



Techne Consulting

Environment and Energy Knowledge



Leadership

in energy and environment consultancy and software since 1986



Innovation

in methodologies, models and software



Satisfaction

of customer needs



Quality

in services and products

PROFILE

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Our history

Techne Consulting was founded as Techne snc in 1986 in Rome by Carlo Trozzi, who until then had worked as a consultant physicist at ENEA (National Agency for Energy and Environment) and at Olivetti Information System. Since its origin, the company has developed an innovative combination of consultancy, the use of methods of statistical data analysis and software development activities aimed at developing models and complex information systems.

Since its origin the company's business activities were mainly orientated in the environment and energy sectors and in the beginning was particularly focused on services to public administrations.

In 1992 during the expansion of its business it was transformed into a limited liability company with the new name Techne Srl simultaneously modifying its company structure with the entry of Rita Vaccaro.

Since 1993 it has expanded its activities to local public administrations and has begun marketing its Software products in the environment and energy fields.

In 1999 it acquired the assets from the company Enviplan Srl specializing in environmental planning.

In 2003 it changed its name again, becoming Techne Consulting srl, in order to highlight its vocation to consultancy, but also for greater visibility on the Internet.

The company's business activities have overtime become increasingly focused on the areas of energy, the environment and the environmental and energy aspects of transport, and in 2004 it extended its corporate objects clause, highlighting those areas, and specialized its activity in the planning and development of information systems and proprietary software as well as modelling applications.

Recently Techne Consulting strongly enlarged its horizons towards the themes of ecological footprint of products/services and the project of an information system supporting its calculation, finalizing its deeping experience on the iusses of air and water pollutant emissions and of wastes production, for which a specific model. is in progress.

Since its origin the focus of the company has been dedicated to innovation by exploring new horizons in services and products offered and in so doing anticipating considerably market trends. Currently, its attention is directed towards the Integrated Government of Energy and the Environment and aims to extend the current outlook of the sector and provide global solutions to global challenges.

Honesty, integrity, transparency and social responsibility have always been elements that have characterised the activities of the company.

Our mission

Techne Consulting is a consulting company that, since 1986, carries out studies and researches and develops software models in the sector of environment and energy.

In particular, the company develops for the public administrations Plans and Programmes at national, regional, provincial and municipal levels, operating in the field of Climate Change and carries out both for private and public sector, Energy Audits and Environmental Impact Assessments both nationally and internationally, with a focus on the European Union and the Balkans Mediterranean area.

In this context specific attention is devoted to the design and development of Environmental Governance Systems in accordance with the DPSIR (Driving forces, Pressures, State, Impact, Responses) model, to systems of energy governance and to the application design and development of Models and Software Systems.

Functional activities for the implementation of the above, include the development of Inventories and Registers in the field of environment and energy field through Data Retrieval and Statistical Indicators Processing as well as Survey and onsite Monitoring. The project of the training and the provision of hardware, software and information systems complete our offer of the services.

Techne Consulting is the leader in Italy in the field of air pollution (emission inventories, air quality planning and modelling applications for the diffusion, transport and transformation of pollutants).

Techne Consulting is the creator and owner of the Air Suite system for the study of air pollution, the EnviPlan.com system, both of which are licensed to numerous local and national public administrative bodies and the new system ([E²Plan](#)) for environmental planning, which includes a system for the governance of Energy and Environment ([E²Gov](#)), pollutant diffusion, transport and transportation modelling interface systems ([E²Diffusion](#)), as well as specific models for estimating energy consumption and emissions from road, sea port and air transport systems (respectively [E²Road](#), [E²Port](#) and [E²Airport](#)) and model for emission estimate from landfill ([Landfill](#)).

Techne Consulting has in development an appropriate system for evaluation of ecological footprint of products/services ([E²Footprint](#)).

The activities

ENVIRONMENT AND ENERGY GOVERNANCE SYSTEM

The global challenges in the environmental and energy field, whatever the territorial level, require global answers. For a comprehensive understanding of phenomena, to understand cause, assess effect and plan response strategies it is necessary to set an overall vision that goes beyond individual sector data.

Towards the end of the last century, the new focus on energy and environmental issues has stimulated the need to acquire as much information as possible on the environment with a concentration on monitoring.

In recent years, at least in the more advanced contexts, the scientific community has come to understand that with limited economic resources, attention should be focused towards the maximum exploitation of information, through the development of summary indicators and the use of models for the definition of intervention strategies.

In this context at European level a model for representation of information called DPSIR (Driving Forces-Pressures-States-Impacts-Responses) which permits environment and energy governance has been defined.

The Environment and Energy Management Systems can be broadly applied at local, regional and national level as well as in planning, Agenda 21, and in reporting on the state of the environment.

It is in the context of this environmental and energy governance system that Techne Consulting develops its activities by integrating planning, preparing inventories and registers, auditing, monitoring and training. For those activities Techne Consulting develops and uses models and specific software systems.

PLANS AND PROGRAMMES

The planning of responses to the problems of government energy and environment is a core activity of Techne Consulting, which in this area focuses on:

- planning for environmental remediation in Italy and abroad (in particular the Balkans) specifically:
 - national, regional, provincial and municipal air quality management plans
 - municipal noise management plans
 - electromagnetic noise management plans
 - local remediation plans
 - regional waste management plans
 - water management plans
 - local action plans (Agenda 21)
- sustainable energy planning and in particular:
 - regional energy plans
 - provincial energy plans
 - municipal energy plans
 - municipal action plans (Covenant Majors)

MODELS AND SOFTWARE

The development of information systems and software models is a central activity of Techne Consulting that over the years has developed extensive expertise in the field through:

- feasibility studies of information systems and geographical information systems
- design and implementation of databases
- development of information systems
- development of Geographic Information Systems
- development of interfaces to databases
- development of mathematical models
- development of interfaces to mathematical models
- management planning of complex information systems

In particular, the work is dedicated to:

- developing energy and environmental governance systems
- developing methodologies and models for estimating data
- developing models and software for the evaluation of air, water and soil pollutant emissions
- developing models and software for assessing the production of municipal and industrial waste
- the development and application of models and software programs to predict energy and environmental planning and optimization
- developing software systems for the evaluation of environmental damage caused by shipping accidents
- developing software systems for environmental risk assessment
- the personalization and interfacing of diffusion and transport models for pollutants in air, water, and soil
- the personalization and interfacing of models for the generation and propagation of noise
- the personalization and interfacing of models for risk assessment
- the personalization and interfacing of models for the evaluation of traffic counting

INVENTORIES AND REGISTERS

The development of inventories and registers is the main activity of Techne Consulting providing support for organising information into an integrated system of energy and environmental governance or specific system areas. These inventories and registers are essential tools for the preparation of plans and programmes.

In particular, Techne Consulting provides the following:

- registers of environmental pressure driving forces
- pollutant emission inventories in different environmental media (air, water, soil) from point sources, linear and areal
- energy databases to support the compilation of energy balance
- registers of electromagnetic pollution sources
- registers for the production and disposal of waste
- registers of monitoring data (air, water, soil, noise, electromagnetic fields)
- databases relative to the impact of environmental pressures
- databases of responses (financing, polluted soils remediation, etc.)
- integration of the registers in the energy and environmental governance system

CLIMATE CHANGE

Techne Consulting provides consulting in the field of climate change with particular regard to support:

- preparation of greenhouse gas emissions inventories;
- preparation of national Communications as defined by the United Nations Framework Convention on Climate Change
- preparation of the PROJECT DESIGN DOCUMENT (PDD) necessary for the submission of projects under the Clean Development Mechanism (CDM) foreseen by the Kyoto Protocol within the United Nations Framework Convention on Climate Change

Techne Consulting has over twenty years experience in the preparation of emission inventories, since the first CORINAIR 1985 pilot studies and can support all phases of implementation (data collation, validation, reporting, etc.).

Techne Consulting is able to coordinate the compilation of National Communications and especially the development of the following components:

- National circumstances relevant to greenhouse gas emissions and removals
- Greenhouse gas inventory
- Policies and measures
- Projections and effects of policies and measures

Techne Consulting is able to coordinate the compilation of PDD both for technical aspects and management, in all its components:

- General description of project activity
- Application of a baseline and monitoring methodology
- Duration of the project activity / crediting period
- Environmental impacts
- Stakeholders' comments

The added value provided by Techne Consulting is particularly evident, not only in the compilation of the PDD, but also in assessing the planning related to:

- Technical description of the project activity
- Technology to be employed by the project activity
- Estimated amount of emission reductions over the chosen crediting period
- Application of a baseline and monitoring methodology

ENERGY AUDITS AND ENVIRONMENTAL ASSESMENT

Techne Consulting undertakes energy analysis of buildings and civil infrastructures in Italy and abroad, including the preparation of the CDM, through the following steps:

- Evaluation of energy, electrical and thermal consumption
- Assessment of carbon dioxide emissions generated
- Assessment of overall energy efficiency

- Assessment of electrical and thermal equipment and thermal insulation
- Identification of areas for possible intervention with energy saving measures
- Assessment of energy saving and of carbon dioxide emissions reduction
- Assessment of the timescales for implementation
- Assessment of organizational, managerial and regulatory constraints
- Assessment of cost efficiency

Techne Consulting carries out the environmental impact assessment in Italy and abroad for the following topics:

- emissions of air pollutants, water and soil
- air pollutant concentrations and deposition
- diffusion and transport of water pollutants
- transport of contaminants in soil
- noise impact
- Planning of environmental monitoring

Techne Consulting carried out strategic environmental assessment of Plans and Programmes and particularly:

- Redaction of the preliminary environmental report
- Support for consultation
- Redaction of the environmental report and non technical summary
- Assessment of implication of plans and programmes

MONITORING, SURVEY, DATA PROCESSING

In the field of environmental monitoring Techne Consulting carries out:

- Onsite monitoring
 - planning of environmental monitoring networks
 - planning of environmental biomonitoring networks
 - planning of traffic counting monitoring networks
 - planning of industrial monitoring
 - planning of energy consumption monitoring
 - carrying out of the environmental parameter measurement campaigns
- Data and information collection
 - data and basic information collection from statistical sources
 - data and basic information collection by survey
 - questionnaire based surveys
 - telephone surveys
 - organisation and preliminary analysis of information collected
 - data and information validation based on a codified system of automatic and manual quality procedures
- Data statistical processing and development of indicators through:
 - elaboration of indices and indicators
 - statistical and analysis data processing
 - regressive models
 - application of multivariate statistical methods (regression analysis, factor analysis, cluster analysis)
 - analysis and processing of data based on surveys or questionnaires

- application of neural networks

TRAINING AND ASSISTANCE

The training activities Techne Consulting carries out are related to general environment and energy topics and principally to software products and systems developed by the company. Similarly support services on site and online for the various products can be supplied.

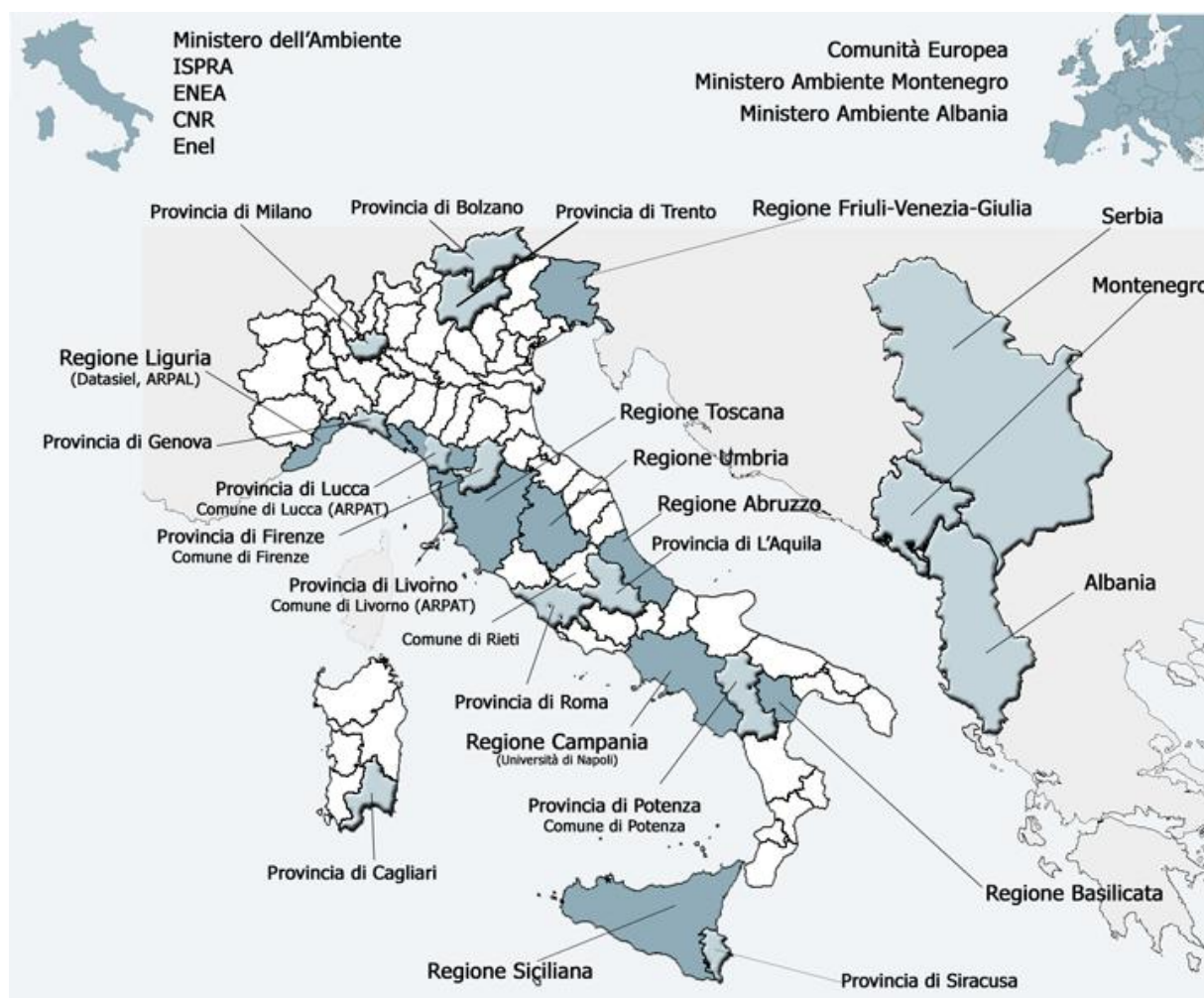
APPLIED RESEARCH

Applied research is at the basis of all Techne Consulting services and activities. In all projects there is very high level of attention to aspects of innovation. This attention has led to the publication of over a hundred contributions to international journals and conference literature, participation in international conferences and working groups with implementation of specific research nationally and internationally.

Techne Consulting has always paid great attention to the acquisition of international scientific knowledge and contributes actively to its development through the presence of its representatives in international task forces on energy and the environment.

This aspect of our work, which is undertaken free of charge, permits the company continuity in market presence with the most up to date knowledge in all areas of its professional activity.

The projects



ENERGY AND ENVIRONMENTAL GOVERNANCE

The governance system is actually the main application of Techne Consulting. The following list contains assignments directly connected to the governance system; assignments directly related to specific software modules are contained in specific section [Models and software](#), while activity of information insertion in the system are often contained in inventories registers:

- Web information system for emission inventories compilation and management
Arpa Toscana, 2019
- Support to the air quality management and development of environmental governance system
Ministry of Sustainable Development and Tourism of Montenegro, 2012
- Provision E2Gov new components (*Regional energy balance*)
Datasiel, 2012
- Start up of the environmental governance system and support to air quality management
Ministry of Sustainable Development and Tourism of Montenegro, 2011
- Update of the energy balance of Liguria Region
Datasiel, 2009
- Project ECOZERO – Governance System planning and provision of the integrated inventory evolved use system including the air emission inventory update
DATASIEL, 2005
- Provision of an environmental data base for the produced and consumed energy evaluation by sectors and geographic areas
Provincia di Genova, 2005
- Support to the Agenda 21 activation process and editing of the report on the Environment
Rieti Municipality, 2005
- Available and sustainability data, preparation of the report on the Environment (Agenda 21)
L'Aquila Province, 2002

PLANS AND PROGRAMMES

In the following the [Plans and Programmes](#) activities carried out by Techne Consulting are listed:

- Ex-ante evaluation of the implementation measures of the Air Quality Management Plan
Arpa Umbria, 2023
- Support for the preparation of the Air Quality Management Plan finalized to its approval
Regione Toscana, 2022
- Specialistic technical support for the updating of the Air Quality Plan
Arpa Veneto, 2022
- Climate-changing and polluting emission estimate associated to different forecast scenarios expected in the updating of the Regional Integrated Waste Management Plan of the Umbria Region
3A Parco Tecnologico Agroalimentare dell'Umbria, 2021
- Modelling evaluation of emissions in alternative scenarios of the traffic restrictions
Terni Municipality, 2021
- Meteorological and air quality modeling
Arpa Sicilia, 2019
- Update of the Air Quality Plan, 2018
ARPA Umbria, 2018
- Meteorological and air quality modeling
Arpa Sicilia, 2018

- Services supporting the evaluation, implementation and further development of air quality and emissions policies
European Commission DGE, 2017
- Technical Support for the drafting of the Air Quality Protection Plan
Campania Region, 2017
- Air Quality Regional Plan updating (Recalibration of the Plan)
Abruzzo Region, 2016
- Application of air quality models for air quality evaluation and regional planning
Sicilia Region, 2016
- Application of air quality models for air quality evaluation and regional planning
Liguria Region, 2014
- Air Quality Regional Plan updating
Abruzzo Region, 2013
- Activities related to the project RENERFOR in the frame of ALCOTRA Program
ARE Liguria, 2013
- Update of the Air Quality Planning Support System and of the Regional Profile
Liguria Region, 2013
- Activities related to the project RENERFOR in the frame of ALCOTRA Program
ARE Liguria, 2012
- Update of air quality monitoring networks and air emission sources
Sardegna Region, 2012
- Update of air quality management plan
ARPA Umbria, 2012
- Update of Air Quality Support System and of Regional Profile
Liguria Region, 2012
- Strategic Environmental Assessment (SEA) of the air quality plan
Umbria Region, 2011
- Update the zoning of the territory
Abruzzo Region, 2011
- Energy and CO2 emissions data processing in the frame of INTERREG IVC e ALCOTRA Programmes
ARE Liguria, 2011
- Air Quality Plan updating
ARPA Umbria, 2011
- Consultancy services to the Ministry of Environment, Forestry and Water Administration in the sector of the air pollutant emission inventories implementation and air quality planning in Albania
Ministry of Environment, Forestry and Water Administration of the Republic of Albania, 2010
- Interventions evaluation of national interest for air quality improvement and emission reduction in the port sector
ENEA, 2009
- Support to the regional inventory update and the drawing up of plans and programs for the air quality management in the Sicily Region
Sicily Region, 2008
- Technical assistance for the activities related to atmospheric pollution in Montenegro
CNR, 2008
- Implementation of Regional Air quality Management Plan – Drafting of technical document
Abruzzo Region, 2008

- Information system and services for air pollutant emissions projections and evaluation of the air pollutant concentrations and deposition
Livorno Province, 2008
- Update of the regional air pollutants emission inventory
ARPA Umbria, 2008
- Regional inventory update and drafting of plans and programs for the air quality management in the Sicily Region
Sicily Region, 2008
- Activities related to atmospheric pollution in Montenegro
CNR, 2007
- Assistance for the presentation of a project of the Abruzzo Region - Direction of Parks, Territory, Atmosphere, and Energy within the “Program of financings for the needs of environmental management connected to the air quality improvement and to the particulate emissions reduction in the urban areas” of the Italian Ministry for the Environment, Land and Sea
Abruzzo Region, 2007
- Study for the evaluation of other pollutants concentrations ruled on provincial territory through air pollution dispersion models at present and future scenario
Trento Province, 2007
- Predisposition of the noise management plan according to Law 447/1995 for ten municipalities of Cagliari province
Cagliari Province, 2006
- Provision the software Air Suite for the elaboration of plans and programs for air quality management, according to D.L351/99 and related support services
Basilicata Region, 2005
- Adaptation of the air quality management plan to the recent normatives
Umbria Region, 2004
- Preliminary evaluation of air quality and for the development of zoning methodologies of the regional territory
ARPA Umbria, 2003
- Preparation of the regional air quality management plan in Campania and provision of the software Air Suite
Università di Napoli, 2003
- Adaptation of the provincial air quality management plan to the recent legislative modifications
Trento Province, 2003
- Air Quality Management Plan in Liguria Region
ARPAL Liguria, 2003
- Development of the project “ Implementation of the air quality management plan in Umbria Region”
Umbria Region, 2002
- Preliminary evaluation of the effects of the most recent normative and technical initiatives at EC level relative to air pollutant emissions
Ministry of Environment and Territory, 2002
- Integrating activities to the predisposition of the regional Air Quality Management Plan of Friuli Venezia Giulia Region
Autonomous Region of Friuli - Venezia Giulia, 2001
- Determination of specific livestock emission factors at national level and estimate of the ammonia emissions effectiveness and other compounds abatement measures
ENEA, 2001

- Air quality Management Plan update
Autonomous Province of Trento, 2001
- Implementation of the process Agenda 21 in the province of L'Aquila
L'Aquila Province, 2001
- Provision of products and services for air quality management planning
Autonomous Province of Bolzano-Alto Adige, 2000
- Evaluation of entities and effects of air pollutant emissions reduction ruled by international standards
Ministry of Environment and Territory, 1999
- Preparation of the Regional Air quality Management Plan
Umbria Region, 1999
- Study finalized to the acquisition of cognitive elements for the predisposition of the regional Air Quality Management Plan
Autonomous Region of Friuli - Venezia Giulia, 1999
- Preparation of the Air Quality Management Plan in Liguria region and models experimentation
Datasiel spa, 1999
- Air quality management plan
Autonomous Province of Trento, 1998
- Support for the preparing of emissions inventory and implementation of Air Quality Management Planning in the Autonomous Province of Bolzano - Alto Adige
Autonomous Province of Bolzano- Alto Adige, 1998
- Additional activities for the preparation of the Air Quality Management Plan in Toscana Region
Tuscany Region, 1998
- Predisposition of the noise management plan
Potenza Municipality, 1998
- Preparation of the Regional Air Quality management plan in Toscana
Tuscany Region, 1997
- Project of the Provincial Air quality Management Plan in the province of Bolzano
Autonomous Province of Bolzano- Alto Adige, 1997
- Preparation of the Air quality Management Plan of Trento Province
Autonomous Province of Trento, 1996
- Implementation and experimentation of the LEAP model at regional scale
ENEA, 1993
- Simulation models in energy-environment field
ENEA, 1992
- Study on the state of the art of toxic wastes in deep argillaceous formation
ISMES, 1990
- Study on the toxic wastes management
ISPES SpA, 1987

MODELS AND SOFTWARE

In the following the activities related to the software are listed; when the implementation of systems and their provision are integrated with the planning and production of inventories and registers, the tasks are listed below with their voices ([Plans and programmes](#), [Inventories and registers](#)):

- Provision of the software for the management of the new regional emissions inventory – CIG 812816886B
Consorzio Lamma, 2019
- Project of air quality previsional model
(Research Program POR FESR Campania 2014-2020 O.S.1.1)
Orion, 2019
- Provision of program SETS for road transport air pollutants estimation and of its interface with VISUM traffic model
Florence Municipality, 2014
- Provision of a supplementary software for inventory IRSE management
Consorzio Lamma, 2013
- Provision of E2Gov new components (*Regional energy balance*)
Datasiel, 2012
- Updating of APEX software for emissions inventory management
Consorzio Lamma, 2012
- APEX software provision for emissions inventory and training
Consorzio Lamma, 2010
- Software update for regional emission inventory management
ARPA Umbria, 2010
- Support to the Montenegro Government for the development of activities related to air pollution
Italian Ministry for the Environment, Land and Sea, 2006
- AirSuite software provision for air quality plan and emission inventory management
Sicilia Region, 2006
- RAAP software provision – a rapid system for emissions estimation
Tuscany Region, 2005
- Software support related to the Air Quality Management Plan
ARPA Umbria, 2005
- Support related to the management and evolved use system of environmental data
Datasiel, 2003
- Support related to the management and evolved use system of environmental data
Datasiel, 2002
- Support for the predisposition of the operative environment necessary for information system data entry supporting the regional energy plan (PEAR)
Datasiel, 2002
- AirSuite software and services provision for the transfer of air management plan tools to ARPA in Umbria Region
ARPA Umbria, 2002
- Implementation of the Territorial Information System (GIS) for mapping critical levels of ozone across national territory
ENEA, 2002
- AirSuite software and services provision for the air pollutant emission inventory and for the use of air diffusion models within ARPAT
ARPAT Toscana, 2002
- Provision of the necessary hardware and software for the management of the integrated emission inventory
Genova Province, 2001
- Implementation of a database of the techniques and technologies of protection and remediation and of the methodologies of characterisation, monitoring and cartographic

representation of polluted soils
ENEA, 2001

- Provision of the integrated APEX and PREM information system for the management of the emission inventory
Genova Province, 2000
- Provision of a plotter
Rome Municipality, 2000
- Hardware provision necessary to P.O.M. activities, Irrigation – Action 1
INEA (Istituto Nazionale di Economia Agraria), 2000
- Support related to Air quality management plan information system of Tuscany Region
Tuscany Region, 1999
- Project and implementation of an information system for the evaluation of environmental risks from contaminated soils
ENEA, 1998
- Implementation and provision of emission inventory management software
Milano Province, 1998
- Provision of emissions estimation models for insertion in the information system with a view to the development of air quality management actions
Datasiel spa, 1998
- Implementation of the "Information System for the Evaluation and the Control of Energy Resources in Livorno Province"
Livorno Municipality, 1998
- Provision of systems and services for the implementation of the emission inventory (APEX) within the information system finalized to the activities of regional air quality management planning
Datasiel spa, 1998
- Provision of the programmes SETS and AIR AIR, respectively a programme for road transport emissions estimation and a programme for airport emissions estimation
Rome Province, 1997
- Development of software related to the bibliographic system ALEPH and relative services to same
ENEA, 1997
- Integration and development of information systems for energy and environmental planning
ENEA, 1997
- Development of a cartographic module within the information system COMEST related to Italian high technology products foreign trade data
ENEA, 1997
- Planning of an information system for the regional air quality management plan in Liguria
Datasiel spa, 1997
- Implementation of the software procedures for the elaboration of bibliographic data contained in the ENEA information system
ENEA, 1996
- Implementation of shift management software for the Società Ferrotranviaria di Bari
Prael SpA, 1996
- Provision of the software PRISM for waste disposal planning
ENEA, 1996
- Integration and innovation for the DISIA Project 'Development of an air pollutant emissions inventory information system and emission inventory production for the city of Florence' within the DISIA Projects
ENEA, 1995

- Provision of the program AIR AIR for airport emissions estimation
Tuscany Region, 1995
- Support for the Implementation of procedures within FOCUS and ARC/INFO for the transfer of numerical and cartographic data from the Haven system to the SI.DI.MAR system
ENEA, 1995
- Implementation of software related to the implementation and integration of information systems regarding air pollutant emission inventories, air quality data and energy infrastructures across Italian territory; data and integration collection within the information system "SINA"
ENEA, 1995
- Integration of the national energy indicators database with the unified European energy indicators established by EnR (European Energy Network)
ENEA, 1995
- Implementation of procedures for bibliographic data processing in DMARC format
ENEA, 1995
- Provision of the program SETS for road transport air pollutants estimation
Genova Province, 1995
- Provision of the program SETS road transport air pollutants estimation and for the programme AIR AIR for air transport emissions estimation
ENEA, 1995
- Maintenance of the information system used for the evaluation of environmental damage consequent to the Haven incident
ENEA, 1994
- Provision of the program SETS for road traffic air pollutants estimation for Florence Province
ENEA, 1994
- Development of software for meteorological data processing
TELESPAZIO SpA, 1994
- Implementation of software for the analysis of air pollutant emissions uncertainty from different sources
ENEA, 1993
- Extension and update of MEPER (Methodologies for Regional Energy Programming)
ENEA, 1993
- Implementation of procedures for the development and the management of the data base related to industrial incentive laws
ENEA, 1993
- Update of the SINAPO Information System of the National Union of Vegetables and Fruit Producers (UNAPOA)
UNAPOA, 1993
- Procedures of air quality data management and processing - DISIA Project – Venice Province
ENEA, 1993
- Enlargement and update of MEPER ("Methodologies for the Regional Energetic Programming") referring to the modules of pollutant emissions, of renewable sources and of the national energy balance
ENEA, 1992
- Implementation of the System for the elaboration of judgements and/or reliabilities of the National Union of Vegetables and Fruit Producers (UNAPOA)
UNAPOA, 1992

- Implementation of the System for the retrieval, acquisition, cataloguing of "full text" information of the National Union of Vegetables and Fruit Producers (UNAPOA)
UNAPOA, 1992
- Update of the Information System "ENERGECO"
ENEA, 1992
- Implementation of the module for the management of statistical information related to the production of the Information System of the National Union of Vegetables and Fruit Producers (UNAPOA)
AGRISERVICE, 1992
- Update of the information system for the management and maintenance of RAI antennas
Olivetti Information Services SpA, 1992
- Implementation of the information system CompeTe - ComEst (Technological Competitiveness-Foreign Commerce of high technology products)
ENEA, 1992
- Implementation of the information system relative to the environmental damages consequent to the ship Haven's accident
ENEA, 1992
- Implementation of the system related to major accident hazards of certain industrial areas
ENEA, 1992
- Information system related to MEPER project (Methodologies for the Regional Energy Programming)
ENEA, 1991
- Development of the energy information systems (ENERGECO and BIBL)
ENEA, 1990
- Implementation of environmental modules for regional energy planning and the evaluation of fiscal manoeuvres on the use of energy products
ENEA, 1990
- Implementation of activities of supervision and control on the development of the Information System of the Unione Nazionale Associazioni Produttori Ortofrutticoli ed Agrumari
UNAPOA, 1990
- Development of software and data collection for the analysis of sensitivity of the air pollutant emission estimates in complex emissive situations
ENEA, 1990
- Development of energy information systems (ENERGECO and BIBL)
ENEA, 1989
- Integration of the data management system developed by the Associazione Nazionale Cooperative Agricole della Lega Nazionale delle Cooperative
Olivetti Information Services SpA, 1989
- Update of the information system for the management and maintenance of RAI antennas
Olivetti Information Services SpA, 1989
- Development of the energy information systems (ENERGECO and BIBL)
ENEA, 1988
- Support to the development of the Information System of the Unione Nazionale Associazioni Produttori Ortofrutticoli ed Agrumari
Data Division Srl, 1988
- System for the data management developed by the Associazione Nazionale Cooperative Agricole della Lega Nazionale delle Cooperative
SYNTAX - Generale di Sviluppo Servizi e Sistemi Software SpA, 1987

- Analysis and development of interfaces between the bibliographic system of ENEA and the base of DOE ENERGY
ENEA, 1987
- Implementation of the Information System of the Unione Nazionale Associazioni Produttori Ortofrutticoli ed Agrumari
Data Division srl, 1987
- Development of an applicative software relative to air pollutant emissions in Italy
ENEA, 1987
- Compilation of a database related to air pollutant emissions in Italy
Fimbes, 1986

INVENTORIES AND REGISTERS

In the following the activities listed are primarily related to energy and environment data inventories and registers; when this activity is integrated with planning, the tasks are inserted under the appropriate item ([Plans and Programmes](#)):

- Update of air emission inventory for 2021, technical and maintenance assistance connected to the software using for the inventory management and air quality management planning
Regione Campania, 2023
- Provision of the regional air emissions inventory for year 2021, of emissions projection to years 2025 and 2030 e of the management and consultation system
Regione Liguria, 2022
- Provision of the input “CHIMERE” and of the questionnaires of the point sources available in E2GOV pre-completed with data related to 2016, finalized to implement activities to support air quality regional planning
Regione Liguria, 2022
- Technical support for the evaluation of the environmental impacts of DEASP
Ire Liguria, 2022
- Technical support for the updating of the air emissions inventory for Lazio region Arpa Lazio, 2022
- Preparation of the regional emissions of emission sources (IRSE) for the year 2019
Arpa Toscana, 2022
- Update of the emission inventory, technical assistance and maintenance connected to the software using for the emission inventory management and activities of air quality plan – referred to 2019
Campania Region, 2021
- Technical support aimed at creating the CO2 balance and the main climate-altering and polluting emissions of the waste cycle closure options at local level with a plant for the valorisation of flows outgoing from the Ligurian biological mechanical treatment plants
Liguria Region, 2021
- Methodologic support for the redaction of the inventory for the emissions monitoring of Vado Ligure Municipality and of the quantification of the impact of the Programme of the interventions of SECAP, based on the emissions inventory
IRE Liguria, 2021
- Redaction of the intervention scheme “Cold Ironing of ferry terminal and cruise terminal of Maritime Station at Genoa and cruise terminal of the Savona - Vado Ligure port” in the framework of the energy and environmental planning of the Portual system DEASP
IRE Liguria, 2020

- Update of the emissions inventory for 2015-20\9
Arpa Sicilia, 2020
- Updating of the regional emission inventory for 2017 and of emission scenarios
Arpa Toscana, 2019
- Completion of the regional emission inventory
Regione Liguria, 2019
- Updating of the emission inventory for 2018
Arpa Umbria, 2019
- Regional Energy Balance for 2016
IRE Liguria, 2018
- Update of port activities and main point sources for the emission inventory
Liguria Region, 2018
- Update for the emission inventories for 2016
Campania Region, 2018
- Emissions inventory updating for 2015
ARPA Umbria, 2016
- Regional Energy Balance and Monitoring of the Regional burden sharing goals
Piemonte Region, 2014
- Updating of the air emission inventory and relative software
ARPA Sicilia, 2014
- Updating of energy balance and greenhouse gases emission inventory
Genova Province, 2013
- Activities in the frame of the “Implementation of the Regional Environment Information System (SIRA)” of the Sardinia Region
Engineering Ingegneria Informatica, 2013
- Emissions inventory updating for 2010 and 2013
ARPA Umbria, 2013
- Integration to the service for updating of the information system for air quality planning and knowledge framework of the regional plan (Regional Energy Balance)
Liguria Region, 2013
- Compilation and updating of the regional emission inventory for the years 1995-2000-2003-2005-2007-2010
Tuscany Region, 2013
- Management and implementation of the Regional Environment Information System (SIRA) and Regional Focal Point (PFR)
Sardinia Region, 2012
- Emission inventory updating for 2010
Roma Province, 2012
- Update of provincial emissions inventory for 2010 and evaluation of air pollutants emission from road traffic
Firenze Province, 2011
- Compilation of the regional emissions inventory in 2008
ARPAL Liguria, 2011
- Updating of emission inventory in 2008, air quality assessment in the provincial municipalities and evaluation of air pollutant dispersion and deposition from six industrial plants
Roma Province, 2010
- Updating of energy balance and greenhouse gases emission inventory
Genova Province, 2009

- Technical assistance for implementing European Legislation on air quality
Ministry for Spatial Planning and the Environment of Montenegro, 2010
- Updating of the emissions sources inventory and implementation of the paper and digital archives concerning authorization procedures
Cagliari Province, 2009
- Consultancy services in the sector of the air pollutant emission inventories implementation and air quality planning in Albania
Ministry of Environment, Forestry and Water Administration of the Republic of Albania, 2009
- Adjustment of the greenhouse gas emissions provincial inventory according to the requirements of UNI ISO 14064 certification
Genova Province, 2009
- Pilot project for the observance of EU Reporting obligations and toward the accord of national legislation with the Acquis Communautaire of the European Union in the sectors air quality, industrial pollution control and climate change
Ministry of Tourism and Environment of Montenegro, 2008
- Update of the emissions sources regional inventory (IRSE) for the year 2007 and technical support for the year 2008
Tuscany Region, 2008
- Support to the regional inventory of sources of emissions (IRSE) and evaluation of emission projections
Tuscany Region, 2007
- Compilation of the regional emission inventory, preparation of the plan and programs for air quality management and provision of software for the support of their elaboration and management
Abruzzo Region, 2006
- Review of emissions estimates from air transport, shipping, industry and animal husbandry
APAT, 2007
- Provision of the system “AirSuite” including the compilation of the provincial emission inventory
Syracuse Province, 2006
- Provincial Inventory of air pollutant emissions
Lucca Province, 2006
- Air pollutant emission inventory update for the year 2005 and air quality planning
Florence Province, 2006
- Regional Inventory of air pollutant emissions (IRSE): update related to 2005 and support for 2006
Tuscany Region, 2006
- Emission inventory integration: data acquisition related to sinks and compilation of the energy inventory
Datasiel, 2006
- Update and validation of the air pollution sources inventory, with relative adaptation to the provincial information system
Rome Province, 2006
- Provision of the air pollutant emission inventory information system with relative support
Livorno Province, 2005
- Update of the regional air pollutant emission inventory and the integration of benzene in the regional Air Quality Management Plan
ARPA Umbria, 2005
- Provincial air pollutant emission inventory
Florence Province, 2005

- Update of the provincial air pollutant emission inventory and extension to the ozone in air quality management planning; adjustment of the relative software
Autonomous Province of Trento , 2004
- Regional inventory of emissions sources (IRSE)
Tuscany Region, 2004
- Inventory of PM₁₀ and PM_{2.5} emissions
Tuscany Region, 2004
- Update of the air pollutant emission inventory and of the relative information system tools
Autonomous Province of Bolzano-Alto Adige, 2004
- Air pollutant emissions estimation of the paper industry area within the project LIFE PIONEER
Lucca Province, 2004
- Support for the choice and use of traffic emission estimation models within the P.U.T.
Florence Municipality, 2003
- Update of the emission inventories for the period 1997-2000
Autonomous Province of Bolzano-Alto Adige, 2003
- Compilation of a local emission inventory prototype for Livorno Municipality with a view to use within P.A.C.
ARPAT Tuscany – Provincial Department of Livorno, 2003
- Provision, installation, testing and training of hardware and software for the air pollution emission inventory
Cagliari Province, 2003
- Predisposition of a methodology for the estimation of civil thermal plant emissions
ARPAT Tuscany - Provincial Department of Lucca, 2003
- Update of the air emission inventory and implementation of the function for access to the system for the Provincial Department ARPAT Florence
Florence Province, 2002
- Support for the update of the air pollutant emission inventory (I.R.S.E.)
Tuscany Region , 2002
- Support for road transport emissions estimation
Autonomous Province of Bolzano-Alto Adige, 2002
- Preparation of an analytic report of values relative to the air pollutant emission inventory in the province of Rome
Roma Province, 2002
- Update to the year 2000 of the diffuse and linear sources emissions in the regional inventory and predisposition of systems for the support of interventions evaluation
Tuscany Region, 2001
- Air pollutant emissions estimation support in the frame of the Transport Provincial plan
Autonomous Province of Bolzano-Alto Adige, 2001
- Preparation of the national emissions inventories in the sector "Emissions from solvents" and of the national case study "Emissions from transport"
ANPA, 2001
- Update of the provincial inventory of air emissions based on DPR 203/88 and updating of authorized waste water
Potenza Province, 2001
- Information system support to the Tuscany Region air quality management plan, emission inventory updating, provision of new models for air quality management
Tuscany Region, 2001
- Completion and updating of the air pollutant emission inventory and implementation of further information system functionalities
Florence Province 1999

- Compilation of national air and maritime transport and vegetation emissions inventories
ANPA, 1999
- Provision for completion and update of the air emission inventory and implementation of information system functionalities
Roma Province, 1999
- Air pollutant emission inventory update and implementation of the information system
Florence Province, 1999
- Air pollutant emission inventory and information system implementation for the Province of L'Aquila
L'Aquila Province, 1998
- Compilation of the inventory from localized and point sources and first update of data for the years 1995/1996
Florence Province, 1997
- Update of MEPER methodology and its application to all Italian regions to obtain energy balances comparable with the national energy balance
ENEA, 1994
- Completion and validation of the air pollutant emission inventory in the framework of the EEC Project. Corinair '90
ENEA, 1994
- Data collection necessary for the predisposition of the air pollutants emissions inventory in Italy within the CORINAIR '90 Project
ENEA, 1993
- Florence Province air pollutant emission inventory in the framework DISIA Projects of the Ministry of Environment: information analysis, emissions estimate implementation of the main module
ENEA, 1993
- Venice Province air pollutant emission inventory in the framework DISIA Projects of the Ministry of Environment: analysis of information, emissions estimate implementation of the main module, software and interface production
ENEA, 1993
- Definition of the methodology for the development of emissions inventories in environmental urban areas and development of an information system for the organization of environmental documentation
ENEA, 1990
- Extension of the ENEA air pollutant emission inventory and of the system for the organisation, management and use of data for the drawing up of the "State of the Environment Report" (air chapter) produced by the Ministry of Environment
ENEA, 1990
- Development of ENEA air pollutant emission inventory within the EMI information system
ENEA, 1989
- Compilation of the air pollutant emission inventory in Italy with reference to the year 1985 in the framework of the EEC programme CORINAIR on behalf of the Ministry of Environment
ENEA, 1988

CLIMATE CHANGE

The following activities are performed by Techne Consulting in the field of climate change:

- “Carbon footprint” evaluation of the port system of the western Ligurian sea (ports of Genoa and Savona-Vado Ligure)
IRE Liguria, 2019
- Project Design Documents (PDDs) for two hydroelectric power stations on the River Murdhar in Albania
HydroEnergy, 2010
- Project Design Documents (PDDs) for the projects "Combined Heat and Power (CHP) in the University Hospital Centre and Energy efficiency in the University Dormitory Center in Tirana
Ministry of Environment, Forestry and Water Administration of the Republic of Albania, 2008
- Support to Serbia & Montenegro for the draft of the National Communication foreseen by the United Nations Frameworks Convention on Climate Change (UNFCCC)
Italian Ministry for the Environment, Land and Sea, 2005

The activities listed can also be added to those listed in the item Inventories and registers relative to activities associated with inventories and greenhouse emissions projections.

Our experience in this field began in the '90s with the creation of the first greenhouse gases inventory in collaboration with the preparation of the [First National Communication to the Framework Convention on Climate Change](#) by the Italian Ministry of Environment.

The activities listed can also be added to those listed in the item Applied Research, particularly related to the Projects CLAiR-City and iCHANGE.

ENERGY AUDITS AND ENVIRONMENTAL IMPACT ASSESSMENT

The following activities are developed by Techne Consulting in the sector of environmental impact evaluation, while the activities currently developed in the field of energy audits are associated to the predisposition of some PDD in the frame of Climate Change.

- GHG projections of the emissions of pollutants and impact of air quality for Pljevlja as well as trans border context with Serbia and Bosnia up to details available
Smart Environment Solutions, 2013
- Assessment of the air pollution to be induced by construction of the Road Sozina-Bar
Smart Environment Solutions, 2012
- Emissions estimate from road traffic in the municipalities of Messina and Villa San Giovanni
University of Rome, 2012
- TOTAL Progett - Tempa Rossa: Update of the study of air diffusional modelling
Environmental (through Calpuff model) following the changes in plant
pH s.r.l., 2010
- Environmental Impact Assessment related to the construction of three roundabouts in the municipality of Teramo
Studio Marini, 2009
- Support to the environmental impact assessment for a plant in the city of Avezzano
AECOM, 2008

- Development of air diffusional models “post operam” for the project Tempa Rossa of TOTAL Spa
Orion, 2008
- Development of air diffusional models integrated to the monitoring services “ante operam” for Tempa Rossa Project of TOTAL Spa
Orion, 2007
- Evaluation of CO₂ balance related to the burning line construction and of a CO₂ production and distribution plant in Caprese Michelangelo
Consorgas, 2007
- Technical counter-arguments to the relaying tuna environmental compatibility analysis of the in the territorial waters of Maiori and Cetara
Maiori Municipality, 2006
- Simulations for the evaluation of air pollutants emissions and noise from road transport depending on yards installations for the implementation of tramvia (3 yards)
Firenze Municipality, 2005
- Environmental evaluation of air and noise components for the Study of Environmental Impact related to the project “Doubling of the roadway SS640 Di Porto Empedocle
Studio Tecnico Associato D'Alessandro, 2003
- Preparation of a environmental impact study of air component of the project of nord penetration of Trieste
Tecnica, 2003
- Air quality impact of Pisa Airport
Ing. Boeri on behalf of S.A.T. (Società Aeroporto Toscana) of Pisa, 2000
- Emissions estimate from Pisa airports
Sintesis Italia, 1999
- Development of a study for the noise evaluation in the Napoli-Capodichino airport area
GE.S.A.C. SpA, 1996
- Development of a study related to noise and air pollution in the area of the control tower in the framework of the Master Plan of the airport of Naples Capodichino
GE.S.A.C S.p.A., 1996
- Compilation of an emission inventory in the surrounding area power plant ENEL of Rossano Calabro
CISE SpA, 1994

MONITORING, SURVEY AND DATA PROCESSING

In the following are listed the activities related to the monitoring; when the planning of monitoring is integrated with planning assignments the respective items are listed below ([Plans and Programmes and Inventories and Registers](#)):

- Survey and implementation of 7 relevant case studies within the project CReIAMO PA
Sogesid, 2021
- Implementation of the dataset reporting modules of the infoAria system required by current legislation
Arpa Sicilia, 2019
- Support to the realization of "Sentinel Collaborative GS Platform for air quality"
Arpa Umbria, 2019
- Chimere model – Emission inventory with resolution 2 km and professional services
Arpa Campania, 2019

- Strengthening the capacities for Air Quality management in Montenegro Ministry of Finance of Montenegro, 2017
- Filling dataset reporting modules of the system infoAria according to current regulations – Directive 2008/50/EC e Decision 2011/850/EC
Arpa Sicilia, 2016
- Filling the air quality questionnaires according to Decision 2014/461/EC (Services related to Emission inventory updating within the Convention between ARPA Sicilia ed ARTA)
ARPA Sicilia, 2015
- Populating of prototype “Infoaria” for 2013 and 2014 (Services related to Emission inventory updating within the Convention between ARPA Sicilia ed ARTA)
ARPA Sicilia, 2015
- Development of the database for the Regional Energy Observation
ENEA, 2000
- Provision of the information system APEX for air pollutant emission management and collaboration in the provincial development plan framework, sustainable for the part relative to the indicators of air quality data indicators
Provincia Autonoma di Trento, 1999
- Data collection and processing needed to the update of the databases of energy-environment models
ENEA, 1991
- Analysis of information related to waste treatment presented by the regions to the Ministry of the Environment within the Triennial Plan of Environment Protection
ENEA, 1991
- Planning, Implementation and application of the system Air of the environmental monitoring system of the Po Basin
AITEC, 1991
- Elaboration of energy indicators for national economy sectors , comparable on an international level
ENEA, 1993
- Collection and organization of the environmental information and documentation in the south regions of Italy
- Planning of an integrated monitoring system "wide-meshed" of air quality and environmental radioactivity
Ansaldo Industrial Systems spa - Environmental Division, 1990
ENEA, 1989
- Data collection and analysis in the framework of the Second Energy Plan of CNR (National Research Council)
ENEA, 1989
- Application of multi-varied statistical analysis to the environmental epidemiology of the Po Valley
ENEA, 1988
- Development of a documentary study related to the databases existing in international field related to energy saving, energy accumulation and superconductivity
ENEA, 1987
- Implementation of the system for the multi-varied statistical analysis FASI ("Factor Analysis System Integrated") and its pilot application to the province of Latina
SYNTAX, 1987

TRAINING AND ASSISTANCE

In the following the activities listed are uniquely related to training and assistance; when the latter, as often happens, are integrated into more complex tasks, they are listed under the appropriate item ([Government System](#), [Plans and programmes](#), [Models and Software](#), [Inventories and Registers](#)):

- Advanced Training Program on Air Quality Control
Venice International University, 2008
- Pilot project for the observance of EU Reporting obligations and toward the accord of national legislation with the Acquis Communautaire of the European Union in the sectors air quality, industrial pollution control and climate change
Ministry of Tourism and Environment of Montenegro, 2008
- Technical support to the Central and Eastern Europe Task Force
Italian Ministry for the Environment, Land and Sea, 2005
- Air pollution training
ARPA Umbria, 2005
- Course of Integrated training "Tecnico per il Controllo, Gestione e Recupero Ambientale"
Istituto Tecnico Industriale Statale "Amedeo di Savoia Duca d'Aosta" (L'Aquila), 2001
- Organisation and compilation of a training database relative to DPR 175
ENEA, 1995
- Delivery of the training course ORACLE Report Writer
PRAEL Sistemi SpA, 1995
- Delivery of training activities relative to the FOCUS system in a personal computer environment with the Associazione Nazionale Cooperative Agricole
Olivetti Information Services SpA, 1990
- Delivery of the work placement "Computer science applied to the construction of models and the management of environmental data" - "Formazione di Rilevatori e Verificatori di dati ambientali"
INFORCOOP, 1990
- Delivery of training related to the FOCUS system in a personal computer environment for the Italian State Telephone Company and the Province of Rome
SYNTAX, 1988
- Delivery of training related to the FOCUS system in a mainframe environment for the Italian State Telephone Company and the Province of Rome
SYNTAX, 1987

APPLIED RESEARCH

In the following the applied research activities carried out by Techne Consulting are listed:
The following activities are carried out by Techne Consulting:

- iCHANGE Project (individual Change of Habits Needed for Green European transition), - Horizon 2020 Program - Type of funding scheme: Innovation action - Topic LC-GD-10-3-2020 "Enabling citizens to act on climate change, for sustainable development and environmental protection through education, citizen science, observation initiatives, and civic engagement"
European Commission, 2021
- CLAiR-City (Citizen Led Air pollution Reduction in Cities) – Horizon 2020 Program - Type of funding scheme: Research and Innovation action - Topic: SC5-04-2015 "Improving the Air Quality and Reducing the Carbon Footprint of European Cities"

- Commissione Europea, 2016
- Subcontract from European Topic Centre for Air Pollution and Climate Change Mitigation (ETC/ACM) task 1.1.3.1 for Support on review of updated chapters of EMEP/EEA Emission Inventory Guidebook
RIVM, National Institute for Public Health and Environment, 2012
- Update of the maritime Guidebook chapter
Aristotle University Thessaloniki, 2010
- Update of emission factors for maritime navigation
Aristotle University Thessaloniki, 2009
- Revision of the EMEP/EEA Emission Inventory Guidebook chapter on navigation (1A3d)
Aristotle University Thessaloniki, 2008
- MEET Project "Methodologies for estimating air pollutant emissions from transport" within the Program Transport of European Communities (extension to contract n° ST-96-SC-204)
European Communities, 1998
- MEET project "Methodologies for estimating air pollutant emissions from transport" within the Program Transport of European Communities
European Communities, 1996
- Research in the framework of "ENEL-CNR convention on the interaction of the energy systems with the health of man and with the environment" having as subject the "evaluation of the pollutant loads in areas concerning energy poles" - Implementation of a case study related to the area of Piombino
ENEL SpA, 1993
- Research within the "ENEL-CNR convention on the interaction of the energy systems with the health of man and with the environment" having as subject the "evaluation of the pollutant loads in areas concerning energy poles" - Setup of a methodology for the cartographic representation of the emissions and of air quality data
ENEL SpA, 1992
- Research within "ENEL-CNR convention on the interaction of the energy systems with the health of man and with the environment" having as subject the "evaluation of the pollutant loads in areas concerning energy poles" - Setup of a methodology for the quick compilation of the emissions inventory and for spatial - temporal disaggregation
ENEL SpA, 1990
- Research related to the development of the Energy Project of CNR/ENEA (subproject "Energy Models and Databases") having as subject: "Integration of databases internal and external to S.I.N.E. (National Energy Informative System)"
ENEA-CNR, 1988

The company has the following experiences in attending at International Task Forces:

- Combustion Industry expert panel in the frame of UNECE Task Force on Emission Inventories and Projection (since 2000; Carlo Trozzi is Co-leader dell'Expert Panel since 2004). The Task force has been established in 1991, on the basis of the agreement of the Executive Body of the Convention on Long - Range Transboundary Air Pollution, for supporting the work of the Environmental Monitoring and Evaluation Programme (EMEP). Then it was supported by the United Nations Economic Commission for Europe with the new name of Task Force on Emission Inventories and Projections (TFEIP)
- ICAO Committee on Aviation Environmental Protection:
- CAEP 8 (2009-2010)
Working Group 2 (WG2) – Operations, Task Group 4 (TG4) Airport Air Quality
Working Group 2 (WG2) – Operations, Task Group 2 (TG2) Air traffic Management
- CAEP9 (2011-2012)

Modelling and Databases Group (MDG)

- CAEP10 (2013-2014)
ISG. Impacts and Science
FESG. Forecasting and Economics
MDG. Modelling
- Emission Modeling Committee in the framework of Emission Inventory Improvement Program of the United States Environmental Protection Agency (2001-2002)
- Mobile Source Committee in the framework of Emission Inventory Improvement Program of the United States Environmental Protection Agency (2000-2002)
- COST 319 action "estimation of pollutant emissions from transport" may 1993 - october 1998
- UNECE/EMEP Task Force on Emission Inventories and Projection (TFEI) dal 1991
- Group of experts for the inventory CORINAIR 1990 constituted in cooperation with EMEP ed IPCC-OECD for supporting the compilation of inventories required by the Long Range Transboundary Air Pollution Convention e by the Framework Climate Change Convention

Group of experts for the inventory CORINAIR 1985 Inventory. European Communities Council Decision 85/338/EEC (OJ, 1985) established an "experimental project for gathering, coordinating and ensuring the consistency of information on the state of the environment and natural resources in the Community". The program had the name CORINE – CO-ordination INformation Environment and included a project to collect and organize the air pollutants data relevant for acid deposition - CORINAIR. This pilot project began in 1996 with the aim to compile a coordinated air emissions inventory of the 12 Member States present in 1985 (CORINAIR 1985). The inventory CORINAIR 1985 was developed with the Member States, Eurostat, OECD and UNECE/EMEP. The inventory was completed in 1990.

Furthermore, our technical director coordinates several chapters of the EMEP / EEA air pollutant emission inventory guidebook 2013 and he coordinated in the past several chapters EMEP / EEA air pollutant emission inventory guidebook 2009 EMEP / CORINAIR Emission Inventory Guidebook - 2007 and of 'EMEP / CORINAIR Emission Inventory Guidebook - 2006.

The software - E²Plan



E²Plan is a complete system for Environment and Energy Planning developed by Techne Consulting.

The system was founded originally as a system aimed to study air pollution (**AirSuite**) and has evolved over the years towards a system for integrated assessment in different environmental media under the name **EnviPlan.com**.

The new version in the Web environment **E²Plan** released at the end of year 2010 by Techne Consulting extends the functionality of the system to the environment and energy government by managing and processing basic data and indicators, evaluation models and diffusion, transport and transformation of pollutants models.

E²Plan is designed as a complete support system in energy and environmental planning includes:

- the system for managing and processing data and basic indicators in the fields of energy and environment, the development of inventories of emissions and energy balances and their future projections (**E²Gov**);
- models for the evaluation of driving forces, energy consumptions and emissions from road transport (**E²Road**), air transport (**E²Airport**) and shipping (**E²Port**);
- the model for the evaluation of energy consumption and emissions of carbon dioxide (CO₂) in municipalities and to support the Covenant of Majors (**E²Polis CO₂**);
- the system for assessing "quick" energy consumption and pollution (**E²Impact**);
- the interface to the models for the assessment of transport and diffusion of pollutants in different media (air, water, soil) **E²Diffusion**.

Our quality system

In the course of its work Techne Consulting has developed its own system of quality management. In 2000 the Company obtained the DNV certification UNI EN ISO 9001:1994 "Production of studies in the environmental, energy and transport sector. Software modelling for related data analysis and presentation", the current certificate UNI EN ISO 9001:2000 was obtained in 2003 and the new certification according to the norms UNI EN ISO 9001:2008 was achieved. In 2018 the certificate UNI EN ISO 9001:2015 was obtained from Lloyd's Register Quality Assurance Italy. In 2020 the certificate UNI EN ISO 9001:2015 was obtained from Quaser Certificazioni S.r.l. The certificate was renewed in 2021.

All working processes, technical and commercial, are characterised by a strong customer focus keeping in mind the objectives to achieve full customer satisfaction.

In particular, the company has:

- Identified the processes needed for its Quality Management System and their application, sequence and interaction;
- defined criteria for the effectiveness of processes and related controls through the drafting and approval of the quality system manual and procedures;
- ensured the availability of the human resources to implement and monitor the processes defined by the organizational chart;
- ensured the availability of information needed to implement and monitor processes through the distribution of the Quality Management System documentation and staff training;
- implemented monitoring, measurement and analysis processes;
- implemented all appropriate actions to achieve the continuous improvement of processes and products, resulting from monitoring and management reviews.

The company projects, whether related to external or internal assignments, are managed according to codified quality plans. The plan divides the project into actions, assigns responsibilities, undertakes specific tests and quality checks, it also necessitates that they be executed and that the results meet the specified requirements.

Through the quality plan, Techne Consulting monitors in real time the entire lifecycle of the project and the whole process of product implementation. In particular, the preliminary planning activities and the reviews meetings permit to reduce risks and the most critical aspects of each project.

The monitoring of the projects is carried out through a web application for the projects management