tension 150 kV.
266/09	2009	VEOLIA- Vercelli Energia SpA	Vercelli (VC) IT	Waste to energy	Process & Combustion Control System	Basic engineering	Revamping	VEOLIA entrusted W.T.E. with troubleshooting the excessive CO levels in the exhaust gas, measured at the unique stack, used by three lines. The plant was owned by Vercelli Energia and managed by VEOLIA. W.T.E. designed and delivered a combustion control system, to be implemented on an existing DCS, and supplied all necessary new instruments. The control logics were implemented, without plant shut down, on 3 lines, each of them with different capacity. All single grate section frequency was coordinated with ram feeder stroke and frequency as well as the distribution of combustion air along the grates length. Secondary and tertiary air was controlled in order to optimize combustion in a way to minimize CO pollutions. The project included fine tuning and training of plant operators and managers.
265/09	2009	COMART GRUPPO TOZZI	Ravenna (RA) IT	Biomass to Energy	Complete System	Basic Engineering		Basic Engineering including technical specifications for a new Biomass Plant with an installed power of 50 MWt, fed by wood chips and olive oil residues. Location : Reggio Calabria
264/09	2009	VEOLIA Servizi Ambientali Tecnitalia Spa	Vercelli (VC) IT	Waste to energy	Complete System	Feasibility Study		Pre-feasibility study of the conversion of the combustion system installed on the incineration plant from owned by Veolia Servizi Ambientali Tecnitalia Spa in Gioia Tauro (RC). The existing fluid bed furnaces were fed with RDF and they would be transformed into moving grate furnaces fed with MSW. The capacity of the plant was 49 MWth. W.T.E. delivered the study including the description of all modifications to be realised on the main sections of the plant.
263/09	2009	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Complete System	Engineering services	Troubleshooting and improvement project	Adjustment of the venturi meters.

262/08	2008	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Biomass to Energy	Complete System	Engineering services	Engineering for permitting	In order to comply with European and Italian law and regulations concerning renewable energy sources, Ecostesto Spa required to W.T.E. the issue of all technical documents to obtain the authorisation for the major revamping of its biomass power plant installed in Rende (Italy).
261/08	2008	COMER Engineering Srl	Maserada s. P. (TV) IT	Waste to energy	Complete System	Feasibility Study		Comer Engineering Srl committed to W.T.E. a feasibility study for a new MSW incineration plant with energy recovery, 25 MWth, to be realised in Seychelles islands.
260/08	2008	TERMOKIMIK SPA	Milano (MI) IT	Waste to energy	Complete System	Feasibility study	Project of a new plant section	Preliminary design of the flue gas cleaning system for the project of the new incineration plant to be realised in Salerno.
258/08	2008	STC Srl	Forlì (FC) IT	Geothermal	Complete System	Engineering services	Troubleshooting and improvement project	Troubleshooting of conveyor belt on Geotermia plant located in Ferrara.
256/08	2008	FIRE ENERGY Srl	Conegliano V. (TV) IT	Biomass to Energy	Complete System	Feasibility Study		W.T.E. delivered to FIRE ENERGY SRL a feasibility study of a biomass to energy plant 30MWth to be installed in Sedegliano (Friuli V.G.).
255/08	2008	ECOSESTO SPA- Falck Renewables Spa	Rende (CS) IT	Waste to energy	Complete System	Engineering services		Engineering service assistance for a MSW incineration plant in Fusina
254/08	2008	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Complete System	Basic Engineering		Geofo Spa -Pisa Incineration plant 2 lines x 15 MWt Design of two isolating dampers for loading waste chutes.
253/08	2008	STC Srl	Forlì (FC) IT	Biomass to Energy	Process & Combustion Control System	Basic Engineering	Project of a new plant	Coordination of Distributed Control System (DCS) engineering
252/08	2008	TERMOKIMIK SPA	Milano (MI) IT	Waste to energy	Complete System	Basic Engineering		W.T.E. prepared technical specifications necessary for the project of a new receiving and grinding system of bulky waste, in the waste to energy plant owned by ACEGAS Aps- Padova.
249/07	2007	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Complete System	Design and supply	Revamping	ALSTOM Power Italia ordered to W.T.E. the engineering, the construction and delivering of a second gypsum slurry diverter for a desulphuration system installed on the Power plant "Centrale Thermique de Provence", fed by coal, located in Meyreuil, France
248/07	2007	SE.VER.A. spa	Castelnuovo G.na (LU) IT	Biomass to Energy	Complete System	Feasibility Study		Biomass/RDF energy system composed by 2 x 30 MWt furnaces. Design of air treatment system according to best available technology (BAT) Il progetto proposto ha previsto due linee da 17 MWt ciascuna, per la termovalorizzazione di biomasse costituite da legno non trattato, proveniente dalle operazioni di pulizia dei boschi, tale da permettere l'erogazione a pieno carico di circa 9 MWe lordi. Inoltre, il sistema Ã stato dotato di un sistema di depurazione fumi tecnologicamente avanzato per un eventuale intervento dell'impianto di trattamento RSU limitrofo.
247/07	2007	MAIRE TECNIMONT SPA	Milano (MI) IT	Waste to energy	Complete System	Basic Engineering		W.T.E. supported MAIRE Tecnimont in offering for the new MSW incineration plant in Gerbido (Torino); technical specifications were delivered.
244/07	2007	ATZWANGER SPA	Bolzano (BZ) IT	Waste to energy	Complete System	Whole project	Revamping	W.T.E. signed a contract with ATZWANGER AG for the design of two boilers (20 tons/hour steam, T=370 C°, p=36 bar), to be installed at the AAMPS Livorno incineration plant. The contract included the expediting activity, the design of the combustion control system and the training of operators and management of the plant.

243/07	2007	STC Srl	Forlì (FC) IT	Biomass to Energy	Complete System	Design and supply	Project of a new plant	Design, manufacturing, supply start up and commissioning of a 24 MWt furnace fed by wasted biomass (wood chips, wine production waste, straw, kernel and stones), including auxiliaries and Process & Combustion Control. Maximum Quantity of biomasses to be burnt: 10 tonnes hour of grapes harvest and winery by-products at 1850 kcal/kg. LHV shall be in the range 1850-3000 kCal/kg. The main focus of furnace design was the optimization of its adiabatic grade, thus allowing the processing of fuels with low energy content while still reaching optimal post-combustion (temperatures higher than 900 °C and controlled oxygen content). It has to be remarked that a high adiabatic grade (95% in this case) allows for burning fuels with a LHV as low as 1850 kCal/kg.
242/07	2007	AEM Gestioni Srl	Cremona (CR) IT	Sewage treatment plant	Complete System	Feasibility Study		Study to ascertain the viability of disposing organic sludges from a nearby waste water treatment facility on the two lines of Cremona incineration facility. The solutions proposed by W.T.E. were tested on field. W.T.E. indicated main benefits obtained from co-combustion of sewage sludges with MSW : recovery of energy content of sewage sludges; total sanitization and final disposal of organic waste; significant reduction of weight and volume of waste to landfill and reduction of costs.
240/07	2007	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Complete System	Design and supply	Revamping	Development of detailed engineering related to revamping of Cremona MSW incineration line 1 and supply of the new concept variable pressure auxiliary boiler.
238/06	2006	ENERGIA FUTURA	Travagliato (BS) IT	Biomass to Energy	Complete System	Design and supply	Project of a new plant	Design and supply of a Biomass to Energy system (installed power 1 MWe). Scope of supply including: boiler, condenser, degaser, auxiliary systems.
237/06	2006	GRUPPO HERA	Modena (MO) IT	Waste to energy	Complete System	Engineering services	Maintenance services	Multiple measurements of wall thickness on the MSW incineration plant in Modena, owned by Gruppo Hera. The measurements were made on the three lines, after the request of the management.
236/06	2006	TRANSFOREST Srl	Villesse (GO) IT	Biomass to Energy	Complete System	Feasibility Study		Transforest Srl ordered to W.T.E. the preliminary technical report about a proposal of a 24 MWt biomass furnace to be submitted to Public authorities in order to receive the permit to build the plant. The plant should be mainly fed by green wood, wood scraps, but it is also designed to burn miscanthus.
235/06	2006	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Complete System	Feasibility Study		Analysis of Fluidized bed malfunctioning Feasibility study for the replacement of the existing fluidized bed furnace on Line 2 of the Macomer Waste-to-Energy Plant (TOSSILO S.p.A.) with a non-adiabatic grate furnace integrated with the steam generator. The revamping project provided by W.T.E. proposed modifications aimed at achieving improved environmental and operational performance: -Reduction of carbon monoxide (CO) emissions; -Increase in plant performance in terms of superheated steam production, due to the lower flue gas exhaust temperature and the higher throughput of processed waste; -Enhanced plant availability and reduced operating and maintenance costs, thanks to the decreased particulate content in the flue gases.
231/06	2006	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Complete System	Feasibility study		Development of an innovative system to control exhaust flue gas temperature and replacement of the existing lime milk gas reactor with a dry sodium bicarbonate reactor.
230/06	2006	PROAMBIENTE	Plaus (BZ) IT	Biomass to Energy	Complete System	Feasibility study		2,5 MWe wood chips Biomass to Energy system

229/06	2006	PROAMBIENTE	Plaus (BZ) IT	Biomass to Energy	Complete System	Feasibility study		1 MWe wood chips Biomass to Energy system. Chips from a short rotation forestry
227/06	2006	MA&D Power Engineering SpA	S.S.Giovanni (MI) IT	Biomass to Energy	Complete System	Feasibility study		Biomass to Energy system, based on two 12 MWt lines supplying 5 MWe plus additional power to a district heating system.
226/06	2006	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Complete System	Engineering services		W.T.E. delivered engineering services for support ALSTOM in edition of the handbook of erection of new flue gas cleaning system of the wte plant in Parona Lomellina (PV).
225/06	2006	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Complete System	Consulting	Expertise	GEOFOR SPA required a cost estimate of a new plant
224/06	2006	MASCIONI SPA	Cuvio (VA) IT	Power plant	Complete System	Engineering services	Maintenance Services	MASCIONI SPA ordered W.T.E. to provide the on-line cleaning service on the furnace and the boiler of the cogeneration plant existing on the industrial area, Cuvio (VA).
221/06	2006	PROAMBIENTE	Plaus (BZ) IT	Biomass to Energy	Complete System	Feasibility Study		Proambiente GmbH required W.T.E. to deliver a feasibility study for authorisation to realise a biomass plant fed with wood chips and fowl manure for the production of 1MWe.
220/06	2006	ANSALDO CALDAIE SPA	Gallarate (VA) IT	Power plant	Complete System	Procurement		Ansaldo Caldaie SpA ordered to W.T.E. the engineering activity related to a new system to remove flying ashes in dense phase on a coal energy plant, 2 x 150 MW lines in Mohammadia, Morocco.
219/06	2006	GRUPPO HERA	Ravenna (RA) IT	Waste to energy	Complete System	Engineering services	Maintenance services	W.T.E. signed a two-year contract with Ecologia Ambiente- Gruppo Hera whose object was the on-line cleaning service for the MSW incineration plant in Ravenna.
218/06	2006	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Complete System	Engineering services	Maintenance Services	GEOFOR SpA required the on-line cleaning of the furnace-boiler system on the MSW incineration plant to W.T.E..
216/06	2006	AGSM VERONA SPA	Verona (VR) IT	Waste to energy	Complete System	Engineering services	Maintenance Services	W.T.E. was required to deliver cleaning operation on the lime milk reactor installed on line 1 and 2 of the MSW incineration plant- AGSM in Verona.
215/06	2006	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Complete System	Engineering services	Maintenance Services	AEM Gestioni Srl and W.T.E. signed an annual contract for on-line cleaning of boilers existing on the incineration plant in Cremona. This system allowed to carry out the cleaning activity during the running of the plant and to avoid the complete shut down. The boilers and furnaces were cleaned thanks to controlled explosions of bags filled by gaseous mixture.
214/06	2006	GRUPPO HERA	Ravenna (RA) IT	Waste to energy	Complete System	Engineering services	Maintenance Services	W.T.E. delivered maintenance services to the incineration plant managed by Hera in Ravenna. The plant needed an operation of on-line cleaning on the boiler of the line 1.
212/06	2006	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Complete System	Design and supply	Project of a new plant	ALSTOM Power Italia ordered to W.T.E. the engineering and the construction of a gypsum slurry diverter to be installed on SNET "Emil Huchet" coal power central, Saint Avold, France.
211/06	2006	MASCIONI SPA	Cuvio (VA) IT	Power plant	Complete System	Engineering services	Maintenance services	W.T.E. provided the on-line cleaning of the boiler installed on the power plant owned by MASCIONI SPA, by the Bang & Clean system.
209/06	2006	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Complete System	Whole project	Project of a new plant section	W.T.E. carried out the design of a new parallel flow water steam superheaters (SH) for the existing boilers (2 x 17.5 tons/hour of steam) on the incineration plant owned by GEOFOR SPA. This solution was required in order to reduce the recorded heavy corrosions on the tubes due to chlorine acid action.
208/06	2006	LEDOGA SRL - Gruppo Silvateam	S.Michele M.vi (CN) IT	Biomass to Energy	Complete System	Feasibility Study		LEGOGA Srl, a company of Silvateam Group, needed to study the replacement of the existing old furnace (Breda) with a new one operating with a mobile combustion grate. W.T.E. delivered design and thermodynamic calculations.
206/05	2005	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Complete System	Engineering services		Technical and economical alignment of bids for new SCR DeNOx and dry sodium bicarbonate systems, AMSA Milano "Silla 2" MSW incineration plant

205/05	2005	SE.VER.A. spa	Castelnuovo G.na (LU) IT	Waste to energy	Complete System	Feasibility Study		Se.Ver.a. ordered to W.T.E. the feasibility study for the replacement of the furnace of the existing incineration plant in Castelnuovo G.na (LU)
204/05	2005	GEOFOR SPA	Pisa (PI) IT	Waste to energy	Complete System	Consulting	Expertise	Consulting on Electrical Energy Production in a MSW plant
203/05	2005	AGSM VERONA SPA	Verona (VR) IT	Waste to energy	Complete System	Engineering services	Maintenance services	On line cleaning treatment for the maintenance of the reactor installed on the line 1 of the incineration plant managed by ACEGAS in Verona.
200/05	2005	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Complete System	Engineering services		W.T.E. provided engineering services to ALSTOM for the project of a new flue gas treatment and fly ash storage package unit to be installed on the line 2 of the waste to energy plant in Parona L.na (Pavia)
199/05	2005	ECOLOGIA AMBIENTE Spa	Ravenna (RA) IT	Waste to energy	Complete System	Engineering services	Maintenance services	On-line cleaning of line 1 boiler installed on the MSW incineration plant in Ravenna, managed by Ecologia Ambiente Spa.
198/05	2005	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Complete System	Design and supply	Revamping	"Major improvements to the thermal cycle, AAMPS Livorno MSW incineration plant.
197/05	2005	M.E.T.A. Spa - Gruppo Hera	Modena (MO) IT	Waste to energy	Complete System	Engineering services	Maintenance services	From 2002 to 2005 W.T.E. provided to M.E.T.A. Spa many interventions of ordinary maintenance of the furnace-boiler system. These maintenance operations were realised on the three lines of the waste to energy plant sited in Modena. Maintenance services included: cleaning on line by Bang & Clean system of boilers and degasers; Measurement of wall thickness, corrosion and residual life evaluation, steam boiler tubes; Development of technical specifications for replacement of boiler evaporator, convective section.
196/05	2005	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Complete System	Basic Engineering		Preliminary design and technical specification write-up for a new SCR DeNOx system and replacement of the existing dry lime system with a new sodium bicarbonate one, AMSA Milano "Silla 2" MSW incineration plant
195/05	2005	AGSM VERONA SPA	Verona (VR) IT	Waste to energy	Complete System	Engineering services	Maintenance services	W.T.E. provided the on-line cleaning of line 1 of the boiler installed on the incineration plant managed by AGSM VERONA, by the Bang & Clean system.
194/05	2005	TOSSILO SPA	Macomer (NU) IT	Waste to energy	Complete System	Basic Engineering		Progetto di rifacimento del sistema di depurazione fumi esistente (portata fumi 25.000 Nm3/h) sul termovalorizzatore a letto fluido di Macomer (NU). Ingegneria di base completa di specifiche tecniche per la realizzazione di due filtri a maniche, di due sistemi in circuito chiuso di preriscaldamento e di bypass fumi, del sistema di estrazione/scarico ceneri, degli strumenti per analisi di controllo delle polveri, dei relativi circuiti elettrici.
193/05	2005	IBI SPA	Napoli (NA) IT	Waste to energy	Flue Gas Cleaning System	Whole project	Project of a new plant section	IBI Spa ordered to W.T.E. the development of complete engineering of the air treatment system (reactor and Venturi) to be installed on the MSW incineration plant, owned by CASIC, in Cagliari.
192/05	2005	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Complete System	Consulting	Troubleshooting and improvement project	Analysis of failures in MSW preselection screens and belt conveyors; Milano Zama facility
190/05	2005	CORE SPA	S.S.Giovanni (MI) IT	Waste to energy	Complete System	Engineering services	Maintenance services	W.T.E. provided the on-line cleaning of line 2 of the boiler installed on the incineration plant managed by CORE Spa, by the Bang & Clean system.
189/05	2005	A.AM.P.S. SPA	Livorno (LI) IT	Waste to energy	Complete System	Feasibility Study		Troubleshooting and availability improvement of the thermal cycle installed on incineration plant owned by A.AM.P.S. in Livorno (turbogenerator 6.7 MWe gross). Following this study W.T.E. received the order to carry out the revamping of thermal cycle and auxiliaries.

188/05	2005	SE.VER.A. spa	Castelnuovo G.na (LU)IT	Waste to energy	Complete System	Feasibility Study		W.T.E. was entrusted to study the replacement of the existing furnace system of the MSW incineration plant managed by SE.VER.A in Castelnuovo G.na. The object of the prefeasibility study was to indicate: - the project of converting the existing furnace by its modification from "adiabatic" to "non adiabatic" ,with the minimum adaptation of the other sections of the plant; -the project of a new furnace with higher thermal flux (9,3 MWth) and the evaluation of the impact on other sections after the subsequent increase in power.
186/05	2005	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Complete System	Design and supply	Revamping	W.T.E. delivered the design, the construction and the installation of a new economizer for the boiler existing on the line n.1 of the waste to energy plant owned by AEM Gestioni in Cremona.
185/05	2005	ASTER SPA	Cinisello B. (MI) IT	Waste to energy	Complete System	Consulting	Troubleshooting and improvement project	During the start-up and operational tuning of the new air treatment system installed on the MSW incineration plant owned by ACSM (CO), the supplier detected some defects and malfunctionings. W.T.E. delivered to Aster, the supplier, the study of the process in which the origin of failures were identified and possible solutions were suggested.
184/05	2005	ATENA SPA	Vercelli (VC) IT	Waste to energy	Complete System	Consulting	Troubleshooting and improvement project	Consulting - on a continuous basis - on few critical items in the management and performances of the MSW incineration plant, located in Vercelli and operated by Termomeccanica Group on behalf of the municipal company ATENA, the owner.
179/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Engineering services		W.T.E. delivered engineering services developing the risk analysis (HAZOP) of the DeSOx system realised and installed by ALSTOM on the French coal power plant SNET -Saint Avold.
178/04	2004	TECNOCASIC SPA	Cagliari (CA) IT	Waste to energy	Furnace	Whole project	Project of a new plant section	TECNOCASIC had to realise the revamping of MSW incineration plant located in Cagliari neirbourough in order to comply with environmental Italian law. Main sections of plants were replaced after new design of all the system. W.T.E. was required to deliver the basic engineering, thermodynamic calculation of new process, and detailed engineering for the reconstruction of two grate furnaces. W.T.E. designed the modification of furnaces from"adiabatic" to "non adiabatic".
177/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Engineering services		ALSTOM Power Italia required to W.T.E. to provide electric instrumental engineering services delivering technical-economical analysis for a project of refurbishment of a coal power plant SNET - Saint Avold, France.
176/04	2004	FUEL TECH	Gallarate (VA) IT	Waste to energy	Flue Gas Cleaning System	Design and supply	Revamping	FUEL TECH Engineering ordered to W.T.E. the complete project, the construction and transport of two urea-NH3 reactors to be installed on a MSW incineration plant, Brest (France)
175/04	2004	IBI SPA	Napoli (NA) IT	Waste to energy	Flue Gas Cleaning System	Basic Engineering	Project of a new plant section	Engineering of the air treatment system (replacement of the existing semi-dry with a dry APC), CASIC Cagliari MSW incineration plant. New control logics of combustion.
174/04	2004	ASTER SPA	Cinisello B. (MI) IT	Waste to energy	Flue Gas Cleaning System	Startup & Commissioning		Aster advisor, commissioning of the ACSM Como MSW incineration plant air treatment system (two lines including calcium bicarbonate, SCR DeNOx systems and scrubber). W.T.E. led the training of the operators of the plant.
173/04	2004	MICHELE SAPORITI & figli Srl	Besnate (VA) IT	Biomass to Energy	Flue Gas Cleaning System	Basic Engineering	Offer engineering	W.T.E. collaborate for an offer engineering related to a complete Biomass to Energy system.
172/04	2004	PIANIMPIANTI SPA	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Consulting	Expertise	Examination on corrosion damages of a boiler installed on the MSW incineration plant in Colleferro. The boilers were provided by Lurgi-Pianimpianti. The plant was managed by G.A.I.A. SPA, multiutility.
171/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Detailed engineering	Revamping	Upgrade of APC system with installation of a new SCR deNOx system and replacement of the existing dry lime system with a new sodium bicarbonate one, AMSA Milano "Silla 2" MSW incineration plant
169/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	General industry	Flue Gas Cleaning System	Engineering services		W.T.E. delivered engineering services developing the risk analysis (HAZOP) of the DeSOx system realised and installed by ALSTOM on the French steel mill Sollac.

167/04	2004	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Feasibility Study		A.M.S.A. Spa owner of the MSW incineration plant in Milan, needed a technical and economical viability of the integration of a 3 x 61 MWt MSW incineration plant with a turbogas cycle. W.T.E. studied the impact on generation performances was developed by the analysis of 24 different operational functioning, related to weather conditions during the year. Main data of boiler and condenser performances were described by PFD and by thermodynamic balances.
165/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Engineering services		Engineering services for the project of flue gas desulphurization (FGD) system, Hidrocantabrico Energia power plant
164/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Startup & Commissioning		Engineering service and assistance for the start-up and commissioning of the new APC (air pollutant control system) of a power plant (3rd line, ASM power station - Brescia)
163/04	2004	CO.GE.FIN SPA	Bellusco (MB) IT	General industry	Flue Gas Cleaning System	Basic Engineering		Study of a mechanical de-dusting system (cyclone) for ZnO dust, to be used in chemistry industries.
161/04	2004	SACME SPA	Pessago c.B.(MI) IT	General industry	Flue Gas Cleaning System	Design and supply	Revamping	Replacement of a 15 m. chimney, ENEA Research Center
160/04	2004	ALSTOM Power Italia Spa	Milano (MI) IT	Power plant	Flue Gas Cleaning System	Basic Engineering		Consulting and draft of blueprints, lay-out of flue gas desulphuration (FGD) systems, Endesa Los Barrios 6 Litoral 1 Power Plants, Spain
157/03	2003	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Flue Gas Cleaning System	Engineering services	Maintenance services	W.T.E. provided to AEM Gestioni Srl many interventions of ordinary maintenance of the furnace-boiler system of the incineration plant. Maintenance services included: cleaning on line by Bang & Clean system measurement of thickness of steam boiler tube walls.
156/03	2003	EUROPLASTIC SRL	Peschiera B. (MI) IT	General industry	Flue Gas Cleaning System	Design and supply	Revamping	W.T.E. designed, supplied and managed the erection of a 30 m stack, installed on an industrial plant, owned by Europlastic, located in an urban area, close to a major airport.
155/03	2003	MATEC Srl	Fenegrò (CO) IT	Hazardous waste incineration	Flue Gas Cleaning System	Whole project	Revamping	WTE was appointed by MATEC to verify the equipment status of medical waste incineration plant after a destructive explosion occurred during first start up. The plant was located in Paderno Dugnano. Major damages on boiler and gas cleaning system were recorded. After the analysis WTE was designated to deliver the general project of the revamping and to carry out the engineering of: new concept HRSG (Heat Recovery Steam Generator) tile end type, thermal cycle, gas cleaning system, regulation system following new control logics. Assistance for start-up
154/03	2003	TBF + PARTNER AG	Agno -TI CH	Waste to energy	Flue Gas Cleaning System	Feasibility Study	Project of a new plant	W.T.E. supported TBF AG in the engineering of the feasibility study of new AMSA Milano 61.5 MWt incineration plant.
153/03	2003	EUROPLASTIC SRL	Peschiera B. (MI) IT	Hazardous waste incineration	Flue Gas Cleaning System	Engineering services	Expertise	Measurement of wall thickness, VOC catalytic combustor
152/03	2003	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Basic Engineering		Improvement of handling and feeding system of ferrous materials sorted from MSW, AMSA-Milano "Silla 2" incineration plant.
151/03	2003	M.E.T.A. Spa - Gruppo Hera	Modena (MO) IT	Waste to energy	Flue Gas Cleaning System	Consulting	Troubleshooting and improvement project	W.T.E. studied a new cooling system at the interface between lower and upper grates for the waste to energy plant owned by META Spa. During the ordinary running of the furnaces the Client observed the recurrently build up of molten slag on the steps and wanted to solve that inconvenient in order to allow the complete combustion of waste and the efficiency of machinery. W.T.E. purposed three different solutions for colling of grates.
150/03	2003	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Flue Gas Cleaning System	Design and supply	Revamping	AEM Gestione Srl ordered to W.T.E. the replacement of the feeding system of the furnace with medical waste, installed on the Line n.1 of the incineration plant in Cremona. The new system included an innovative solution to insure cooling with water collected from the existing boiler. Capacity: 2 lines of 17,8 MWth : 198 t/d x 1910 kCal/kg

149/03	2003	CARTIERA DEL CHIESE SPA	Montichiari (BS) IT	General industry	Flue Gas Cleaning System	Basic Engineering		Thermodynamic verification of HRSG (Heat Recovery Steam Generator) downstream a gas-turbine plant, installed on a paper mill, Cartiera del Chiese (BS)
148/03	2003	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Feasibility study		In the ambit of fly ashes handling system installed in AMSA - Milano incineration plant, WTE was appointed to carry out the feasibility study for an air cleaning system. The air was drawn from the unloading fly ashes area, located in the fly ashes inertisation plant.
147/03	2003	ATENA SPA	Vercelli (VC) IT	Waste to energy	Flue Gas Cleaning System	Feasibility Study		Technical and economical viability of a MSW incineration plant (2 x 47 MWth lines, thermal cycle with 19 MWe T/G)
143/03	2003	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Flue Gas Cleaning System	Feasibility Study		Feasibility study for replacement of the existing system to feed medical wastes on Waste to energy plant in Cremona. Owner AEM Gestioni Srl.
142/03	2003	MEB IMPIANTI Srl	Fioranio a.S. (BG) IT	General industry	Flue Gas Cleaning System	Whole project	Project of a new plant section	W.T.E. developed the structural engineering of the silos to be erected in a gravel pit. During the construction serious structural faults arised and W.T.E. was appointed to verify calculation and carry out the remediation project in order to reinforce the load-bearing structure. Final client Cava ARMATI-Sovere (BG)
141/02	2002	GPC Gruppo Public Consult Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Expediting		Boiler erection expediting MSW Incineration plant SCHIO
139/02	2002	KRION S.r.l.	Almenno S.B. (BG) IT	General industry	Flue Gas Cleaning System	Design and supply	Revamping	Dosing/Feeding System of industrial RDF (paper and plastic fine residues) to combustion system. The system included: vacuum system, pneumatic transportation, storage silos, capture and dust removal (filtration) Main components designed and delivered by W.T.E. were: -cyclon; -bag filter; - pneumatic transport fan.
138/02	2002	KESSELREINIGUNG GmbH	Wohlen - CH	Waste to energy	Flue Gas Cleaning System	Licence agreement Kesselreinigung-RUEGG GmbH		W.T.E. signed a Licence agreement with Kesselreinigung- RUEGG GmbH concerning the technology of boiler cleaning by explosion to be applied on incineration plants operating in Italy.
136/02	2002	Daneco Impianti Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Whole project	Offer engineering	Daneco Impianti SpA ordered to W.T.E. the engineering for offer related to a project of a new waste to energy plant to be realised in Messina(Sicily). The plant would process 430.000 tons per year of municipal solid waste by three lines of 62.5MWth-53 MWe. W.T.E. delivered basic engineering, all technical specifications, metric calculations of main sections of plant (furnace-boiler, flue gas cleaning system, thermal cycle), drawings of parts and of assembly.
135/02	2002	SIRI SPA (Donau Carbon Technologies S.r.l.)	Guanzate (CO) IT	Hazardous waste incineration	Flue Gas Cleaning System	Consulting	Expertise	Review of design criteria of a slaughterhouse waste incineration system (expert opinion)
134/02	2002	ConSer.VCO SPA	Verbania (VCO) IT	Waste to energy	Flue Gas Cleaning System	Basic Engineering		Design of two new and more effective fabric bag filters, Mergozzo MSW incineration plant
133/02	2002	STUDIMPIANTI SEI Srl	Novate M.se (MI) IT	General industry	Flue Gas Cleaning System	Basic Engineering		Studimpianti sei di Novate Milanese required to W.T.E. to study the structural design of a glass recycle plant building for the final client Ecoglass di Deigo, company of Saint Gobain Group. W.T.E. delivered the explanatory report of stell structure of the floors and in elevation able to support and to withstand vertical and horizontal overloads.
131/02	2002	GPC Gruppo Public Consult Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Expediting		GPC Gruppo Public Consult Spa committed to W.T.E. the expediting and the vendor compliance audit during the refractory laying of furnace installed in third line of waste to energy plant located in Schio (Italy).
129/02	2002	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Design and supply	Project of a new plant	W.T.E. designed, engineered and delivered the system for collection and separation of rain water system to be installed on the waste to energy plant SILLA II, owned by AMSA SpA in Milano. The new design considered a passive system for separation of first rain water to be collected in a dedicated tank. The new system allowed the operators to control and regulate inflow and outflow of rain water by means DCS in compliance with rules concerning the waste water treatment.

128/02	2002	AMA Roma SPA	Roma (RM) IT	Waste to energy	Flue Gas Cleaning System	Consulting	Expertise	AMA SpA needed a consulting on start-up transients of auxiliary burners installed on rotary kiln of incineration plant and related postcombustion chambers. W.T.E. delivered: evaluation of burners power required in order to maintain the temperature in postcombustion as per regulations in force; evaluation of burners power in order to guarantee a ramp rate of heating up equal to 70°C/h; Indication on optimum position of burners.
126/02	2002	ConSer.VCO SPA	Verbania (VCO) IT	Waste to energy	Flue Gas Cleaning System	Consulting	Expertise	CON.SER.VCO, the owner of the incineration plant sited in Mergozzo (VCO), needed a detailed report on the actual state of the refractory lining in the furnaces. W.T.E. delivered an objective analysis about the conditions of furnace walls and some suggestions concerning maintenance and refurbishment costs.
125/02	2002	COMMISSIONING ITALIA SPA	Busto A. (VA) IT	Waste to energy	Flue Gas Cleaning System	Consulting	Troubleshooting and improvement project	Consulting on untimely collapse of furnace roof occurred on the waste to energy plant managed by ACCAM sited in Busto Arsizio (Varese)
123/02	2002	GPC Gruppo Public Consult Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Expediting		The GPC Gruppo Public Consult Spa committed to W.T.E. the expediting and the vendor compliance audit during the manufacturing of a steam boiler of 20 tons/hour to be installed on the third line of the waste to energy plant sited in Schio (Italy).
122/02	2002	Daneco Impianti Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Whole project	Offer engineering	Daneco Impianti SpA ordered to W.T.E. the engineering for offer related to a project of a new waste to energy plant to be realised in Sassari (Sardinia). The capacity of the plant would be 270.000 tons/year of municipal solid waste to be incinerated by two lines of 35 MWth-17 MWe. W.T.E. delivered basic engineering, all technical specifications, metric calculations of main sections of plant (furnace-boiler, flue gas cleaning system, thermal cycle), drawings of parts and of assembly.
120/01	2001	AMSA SPA - Gruppo A2A	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Basic engineering	Performance Analysis	AMSA SpA, owner of the waste to energy plant SILLA 2 in Milan, revealed a decrease in the delivery of power. W.T.E. has been commissioned to develop a performance analysis of the thermal cycle basing on main running parameters and variables such as insertion in urban district heating network, quantity/quality of MSW, the temperature of superheated steam. The period examined started from October 2001 and ended up in January 2002.
119/01	2001	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Process and combustion control system	Engineering services	Revamping	ALSTOM required to W.T.E. to develop: the coordination between all different control systems installed on the waste to energy plant (GEA-Pisa) the draft of commissioning and start-up procedures of the whole plant, with special analysis of procedures for furnaces; study of testing procedure methodic.
118/01	2001	AEM Gestioni Srl	Cremona (CR) IT	Waste to energy	Flue Gas Cleaning System	Design and supply	Revamping	W.T.E. provided the basic engineering, the detailed engineering and the supply of a steam superheater (17,5 t/h, 48 barg, 385°C) to be installed on the existing waste to energy plant in Cremona, final client AEM Gestioni Srl.
117/01	2001	Paolo CORAZZI FIBRE Srl	Cremona (CR) IT	General industry	Flue Gas Cleaning System	Feasibility Study		W.T.E. was required to deliver the feasibility study of a new flue gas cleaning system and flue gas duct layout to be installed on an industrial plant, owned by Corazzi Fibre, a leading company in the production of non woven abrasive web.
114/01	2001	ECOFOR Spa (Geoform Spa)	Pisa (PI) IT	Waste to energy	Flue Gas Cleaning System and ashes conveyors	Whole project	Revamping	In the ambit of major revamping of the waste to energy plant owned by ECOFOR (ex GEA) in Pisa, W.T.E. delivered basic and detailed engineering for a mechanical conveying system ashes coming from boilers and from gas cleaning section. W.T.E. provided: calculation of ashes production; calculation of nominal capacity of each machinery installed; the project of lay out and technical specifications; P&Id; description of control logic; assistance on site.

113/01	2001	FIRETECH Engineering Srl	Saronno (VA) IT	Hazardous waste incineration	Flue Gas Cleaning System	Feasibility Study	Revamping	W.T.E. delivered to FIRE TECH srl an engineering study describing technical solutions for variation of motion trasmission on a Rotary kiln for combustion of slaughterhouse waste. The study analysed three different ways for modify the design of this kind of furnace in the aim to optimize both the time of realisation and the related costs. The mechanical study was integrated to the engineering of post combustion chamber.
112/01	2001	METRIO tecnologica Srl	Cinisello B. (MI) IT	General industry	Flue Gas Cleaning System	Engineering services		W.T.E. provided detailed engineering to METRIO tecnologia Srl for many projects including the draft of gas dampers, shutters, blanking plates. Final Clients of those projects were big company such as ENEL, ANSALDO
109/01	2001	GEA Spa (Geofor Spa)	Pisa (PI) IT	Waste to energy	Flue Gas Cleaning System	Design and supply	Revamping	GEA Spa, owner of a waste to energy plant in Ospedaletto (Pisa), decided the total refurbishment of the two furnaces, including feeding systems, also for hospital wastes and post combustion chambers. W.T.E. was appointed to deliver basic engineering and technical specifications concerning furnaces and combustion grates, boilers, auxiliary systems; the arrangement of automatic control and regulation system of combustion and emissions and the writing of the logics. procurement services; construction management.
108/01	2001	ALSTOM Power Italia Spa	Milano (MI) IT	Waste to energy	Flue Gas Cleaning System	Basic Engineering		W.T.E. delivered basic engineering to ALSTOM Power Italia for the study of a system for the combustion of hospital waste in the furnaces of the incineration facility " Silla 2", owned by AMSA. The capacity of the plant was: 3 lines of 70 MWth each, turnines of 60 MWe and complete flue gas cleaning system.
107/00	2000	GEA Spa (Geofor Spa)	Pisa (PI) IT	Waste to energy	Flue Gas Cleaning System	Feasibility Study		In the project of major revamping of the waste to energy plant in Pisa, the owner GEA Spa appointed W.T.E. to analyse and describe the actual state of the main sections of the plant (pit with travelling cranes; refractory of furnaces, grates, postcombustion, feeding system,ashes conveyors, feeding of hospital wastes), of structures, of auxiliaries services, of control system.
106/00	2000	ORTOLAN Srl	Codognè (TV) IT	Waste to energy	Flue Gas Cleaning System	Feasibility Study		The ORTOLAN Srl company gave to W.T.E. the role of general consultant for the engineering to present a complete project for urban waste management to the public authorities in Ankara (Turkey) The project included: 300.000 tons/year MSW incineration plant (3 x 52 MWt lines, complete with T/G, dry and wet APC system, auxiliary landfill for hazardous/toxic waste) Cost estimates / Financial model
105/00	2000	BIOSUD SRL - Gruppo EcoEridania	Lecce (LE) IT	Hazardous waste incineration	Flue Gas Cleaning System	Design and supply	Revamping	Design and supply of a fabric bag filter, flow rate 15.000 Nm3/h. L'impianto termovalorizzatore é in grado di trattare 7.642 tonnellate annue di rifiuti sanitari pericolosi e non pericolosi, operando un recupero energetico. W.T.E. ha dimensionato e fornito un filtro a maniche, per l'idonea depolverazione dei fumi, operante con i seguenti parametri principali: - Portata gas da filtrare 15000 Nm3/h; - Temperatura di progetto del filtro 190 C; - Superficie filtrante totale 450 m2.
104/00	2000	SIRI SPA (Donau Carbon Technologies S.r.l.)	Guanzate (CO) IT	Hazardous waste incineration	Flue Gas Cleaning System	Basic Engineering		W.T.E. delivered to S.I.R.I. (now Donau Carbon Technologies S.r.l.) basic engineering for the development of multiple size standardized systems for volatile organic compounds (VOC) disposal.
103/00	2000	CO-VER Energia	Verbania (VCO) IT	General industry	Flue Gas Cleaning System	Basic Engineering	Revamping	Development of a new Aluminum smelting process. Process design including mass and energy balances, P&I and general layout of the system, dimensioning of the major components of the system.
102/00	2000	BIOSUD SRL - Gruppo EcoEridania	Lecce (LE) IT	Hazardous waste incineration	Flue Gas Cleaning System	Feasibility Study		W.T.E. delivered a feasibility study of a new flue gas cleaning system to be installed on the hazarodus wastes incineration plant owned by BIOSUD Srl -Lecce