



**Cooperation Program  
for Environmental Protection  
Sustainable Development  
and Environmental Management  
Advanced Training Program**

**Report 2014**

中意环保合作项目  
可持续发展与环境管理  
高级培训项目  
**2014年度报告**

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In Cooperation with  
**AGROINNOVA – University of Turin**

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**6 Chinese partners, 13 training sessions, over 450 participants** and more than **100 lecturers & speakers**: these are the figures for the 11<sup>th</sup> edition (2014) of the *Sino-Italian Sustainable Development and Environmental Management Advanced Training Program*.

The structure of the Sino-Italian Advanced Training Program remains that of 10-day sessions between **Rome-Venice-Turin**, and includes a 5-day course at VIU, with its ad hoc choice of site visits and experts from relevant fields. In 2014, **new site visits** to a variety of Science and Technology Parks, companies and industrial districts have been introduced into the different training sessions in Italy, with the aim of continuing to offer the best sustainability practices available in Italy to the Chinese participants, and with a view to further enhancing links between Italy and China within the framework of their scientific and entrepreneurial communities for sustainable development. Each of the companies and institutions visited are described in detail in the second section.

**Environmental Pollution Control** continues to be one of China’s main priorities, with a particular focus on air quality, and seven courses dedicated to this subject were organized. The other six training sessions addressed the topic **Low Carbon Economy and Innovation**, highlighting how China recognizes this as a key element in achieving an economic development that simultaneously protects the environment. These two basic topics represent the key underlying themes for reflection between which the training sessions organised for 2014 can be divided, although the issues addressed in each individual training course were both more specific and ranged further afield.

The first section lists the lectures and site visits scheduled in the 11<sup>th</sup> edition of the *Sino-Italian Advanced Training Program*. Invited speakers came mainly from the private sector, followed by public institutions and lastly academia and research centers, in order to provide experience from all stakeholders as well as practical examples and discussions.

Finally, since relevant support came from experts, lecturers and site visits supplied by Agroinnova, IMELS, the ENEL Foundation and ELT-Siena University, a brief description of these partners is also included in section 2.

2014年中意合作项目举办了第十一届可持续发展与环境管理高级培训课程。中方政府机构为6个、培训班为13次、参加培训的中国政府官员和专家人数为450人、讲师为100多人。

每次可持续发展与环境管理高级培训课程为期10天，括在**罗马、威尼斯和都灵**的教室专家讲座以及专门安排的实地参观；其中，在威尼斯国际大学的为期5天的培训班作为培训经验的核心。

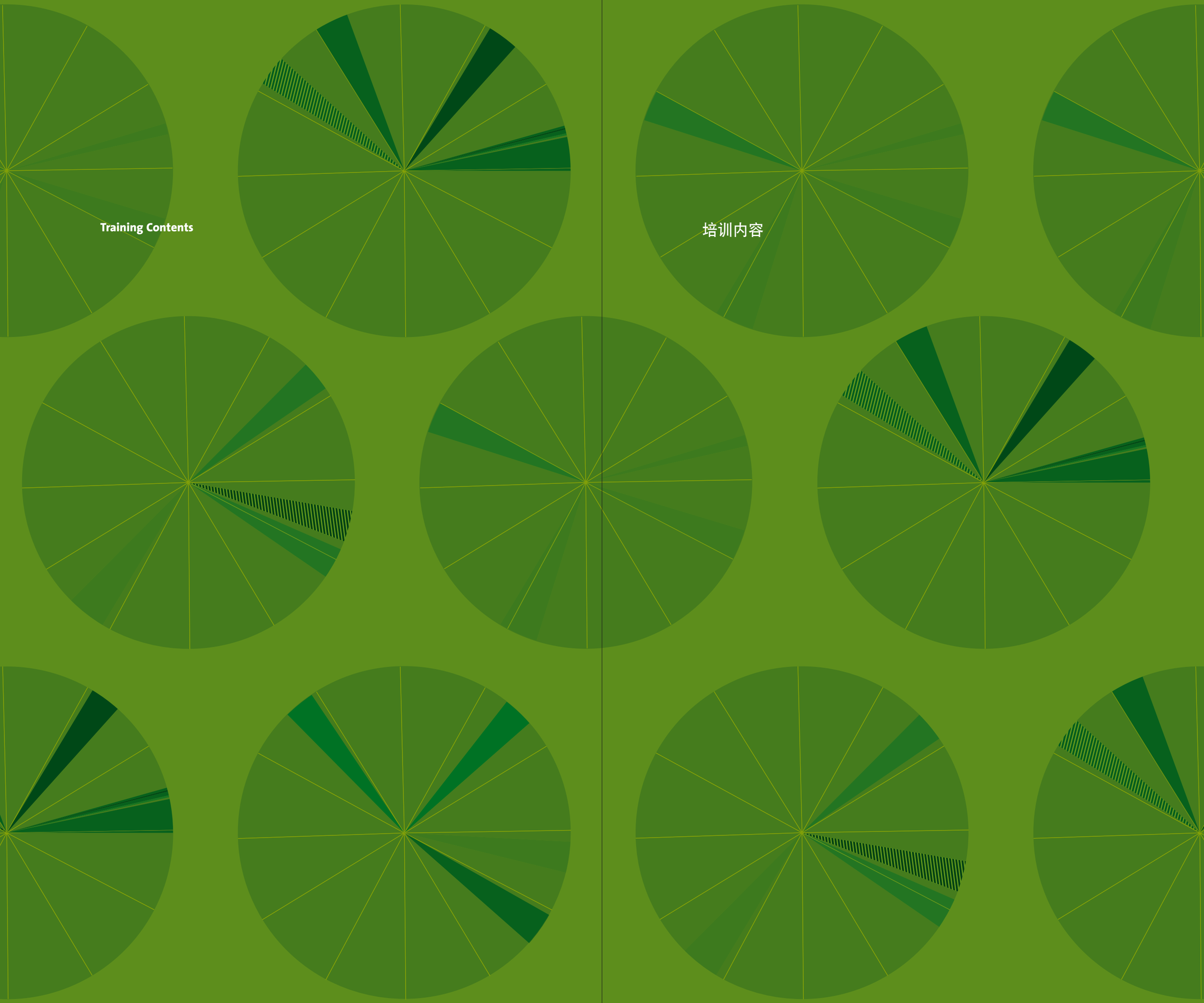
2014年不同培训班所**参观的地点增加了**，包括若干科技园区、企事业及企业群，让参加者亲身体验意大利可持续性方面的最佳实践并进一步加强中意合作，尤其是科学和企业家之间的对话和交流，共同努力以实现可持续发展。报告第2段里详细介绍所参观的各个企业和机构均在。

焦点为空气污染**的环境污染监控**，是中国最关键专题之一，2014年培训项目七次培训班的主要话题。作为六次培训班话题**的低碳经济与创新**，说明中国政府意识到了发展经济的同时保护自然环境是极为关键的要素。

上述2个课题作为13此培训班的**共同考虑的焦点**；当然，具体培训班内的专题内容更为详细并丰富。

报告第1段列出第十一届**理高级培训课程**的全部讲座及参观地点。大部分的讲师来自意方私有企业，接着有来自意方国家机关、学术界和研究中心，以便对培训参加者提供环保事业参与各方的经验、实际案例和相关讨论。

由于不少专家和讲师来自都灵大学的农业创新中心、意大利环境部、意大利电力公司基金会及锡耶纳大学的环境法团队对培训项目的支持很重要，作为不少教室讲座所在地并提供不少专家讲师，因此报告第2段里还提供该单位的简介。



Environmental Monitoring and Control

Health depends on the quality of the environment, and pollution must therefore be brought under control in order to guarantee general good health. Environmental monitoring is a key part of the process. Through continuous data collection and analysis we can better understand changes in the environment and identify pollution sources not only at national and local level, but also when dealing with larger scale pollution events. Environmental monitoring performed by the local protection agencies in the industrial/productive sector is also fundamental to backing up policies, implementing the enforcement of environmental laws and ensuring that emission limits are respected.

Seven courses:

Delegation	Module	Period and Location
CASS	Environment and Health	March 2 <sup>nd</sup> – 13 <sup>th</sup> 2014, Italy
MEP	Air Pollution Prevention and Control	May 4 <sup>th</sup> – 12 <sup>th</sup> 2014, Italy
BMEPB and SEPB	Air Quality Control	June 8 <sup>th</sup> – 18 <sup>th</sup> 2014, Italy
MEP	Air Pollution Prevention and Control	June 29 <sup>th</sup> – July 7 <sup>th</sup> 2014, Italy
BMEPB	Industrial Pollution Control	October 21 <sup>st</sup> 2014, Beijing, China
SEPB	Industrial Pollution Control	October 23 <sup>rd</sup> 2014, Shanghai, China
BMEPB and SEPB	Industrial Pollution Control	November 16 <sup>th</sup> – 26 <sup>th</sup> 2014, Italy

Main objectives

- To present the European and national legislation on pollution control.
- To present the main issues concerning the relationship between environment and health.
- To provide participants with international, national and local experience on environmental pollution control.
- To provide examples of pollution source monitoring systems.
- To explore innovative technologies for pollution control.

Topics

Policies for Pollution Control

- *EU Policies for Environmental and Health Protection*, M. Montini, Environmental Legal Team, University of Siena
- *EU Policies for Environmental Protection and Industrial Pollution Control*, A. Barreca, Environmental Legal Team, University of Siena
- *EU Policies & Legislation for Industrial Pollution Control*, A. Barreca, Environmental Legal Team, University of Siena
- *Energy Efficiency in European Industries: Policies and Strategies*, A. Lorenzoni, University of Padua
- *Air Monitoring: Provisions of the European Directives*, G. Formenton and L. Zagolin, ARPAV, Laboratory Department

环境监测与监管

人类健康依赖环境质量，因此为了保障身体健康应当监控污染，而环境监测极为关键。

只有连续收集及分析环境数据才能识别污染源以及查到自然环境的变化，不但在本地和全国层级而且当发生更广大范围的污染事件。

另外，本地的环保分局所进行的工业环境监测是监督环保法的执行及符合批发标准的不可少工具。

七门课程:

代表团	课程	时间和地点
中国社会科学院	环境与健康	2014年3月2日至13日,意大利
中国环境保护部	空气污染防治	2014年5月4日至12日,意大利
北京市环保局 和 上海市环保局	空气质量控制	2014年6月8日至18日,意大利
中国环境保护部	空气污染防治	2014年6月29日至7月7日,意大利
北京市环保局	工业污染防治	2014年10月21,北京
上海市环保局	工业污染防治	2014年10月23,上海
北京市环保局 和 上海市环保局	工业污染防治	2014年11月16日至26日,意大利

主要目标

- 介绍污染监控欧盟和意大利相关法律和政策
- 介绍环境与健康之间关系的主要因素
- 对参加者提供环境污染监控的国际、国家和本地政府层级经验的介绍
- 提供污染源监测系统的案例
- 探索污染监控的创新性技术

主题

污染监控政策

- 欧盟的环境与保健政策， M. Montini, 锡耶纳大学环境法团队
- 欧盟的环保政策和公用污染控制政策， A. Barreca， 锡耶纳大学环境法团队
- 欧盟工业污染控制政策和法律， A. Barreca， 锡耶纳大学环境法团队
- 欧盟的工业能效政策与策略， A. Lorenzoni， 帕多瓦大学
- 空气监测： 欧盟指令的规定， G.Formenton 和 L.Zagolin， 威尼托大区环保局实验式
- 空气污染管理： 欧盟及意大利层级的法律和政策， M. Strincone， 意大利环境、领土与海洋部可持续发展、气候变化与能源总司

- *Air Pollution Management: Legislation and Strategy Policies Adopted at European and Italian Level*, M. Strincone, Department for Sustainable Development, Climate Change and Energy, IMELS
- *The Italian Ministry for the Environment, Land and Sea: Environment & Health*, V. Leonardi and A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Italian Policies for Promoting Clean Technologies*, E. Vignola, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Italian Competences and Policy on Air Quality*, V. Leonardi, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Permits for Controlling Pollution*, S. Borghesi, University of Siena

Environment and Health

- *Environment and Health. Examples and Solutions for Environmental Safety Issues*, L. Sinisi, ISPRA
- *Environment and Health at City Level*, C. Maignan, Municipality of Venice
- *Health Issues in Sustainable Development at Urban Level: Air Pollution and Health*, E. Cadum, ARPA Piemonte
- *Food Safety and Agriculture: Issues and Strategies*, M.L. Gullino, Agroinnova, University of Turin
- *Health Protection and Economic Issues*, S. Borghesi, University of Siena
- *Soil Pollution and Health: Main Issues - Porto Marghera Case-Study*, A. Marcomini, Ca’ Foscari University of Venice

Pollution Control and Health

- *Air Pollution: Causes, Health Effects and Relevant Legislation*, F. Petracchini, CNR-IIA, National Research Council, Institute for Atmospheric Pollution
- *Air Pollution and Pollution Sources*, S. Caserini, Polytechnic University of Milan
- *Air Quality in Europe: Best Practices and Results*, F. Petracchini, CNR-IIA, National Research Council, Institute for Atmospheric Pollution
- *Air Pollution Control: Implementation of the European Policy at Local Level*, F. Petracchini, CNR-IIA, National Research Council, Institute for Atmospheric Pollution
- *The Lombardy Region Emission Inventory*, S. Caserini, Polytechnic University of Milan
- *Air Pollution Management in the Veneto Region*, L. Zagolin, ARPAV, ORAR - Regional Air Observatory
- *Air Quality Management at Province Level: Province of Turin Case Study*, A. Bertello, Province of Turin, Air Quality and Energy Resources Department
- *Emission Inventories: the Lombardy Region Emission Inventory*, S. Caserini, Polytechnic University of Milan
- *Air Monitoring: Remote Sensing in the Atmosphere*, I. Kostadinov, Consorzio Proambiente ScrI
- *New Challenges in Air pollution Control: PM2.5*, R. Zangrando, CNR, Institute for the Dynamics of Environmental Processes
- *VOCs Pollution in Europe and Italy. Monitoring, Technology Control Options and Related Policies*, R. Mabilia, CNR, Institute for Atmospheric Pollution

- 意大利环境、领土与海洋部: 环境与健康, V. Leonardi 和 A. Negrin, 意大利环境、领土与海洋部 可持续发展、气候变化与能源总司
- 促进清洁技术的意大利政策, E. Vignola, 意大利环境、领土与海洋部 可持续发展、气候变化与能源司总司
- 空气质量方面的意大利政策及国家部门的职能, V. Leonardi, 意大利环境、领土与海洋部 可持续发展、气候变化与能源总司
- 污染防治的可交易许可证, S. Borghesi, 锡耶纳大学

环境与健康

- 环境与健康。环境安全事宜的案例和解决方案, L. Sinisi, ISPRA意大利环境保护与研究院
- 城镇级的环境与健康, C. Maignan, 威尼斯市政府官员
- 城镇级可持续发展的健康事宜: 空气污染与健康, E. Cadum, 皮埃蒙特大区环保局
- 食品安全与农业: 问题及策略, M.L. Gullino, 都灵大学, 农业新技术公司
- 保健问题与经济, S. Borghesi, 锡耶纳大学
- 土壤污染与健康的主要问题 - 玛格拉港口案例研究, A. Marcomini, 威尼斯卡·弗斯卡里大学

污染防治与健康

- 空气污染: 原因、对身体的影响以及相关法律法规, F. Petracchini, 意大利国家研究委员会- 空气污染研究所
- 空气污染与污染源, S. Caserini, 米兰理工大学
- 欧盟的空气质量: 最佳实践与效果, F. Petracchini, 意大利国家研究委员会- 空气污染研究所
- 空气污染控制: 怎样本地政府执行欧盟政策, F. Petracchini, 意大利国家研究委员会- 空气污染研究所
- 伦巴第大区的温室气体排放清单, S. Caserini, 米兰理工大学
- 威尼托大区的空气污染管理系统, L. Zagolin, 威尼托大区环保局, 大区空气质量观测局
- 省级的空气质量管理: 都灵省案例研究, A. Bertello, 都灵深圳分, 空气质量与能源部
- 排放清单: 伦巴第大区的温室气体排放清单, S. Caserini, 米兰理工大学
- 空气监测: 大气中的遥感, I. Kostadinov, ProAmbiente 合营有限公司
- 空气污染控制的新挑战: PM2.5, R. Zangrando, 意大利国家研究委员会 – 动态环境过程学院



- *Technologies for Air Pollution Control: VOC, De-NOx and Mercury*, I. Cavallotti, ICA
- *Black Carbon Monitoring in Urban Air: Milan Case Study*, S. Moroni, AMAT
- *Long-term Sampling of Dioxins (PCDDs/PCDFs) in Emissions*, W. Tirler, Eco-Research
- *Case Studies of Successful Mobility Management in Italy and Europe*, M. Infunti, iMpronta
- *Towards a Sustainable Mobility: Guidelines for Mobility Management*, M. Infunti, iMpronta
- *Vehicle Emissions Control: Fuels and Engines*, S. Casadei, Innovhub - SSI
- *Water Pollution and Health - Main Issues and Possible Solutions - Water Pollution EU and Italian Policies - The Role of Monitoring*, F. Mion, ARPAV
- *Water Pollution and Health - Main Issues and Possible Solutions - Water Pollution EU and Italian Policies - Monitoring Cases of Groundwater Contamination*, F. Mion, ARPAV

Industrial Pollution Control

- *Energy Efficiency in European Industries*, A. Lorenzoni, University of Padua
- *Energy Efficiency in European Industries: Case Studies*, A. Lorenzoni, University of Padua
- *Energy Efficiency in Industrial Buildings*, A. Gasparella, Free University of Bozen-Bolzano
- *Emission Reduction in Electricity Production: the Enel Experience*, M. Germini, Enel Foundation
- *The Fusina Power Plant: Emission Monitoring and Reduction*, C. Marcato, Enel S.p.A.
- *Pollutant Emission Control and Efficiency in Thermal Power Plants – Part I*, G. Benelli, Enel S.p.A. Engineering and Research Division
- *Pollutant Emission Control and Efficiency in Thermal Power Plants – Part II*, G. Benelli, Enel S.p.A. Engineering and Research Division
- *Site-Specific Ecological Risk Assessment (ERA) for Contaminated Sites*, E. Semenzin, Ca' Foscari University of Venice
- *The Simage Project*, A. Daniele, ARPAV

Communnication

- *Social Awareness & Communication Strategies Concerning Environmental Issues - Successful Case Studies*, U. Mezzacapo, University of Bologna
- *Public Communication at the Local Level: Municipality of Venice*, C. Dezuanni and I. Gobbo, Municipality of Venice
- *Air Pollution Control and Communication with the Public: the Veneto Region Case Study*, L. Zagolin, ARPAV
- *Air Quality Assessment in the Veneto Region and Communication with the Public*, G. Marson and L. Zagolin, ARPAV, ORAR - Regional Air Observatory
- *Presentation of the Industrial Monitoring and Alarm System SIMAGE in Venice: Design, Establishment and Management of the System*, A. Daniele, ARPAV

- 欧盟和意大利的挥发性有机化合物污染。监测、技术控制以及相关政策， R. Mabilia, 意大利国家研究委员会 - 空气污染研究所
- 空气污染治理技术：挥发性有机化合物、脱硝及汞， I. Cavallotti, 环境化学工程有限公司
- 城区空气内的黑炭监测：米兰市案例研究， S. Moroni, 米兰交通、环境与领土管理局
- 排放中的二恶英（PCDDs/PCDFs）长期抽样， W. Tirler, Eco-Research 实验式
- 意大利和欧洲成功的交通管理案例研究， M. Infunti, iMmpronta
- 走向可持续性交通：交通管理指南， M. Infunti, iMpronta
- 机动车排放控制：燃料与马达， S. Casadei, Innovhub – 工业试验站点
- 水污染与健康 – 主要问题及解决方案 – 欧盟和意大利的水污染政策 – 监测的作用， F. Mion, 威尼托大区环保局
- 水污染与健康-主要问题及解决方案- 欧盟和意大利的水污染政策 – 地下水污染监测案例， F. Mion, 威尼托大区环保局

工业污染防治

- 欧盟工业的能效， A. Lorenzoni, 帕多瓦大学
- 欧盟工业的能效的案例研究， A. Lorenzoni, 帕多瓦大学
- 工业建筑物的能效， A. Gasparella, 波尔察诺私营大学
- 发电产业的能效：意大利电力集团公司的经验， M. Germini, 意大利电力集团公司基金会
- Fusina 发电厂的排放监测与削减， C. Marcato, 意大利电力集团公司
- 火力发电厂的污染排放控制与效率- 第1部分， G. Benelli, 意大利电力集团公司工程与研发部
- 火力发电厂的污染排放控制与效率- 第2部分， G. Benelli, 意大利电力集团公司工程与研发部
- 污染地区的定点环境风险评价（ERA）， E. Semenzin, 威尼斯卡·弗斯卡里大学
- 威尼斯SIMAGE工业监测与警告， A. Daniele, 威尼托大区环保局

大众传播

- 环境事业的意识性与传播战略 – 有效的案例研究， U. Mezzacapo, 波洛尼亚大学
- 本地政府层级的大众传媒：威尼斯市政府， C. Dezuanni 和 I. Gobbo, 威尼斯市政府
- 空气污染控制与大众传媒：威尼托大区案例研究， L. Zagolin, 威尼托大区环保局



Site visits

- *Agriculture and Food Safety*, Agroinnova, University of Turin, Agroinnova Laboratories
- *The safeguarding of Venice*, TEN Center – Venice International University, Venice Lagoon
- *Air Quality Control*, ARPAV, Regional Agency for Environmental Protection in Veneto, Monitoring Stations
- *Water Pollution and Health*, Veritas S.p.A., Potabilization Plant in Cà Solaro
- *Land Reclamation and Redevelopment*, VEGA Parco Scientifico Tecnologico di Venezia
- *Environmental Performance in Industry*, Favini S.p.A., Vicenza
- *Drinking Water Supply*, Veritas S.p.A.
- *Integrated Waste Water Management*, Veritas S.p.A.
- *Air Pollution Source Monitoring*, Enel S.p.A., Fusina Power Plant
- *High Heat Technology*, ICI Caldaie S.p.A.
- *Energy Efficiency – Air Pollution Control*, Iren Energia S.p.A.
- *Air Emission Control*, Acegas Aps S.p.A., Padua Incineration Plant
- *Air Pollution Control in Industry*, Italcementi Group
- *Industrial Energy Efficiency: Cogeneration*, Iren Energia S.p.A., Co-generation Plant
- *Industrial Pollution Control*, ARPAV, Regional Agency for Environmental Protection in the Veneto, Simage Control Room

- 威尼托大区的空气质量评价与大众传媒，G.Marson 和L.Zagolin，威尼托大区环保局， 大区空气质量观测局
- 威尼斯SIMAGE 工业监测与警告系统的介绍：系统的设计、安装及管理， A.Daniele，威尼托大区环保局

现场访问

- 农业与食品安全，实验室和温室，都灵大学农业创新中心
- 威尼斯的保护，“环境主题网络”中心 - 威尼斯国际大学，威尼斯泻湖
- 空气质量监控，威尼托大区环保局，监测站
- 水污染与健康，Veritas 股份公司，Cà Solaro 水饮用化处理厂
- 污染地区修复及再开发，威尼斯科技园
- 工业的环境绩效，Favini 股份公司，维琴察
- 饮用水供给，Veritas 股份公司
- 污水综合管理，Veritas 股份公司
- 空气污染源监测，意大利电力集团公司，Fusina 发电厂
- 高热技术，ICI 锅炉股份公司
- 能效 – 空气污染控制，Iren Energia 股份公司.
- 空气排放控制，Acegas Aps 股份公司，帕多瓦焚烧厂
- 工业的空气污染控制，意大利水泥集团
- 工业能效：热电联产，Iren Energia 股份公司，热电厂
- 工业污染控制，威尼托环保局，SIMAGE 工业监测与警告系统控制室

Low Carbon Economy and Innovation

Innovation in the industrial sector is the key element for achieving a sustainable and low carbon and green economy. In particular, the promotion of energy efficiency in the industrial sector is essential, both to ensure that increasing energy demands are met and to pursue sustainable development. Further research, innovative technologies and new investments are key tools to improving and encouraging the use of low carbon technologies. High-technology and Science Parks are examples of ideal places where innovation is developed and disseminated.

Six courses:

Delegation	Course	General Schedule
CASS	Green Growth	March 16 <sup>th</sup> – 27 <sup>th</sup> 2014, Italy
MOST	High-Technology and Science Parks for Sustainable Development	June 21 <sup>st</sup> – July 2 <sup>nd</sup> 2014, Italy
MOST	Innovation of Enterprises and Green Technologies	September 6 <sup>th</sup> - 17 <sup>th</sup> 2014, Italy
TSTC	Sustainable Industry and Eco-Innovation Management in Coastal Urban Areas	October 19 <sup>th</sup> – 29 <sup>th</sup> 2014, Italy
MOST	Industrial Energy Efficiency	October 20 <sup>th</sup> – 23 <sup>rd</sup> 2014, Beijing, China
MOST	Industrial Energy Efficiency	October 25 <sup>th</sup> – November 5 <sup>th</sup> 2014, Italy

Main objectives

- To analyze policies for green innovation implemented at EU, national and local level, with a special focus on the Italian and EU experience.
- To provide an overview of the Carbon Market, with a special focus on the EU Emission Trading Scheme and its implementation at the local level.
- To present examples of innovative technologies used by industries to become more environmentally friendly and low carbon.
- To underline the importance of science parks for technology transfer and green innovation.
- To present the main characteristics of energy efficiency and renewable energy and their application on an urban scale.

Topics

Policy and Promotion of Green Innovation

- ➔ Overview on EU Organization and Environmental Law, A. Barreca and M. Montini, Environmental Legal Team, University of Siena
- ➔ EU Policies for Green Growth, M. Montini, Environmental Legal Team, University of Siena
- ➔ EU Policies for Industrial Development and Environmental Protection, A. Barreca, Environmental Legal Team, University of Siena
- ➔ EU Legislation on Industrial Installations, M. Montini, Environmental Legal Team, University of Siena
- ➔ EU Legislative Framework on Energy Efficiency, F. Volpe, Environmental Legal Team, University of Siena

低碳经济和创新技术

工业产业的创新是实现可持续发展和低碳经济的关键因素。为了实现可持续发展，应该推动工业的能效，以便保证能源需求的满足。大量投资、研究开发及创新型技术为促进推动低碳技术及清洁能够的应用的重要工具。

高新技术产业园区及科学园是开发并传播创新技术的理想地点。

六门课程:

代表团	课程	时间和地点
中国社会科学院	绿色增长	2014年3月16日至27日,意大利
中国科学技术部	可持续发展的高新技术与科技园	2014年6月21日至7月2日,意大利
中国科学技术部	企业创新性与绿色技术	2014年9月6日至17日,意大利
天津市科学技术委员会	沿海城市的可持续工业与生态创新管理	2014年10月19日至29日,意大利
中国科学技术部	工业能效	2014年10月20日至23日，中国北京
中国科学技术部	工业能效	2014年10月25日至11月5日,意大利

主要目标

- 分析中央政府和地方政府的城市低碳政策，特别关注意大利和欧盟的相关经验。
- 提供低碳市场的综述，特别关注欧盟排放交易机制以及其本地层级的实施。
- 介绍工业所采用的保型以及低碳型创新性技术的例子。
- 强调技术转让以及创意领域技术园所起的重要作用。
- 介绍能效和可再生能源的主要特点以及其在城市层级的实施。

主题

推动绿色创新的政策

- ➔ 欧盟组织机构及其环保政策简介， A. Barreca 和M. Montini,锡耶纳大学环境法团队
- ➔ 欧盟的绿色增长政策， M. Montini， 锡耶纳大学环境法团队
- ➔ 欧盟的工业发展与环境保护政策， A. Barreca， 锡耶纳大学环境法团队
- ➔ 欧盟工业设施法律与政策， M. Montini， 锡耶纳大学环境法团队
- ➔ 欧盟能效框架法， F.Volpe， 锡耶纳大学环境法团队
- ➔ 欧盟能效政策实施的案例研究， F.Volpe， 锡耶纳大学环境法团队
- ➔ 欧盟的排放交易体制， A. Barreca， 锡耶纳大学环境法团队

- *EU Energy Efficiency Policies Implementation: Case Studies*, F. Volpe, Environmental Legal Team, University of Siena
- *EU Emission Trading Scheme*, A. Barreca, Environmental Legal Team, University of Siena
- *EU ETS and Linking with other Emission Trading Schemes*, M. Montini, Environmental Legal Team, University of Siena
- *Waste Management and Resource Conservation - EU Policies & Case Studies*, A. Muntoni, University of Cagliari
- *The Italian Ministry for the Environment, Land and Sea*, V. Leonardi and A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *The Role of the Italian Ministry for the Environment, Land and Sea: Policy for Sustainable Development*, A. Negrin, IMELS, Department, for Sustainable Development, Climate Change and Energy
- *Italian Policies for Green Growth and Environmental Protection*, A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Italian Policies for Promoting Clean Technologies*, A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Low Carbon Economy & Italian Policy*, E. Vignola, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Energy Managers and White Certificates in Italy*, D. Di Santo, FIRE
- *State and Perspective of Energy Efficiency in Italy: Policies and Technologies*, M. Aurelio, Enel Foundation
- *Promoting Innovation: Italian Perspectives*, M. Dal Co, Italy-China Center for Technological Transfer
- *Sustainable Energy Systems: Promoting Renewable Energy Sources (RES) and Energy Efficiency in Liberalised Markets*, L. Bano, Galileia S.r.l.
- *Research and Innovation: Direct and Systemic Incentives*, M. Dal Co, Italy-China Center for Technological Transfer
- *Economic Aspects of Promoting Clean Technologies*, M. Germini, Enel Foundation
- *Economic Feasibility of the Technological Solutions for Industrial Energy Efficiency*, P. Baldracchi, Polo Tecnologico per l'Energia S.r.l.
- *How to Foster the Technologies Market on Energy Efficiency and Renewables - Some Observations Based on Experience*, G. Gallo, Energy Gate Fondazione Torino Smart City
- *Promoting Innovation and Technology Transfer in Emilia-Romagna Region*, S. Valentini, ASTER S. C. p. A.

Science Parks for Green Innovation

- *The Role of Science and Technology Parks for Promoting Sustainable Development through Innovation*, E. Moi, APSTI - Italian Science and Technology Parks Association
- *Energy Management in Science Parks*, S. Scaleri, Enel S.p.A., Engineering and Research Division

- 欧盟排放交易体制与其他排放交易体制的连接, M. Montini, 锡耶纳大学环境法团队
- 废物管理与资源节约 – 欧盟政策和案例研究, A. Muntoni, 卡利亚里大学
- 意大利环保政策与意大利环境、领土与海洋部, V. Leonardi 和 A. Negrin, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 意大利环保政策与意大利环境、领土与海洋部的职责及可持续发展政策, A. Negrin, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 意大利的历史增长与环境保护政策, A. Negrin, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 推动清洁技术的意大利政策, A. Negrin, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 低碳经济与意大利政策, E. Vignola, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 能源经理人与白皮证明, D. Di Santo, FIRE, 意大利能源联盟
- 意大利能效的状况与前途: 政策和技术, M. Aurelio, 意大利电力集团公司基金会
- 推动创新: 意大利的观点, M. Dal Co, 中意技术转移中心
- 可持续能源系统: 在放开管制的市场提高可再生能源利用及能源效率, L. Bano, Galileia 有限公司
- 研究与创新: 直接与系统性的激励, M. Dal Co, 中意技术转移中心
- 推动清洁技术的经济方面, M. Germini, 意大利电力集团公司基金会
- 工业能效技术的经济可行性, P. Baldracchi, 能源科技园有限公司
- 怎样推动能效和可再生能源的技术市场 – 基于经验的一些意见, G. Gallo, Energy Gate都灵智慧城市基金会
- 艾米利亚·罗马涅大区推动创新与技术转移政策, S. Valentini, ASTER 联营公司

绿色创新科技园

- 通过技术创新促进可持续发展及科技园的作用, E. Moi, APSTI – 意大利科技园协会
- 科技园的能源管理, S. Scaleri, 意大利电力集团公司, 工程与研究部
- 技术园及工业区的交通管理指南, M. Infunti, iMpronta
- 技术园及工业区的交通管理: Moma.biz 项目, M. Infunti, iMpronta
- 威尼斯科技园孵化器企业的介绍, M. Zanetto, Mr Energy 有限公司, D. Franceschetti, Solwa 有限公司和 G. Borga, Unisky 有限公司

- *Mobility Management for Science Parks and Industrial Districts: Guidelines for Mobility Management*, M. Infunti, iMpronta
- *Mobility Management for Science Parks and Industrial Districts: the Moma.biz Project*, M. Infunti, iMpronta
- *Presentation of VEGA InCube Companies*, M. Zanetto, Mr Energy S.r.l., D. Franceschetti, Solwa S.r.l. and G. Borga Unisky, S.r.l.
- *Presentation of CEEM Project*, F. Romano, Friuli Innovazione, Udine - Science and Technology Park “Luigi Danieli”
- *Presentation of Friuli Innovazione and Luigi Danieli Science and Technology Park Activities and Projects*, F. Feruglio, Friuli Innovazione, Udine - Science and Technology Park “Luigi Danieli”
- *Presentation of POINT and Bergamo Innovazione Activities and Projects*, C. Arrigoni, Bergamo Sviluppo
- *Presentation of Rome Technology Park Systems*, A. Ciancia, Tecnopolo Roma S.p.A.
- *Presentation of the Parks’ Companies and Research Centers*, D. Cattaneo, Cimprogetti S.p.A. and E. Pasinetti, SIAD S.p.A.
- *Presentation of the Technopole Laboratories and Researchers*, A. Picano, LABOR S.r.l., L. Fiorentino and M. Bistolfi, Roma Research Consortium
- *Presentation of VEGA and its Activities*, I. Abrami, VEGA Parco Scientifico Tecnologico di Venezia
- *Presentation of Veneto Nanotech*, F. Lodato, Veneto Nanotech S.c.p.a.
- *Presentations of the Park’s Projects and Companies*, D. Gulic, Dermap S.r.l., P. Omero, infoFACTORY S.r.l. and A. Bernardis, B-Lab S.r.l.

**Green Innovation Technologies and Firms**

- *Cities as Engines of Innovation and Sustainability*, A. Facchini, Enel Foundation
- *Technologies: Case Studies from Industry*, A. Lorenzoni, University of Padua
- *Innovation of Enterprises: Strategic Research*, G. Benelli, Enel S.p.A. Engineering and Research Division
- *Competitive Green Strategies: How to Benefit from Green Innovations*, V. De Marchi, University of Padua
- *Innovation and Sustainability: Case Studies from Industrial Ecology*, I. Mannino, VIU
- *Green Growth and Energy: Energy Efficiency and Renewables*, M. Fauri, University of Trento
- *Green Growth: Production, Research and Environmental Protection at Local Level*, G. Simonetto, Independent Consultant
- *LCA Methodology and its Applications for a Green Growth*, L. Breedveld, 2B S.r.l.
- *LCA Methodology and its Applications for Greening Industries*, S. Fontana, 2B S.r.l.
- *Italian Industrial Districts and Sustainable Development*, B. Da Ronch, Tedis, VIU
- *Innovation in the Energy Sector: Challenges and Strategies*, A. Facchini, Enel Foundation and D. Colozza, Enel S.p.A., Innovation Planning and Value

- 环境与能源集中管理（CEEM）项目的简介， F.Romano， 弗留利创新， 乌迪内 – “Luigi Danieli”科技园
- 弗留利创新与《Luigi Danieli》科技园区业务和项目的简介， F.Feruglio， 弗留利创新， 乌迪内 – “Luigi Danieli”科技园
- POINT 技术创新中心和贝尔加莫创新公司的业务与项目的简介， C.Arrigoni， 贝尔加莫发展公司
- 罗马科技园体制的简介， A. Ciancia， 罗马科技工业园区股份公司
- 科技园企业和研究中心的简介， D.Cattaneo， Cimprogetti 股份公司和 E. Pasinetti， SIAD股份公司
- 罗马科技工业园区实验式和研究员的简介， A. Picano， LABOR 有限公司， L. Fiorentino 和 M. Bistolfi， 罗马研究联合会
- 威尼斯科技园及其业务的简介， I.Abrami， VEGA 威尼斯科技园
- 威尼托纳米技术公司的简介， F.Lodato， 威尼托纳米技术联营公司
- 科技园项目和企业的简介， D.Gulic， Dermap 有限公司、 P.Omero， infoFACTORY S.r.l. 有限公司和 A. Bernardis， B-Lab 有限公司

**绿色创新技术与企业**

- 城市作为创新和可持续性的发电机， A. Facchini， 意大利电力集团公司基金会
- 技术的工业案例研究， A. Lorenzoni， 帕多瓦大学
- 企业的创新：战略性研究， G. Benelli， 意大利电力集团公司公司工程与研发部
- 竞争性的绿色战略： 怎样从绿色创新中得益， V. De Marchi， 帕多瓦大学
- 创新与可持续性： 工业生态学的案例研究， I. Mannino， 威尼斯国际大学
- 绿色增长与能源： 能效和可再生能源， M. Fauri， 特兰托大学
- 绿色增长： 地方层级的生产、研究及环保政策， G. Simonetto， 独立顾问
- 生命周期评价方法和绿色增长的应用， L. Breedveld， 2B 有限公司
- 生命周期评价方法和工业绿化的应用， S. Fontana， 2B 有限公司
- 意大利企业群与可持续发展， B. Da Ronch， 威尼斯国际大学 – Tedis中心
- 能源产业的创新： 挑战和策略， A. Facchini， 意大利电力集团公司基金会和 D. Colozza， 意大利电力集团公司创新规划部
- 工业的可再生能源和能效的案例研究， M. Fauri， 特兰托大学
- 能效技术， A. Lorenzoni， 帕多瓦大学
- 能效与智能电网： 创新性项目案例研究， V. Cantello， EnerGrid 股份公司



- *Renewables and Energy Efficiency Implementation in Industry: Case Studies*, M. Fauri, University of Trento
- *Energy Efficiency Technologies*, A. Lorenzoni, University of Padua
- *Energy Efficiency and Smart Grids: Case Studies of Innovation Projects*, V. Cantello, EnerGrid S.p.A.
- *Energy Efficiency in Industrial Buildings*, A. Gasparella, Free University of Bozen-Bolzano
- *Energy Efficiency in the Industrial Use of Electricity*, G. Gallo, Energy Gate Fondazione Torino Smart City
- *Renewable Energies, Energy Efficiency and Smart Grids: the Enel Experience*, M. Germini, Enel Foundation
- *High Efficiency Coal Conversion*, G. Molina, Enel S.p.A.
- *Solid Oxide Fuel Cells for Industrial Applications*, A. Ravagni, SOFCpower
- *Italian Projects for Energy Efficiency in Industrial Areas: ENEA Research Activities*, R. Preka and M.A. Segreto, ENEA
- *Waste Management and Resource Conservation – EU Policies & Case Studies*, A. Muntoni, University of Cagliari)
- *Organic Waste Valorization, New Technologies for Sustainable Agriculture: from Waste to Resource from Research to Business*, M.L. Gullino and M. Pugliese, AgriNewTech
- *Prevention and Management of Industrial Emergencies*, L. Torriano, D'Appolonia S.p.A.
- *Porto Marghera and the Industrial Development of the Venice Lagoon*, F. Porchia, Impact S.r.l. and EZI
- *Italcementi Group*, S. Gardi, Italcementi Group
- *Sustainability in the Wine Sector: V.I.V.A. Sustainable Wine*, M. Monchiero, Agroinnova, University of Turin
- *Sustainable Agriculture and Corporate Environmental Responsibility in the Wine Sector: the VIVA Project*, M. Monchiero, Agroinnova, University of Turin

Site Visits

- *Sustainable Industrial Redevelopment, Porto Marghera Industrial Area*, Impact S.r.l. and EZI
- *Science Parks and Sustainability*, Environment Park S.p.A.
- *Science Parks and Sustainability*, Tecnopolo Roma S.p.A
- *Science Parks and Sustainability*, Friuli Innovazione, Udine - Science and Technology Park “Luigi Danieli”
- *Science Parks and Sustainability*, Bergamo Sviluppo, POINT - POlo per l'INnovazione Tecnologica
- *Science Parks and Sustainability*, VEGA Parco Scientifico Tecnologico di Venezia
- *Porto Marghera and the Industrial Development of the Venice Lagoon*, TEN Center – Venice International University, Marghera Area, VEGA Industrial Park and San Giuliano Park

- 工业建筑物的能效， A. Gasparella， 波尔察诺私营大学
- 工业用电能效， G. Gallo， Energy Gate 都灵智慧城市基金会
- 可再生能源、能效与智能电网： 意大利电力公司的经验， M. Germini， 意大利电力集团公司基金会
- 高效煤转化技术， G. Molina， 意大利电力集团公司
- 工业应用的固体氧化物燃料电池， A. Ravagni， SOFCpower
- 工业能效的意大利项目： 意大利新技术、能源与可持续发展委员会的相关研究R. Preka 和 M.A. Segreto， 意大利新技术、能源与可持续发展委员会
- 废物管理与资源节约–欧盟政策和案例研究， A. Muntoni， 卡利亚里大学
- 有机废物资源的增值潜力， 可持续农业的新技术： 变废为宝， 由研发转向商业化， M. L. Gullino 和M. Pugliese， 农业新技术公司
- 工业应急的预防和管理， L. Torriano， D'Appolonia 股份公司
- 玛格拉港口与威尼斯泻湖的工业发展， F. Porchia， Impact 有限公司和玛格拉港口工业区工业协会
- 意大利水泥集团公司的简介， S. Gardi， 意大利水泥集团公司
- 葡萄酒产业的可持续性： V.I.V.A. 可持续葡萄酒， M. Monchiero， 都灵大学农业创新中心
- 可持续农业与葡萄酒产业的企业环境责任： VIVA 项目， M. Monchiero， 都灵大学农业创新中心

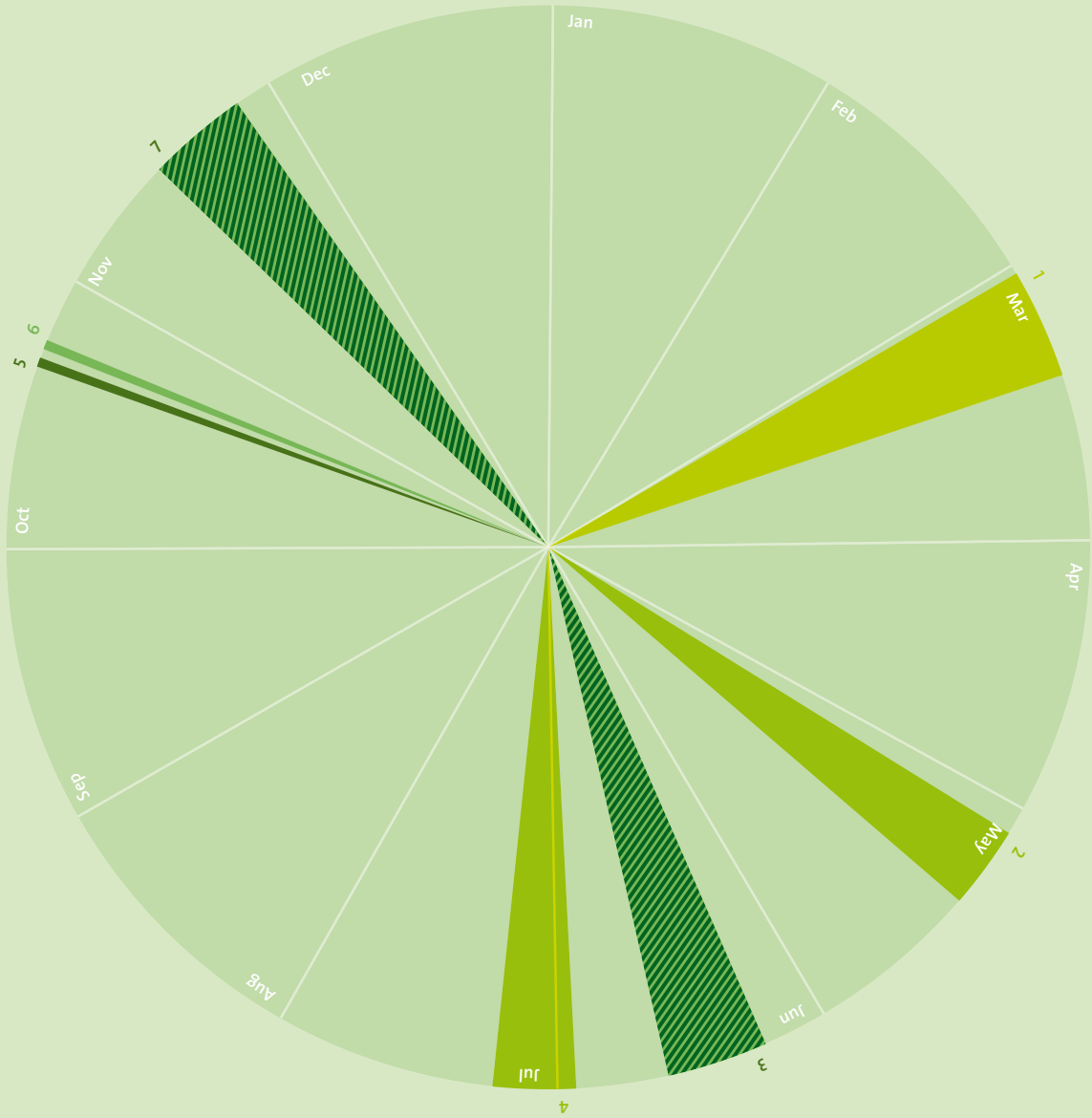
现场访问

- 工业可持续性再发展， 玛格拉港口工业区， Impact 有限公司和玛格拉港口工业区工业协会
- 科技园与可持续性， 环境科技园股份公司
- 科技园与可持续性， 罗马科技工业园区股份公司
- 科技园与可持续性， 弗留利创新， 乌迪内 – “Luigi Danieli”科技园
- 科技园与可持续性， 贝尔加莫发展公司POINT – 技术创新中心
- 科技园与可持续性， 威尼斯科技园
- 玛格拉港口与威尼斯泻湖的工业发展，“环境主题网络” 中心 - 威尼斯国际大学， 玛格拉地区， 威尼斯工业园区和San Giuliano 园区
- 玛格拉港口与威尼斯泻湖的工业发展， Impact 有限公司和玛格拉港口工业区工业协会
- 清洁煤炭技术， 意大利电力集团公司， Civitavecchia 清洁媒体发电厂
- 工业能效， Maschio Gaspardo 集团公司

- *Porto Marghera and the Industrial Development of the Venice Lagoon*, Impact S.r.l. and EZI
- *Clean Coal Technology*, Enel S.p.A., Civitavecchia Clean Coal Power Plant
- *Energy Efficiency in Industry*, Gruppo Maschio Gaspardo S.p.A.
- *Environmentally Friendly Industry*, Valcucine S.p.A.
- *Environmental Impact Reduction in Firms*, Latteria Montello S.p.A.
- *Environmental Performance of Industries*, Burgo Group S.p.A., Sarego Plant
- *Green Technologies and Innovation of Enterprises*, Italcementi Group
- *Energy Efficiency in Co-generation*, ICI Caldaie S.p.A.
- *Biotechnologies Applied to Agriculture and the Environment*, AgriNewTech, Structures and Laboratories
- *Biotechnologies Applied to Agriculture and the Environment*, AgriNewTech, Experimental Vineyard
- *Science Parks and Sustainability*, ZIPR – Consorzio per la Zona Industriale Ponterosso & Brovedani Group S.p.A.
- *Low Carbon Industry*, Italcementi Group, Calusco D’Adda Plant
- *Corporate Social and Environmental Responsibility*, L. Lavazza S.p.A.
- *Energy Efficiency in Industry*, Turboden S.r.l.
- *Green Industry*, Valcucine S.p.A.
- *Integrated Waste Treatment and Energy from Waste*, Veritas S.p.A. and Ecoprogetto Venezia S.r.l., Integrated Waste Treatment Plant
- *The Safeguarding of Venice*, TEN Center – Venice International University and Sestante di Venezia

- 环保型工业，Valcucine 股份公司
- 企业减缓环境影响，Montello 挤奶厂股份公司
- 工业的环境绩效，Burgo 集团股份有限公司，Sarego 造纸厂
- 企业的绿色技术与创新，意大利水泥集团公司
- 热电联合发电的能效，ICI 锅炉股份公司
- 农业及环保方面的生物技术应用，AgriNewTech（农业新技术），结构与实验室
- 农业及环保方面的生物技术应用，AgriNewTech（农业新技术），试验葡萄园
- 科技园与可持续性，ZIPR – 红桥工业开发区联营企业和 Brovedani 集团股份公司
- 低碳工业，意大利水泥集团公司，Calusco D’Adda 工厂
- 企业社会责任与环保责任，L. Lavazza 股份公司
- 工业能效，Turboden 有限公司
- 绿色工业，Valcucine 股份公司
- 垃圾综合处理以及垃圾能，Veritas 股份公司和威尼斯生态项目有限公司，垃圾综合处理厂
- 威尼斯的保护，“环境主题网络”中心 - 威尼斯国际大学和威尼斯 Sestante



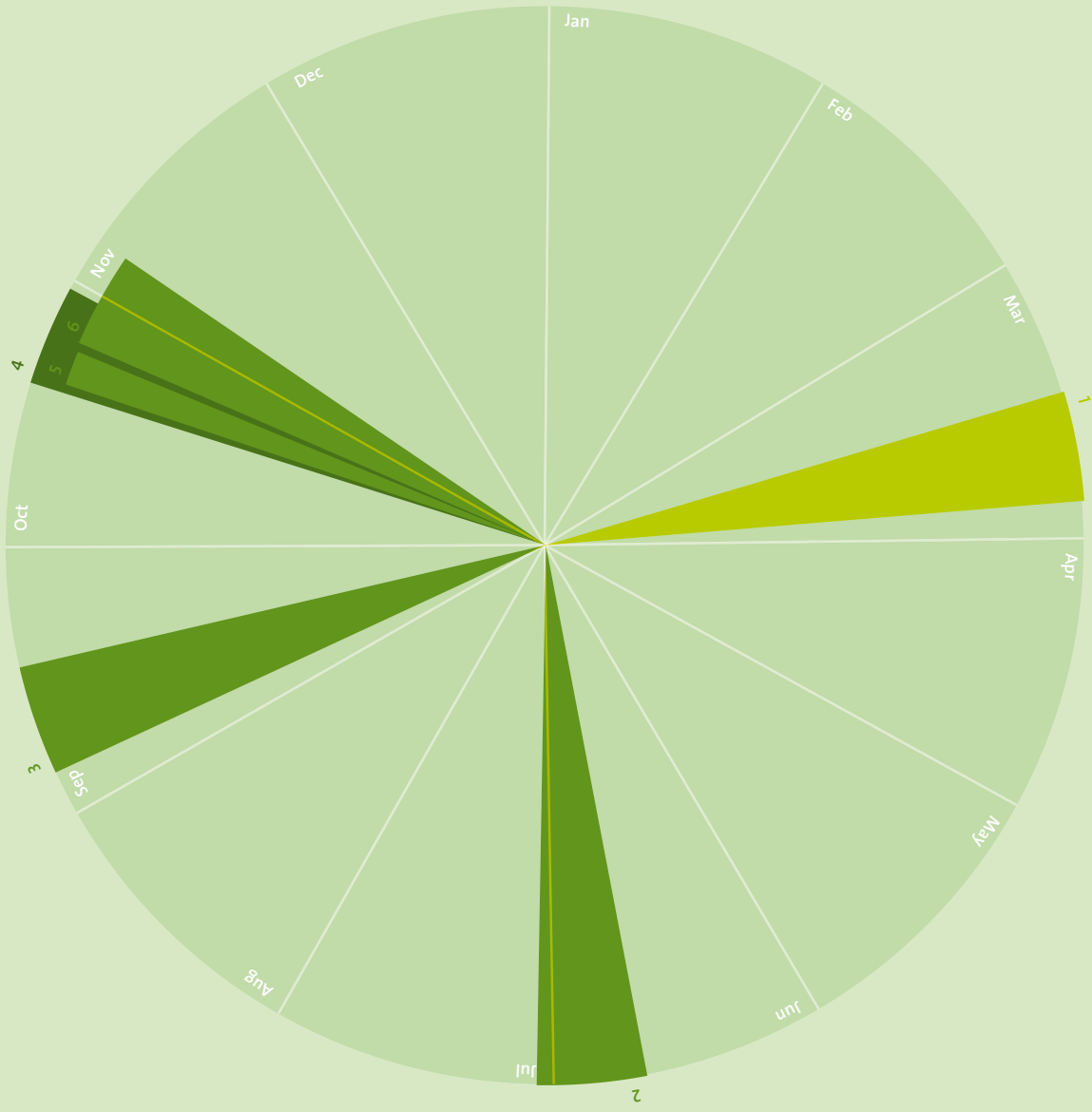


Environmental Monitoring and Control

- 1 Environment and Health
- 2 Air Pollution Prevention and Control
- 3 Air Quality Control
- 4 Air Pollution Prevention and Control
- 5 Industrial Pollution Control
- 6 Industrial Pollution Control
- 7 Industrial Pollution Control

环境监测与监管

- 1 环境与健康
- 2 空气污染防治
- 3 空气质量控制
- 4 空气污染防治
- 5 工业污染防治
- 6 工业污染防治
- 7 工业污染防治



Low Carbon Economy and Innovation

- 1 Green Growth
- 2 High-Technology and Science Parks for Sustainable Development
- 3 Innovation of Enterprises and Green Technologies
- 4 Sustainable Industry and Eco-Innovation Management in Coastal Urban Areas
- 5 Industrial Energy Efficiency
- 6 Industrial Energy Efficiency

低碳经济和创新技术

- 1 绿色增长
- 2 可持续发展的高新技术与科技园
- 3 企业创新性与绿色技术
- 4 沿海城市的可持续工业与生态创新管理
- 5 工业能效
- 6 工业能效

Site Visits and Institutions

The information reported in this section concerns companies and institutions that were both visited and involved in the training sessions. They have authorized the publishing of this document.

现场访问与机构

本部分报告列出培训期间将访问的公司与机构的相关信息。上述公司已授权本报告的出版

Institution/Company

Acegas Aps S.p.A., Waste Incineration Plant

Institution/Company Profile

The Acegas Aps Group is the most important multiutility company in north-east Italy. Specifically, the company operates in the sectors of management and distribution of water resources, electrical energy and gas, and waste collection. It also carries out a series of activities complementary to and synergic with the supply of public benefit services, in particular: cemetery management, total facility management, district heating, public lightning, traffic light management and re-lining (of telecommunication networks). Established after the merger between Acegas and Aps on December 18, 2003, the company is currently mainly active in Trieste and Padua, but is progressively broadening the area of its activity both in Italy and abroad.

The Padua incinerator plant was built in the 1950s and began operations in 1962. It was the first waste management plant in Italy with energy recovery. Over the years the plant has been enlarged and upgraded, and work has been carried out to keep it in line with the ever-lower emission levels set by Italian law. This led to the achievement of EMAS certification in 2001. The current three lines of the plant can treat waste from 20 municipalities in the Padua area, producing 78.4 GWh of electrical energy per year. The typologies treated are:

- \_ municipal solid waste
- \_ special non-hazardous waste
- \_ infectious medical waste (provided that it doesn't contain substances defined as hazardous under the law)
- \_ medicines

An online monitoring system collects the emission data and makes it available to the public on the company website, where other documents related to the general environmental performance of the plant can be found.

Site Visit

Air Emission Control

Objectives

To show advanced technologies for recovering energy and heat from waste incineration and the continuous monitoring of emissions from the plant, the resulting data being made available to the public in order to facilitate their involvement in local environmental issues.

Reference Address

Viale Navigazione Interna 34, 35129 Padua

www.gruppo.acegas-aps.it (only in Italian)

Institution/Company

AgriNewTech (ANT)

Institution/Company Profile

AgriNewTech is a young company - a Turin University spin-off that works on biotechnologies applied to agriculture and the environment. AgriNewTech's main aim is to disseminate the results of many years of research in the environmental and agricultural fields among its members. The company works mainly in the recycling of organic waste, using patented microorganisms and innovative analysis methodologies to guarantee compost quality.

Site Visit

Biotechnologies Applied to Agriculture and the Environment

Objectives

To offer a comprehensive view of the real-world applications of academic research in the agricultural and environmental fields. AgriNewTech is an example of how innovation and new technologies can enhance existing methodologies for organic waste management, moving toward specific applications for sustainable agriculture and the biological control of plant diseases.

Reference Address

Via Leonardo da Vinci 44, 10095 Grugliasco (Turin)  
www.agrinewtech.com

机构/公司

Acegas Aps S.p.A. Acegas Aps股份公司， 焚烧厂

机构/公司简介

Acegas Aps集团是意大利东北最大的综合性事业。公司主要业务为供水、供电、供煤气以及垃圾收集。公司还从事一系列的为辅业务，均与公共产品有关的：坟墓和葬礼服务、综合性服务管理、分区供暖系统、公共照明、红绿灯管理、管道修铺（电信网络）。于2003年12月18日通过 Acegas 和Aps的合并而成立的，目前公司主要给的里雅斯特市和帕多瓦市居民提供服务，有计划把其经营范围扩大到全国及国外。帕多瓦焚烧厂早于1950年建立，1962年开始运作，是意大利第一家能源回收废物处理厂。焚烧厂经过了数次扩大升级，以便符合意大利法律所规定的排放量标准。2001年获得了EMAS认证。焚烧厂的三线每年处理来着帕多瓦省辖区的20个城镇，发电总量为78,4百万瓦小时。所处置的废物类型如下列:

- \_ 城市固体垃圾
- \_ 特殊非危险废物
- \_ 传染性医疗废物（只有不包含法律所限制的风险物质）
- \_ 药品

焚烧厂的在线监测系统以连续性方式收集排放数据；该数据以及有关焚烧厂环保绩效的文件均在公司网站上公开发布。

参观焦点

大气污染物气排放控制

实地参观目标

介绍焚烧厂热能回收的先进技术以及连续性排放监测系统。监测数据被公开，以便允许公众参与本地的环保事项。

联系地址

Navigazione Interna 大道34号， 35129 帕多瓦市  
www.gruppo.acegas-aps.it (意大利语)

机构/公司

AgriNewTech (ANT) - 农业新技术

机构/公司简介

农业新技术公司成立不久，是都灵大学衍生出来公司，把生物技术应用于农业和环保业并把此领域多年研究的成绩传导给其成员为公司的目标。公司主要从事的是有机垃圾的资源化并通过专利的创新性微生物分析方法保证堆肥的质量。

参观焦点

用于农业和环保领域的生物技术

实地参观目标

提供学术研究用于农业和环保业的综合性概况。创新技术能够提高已知的有机垃圾处理法，而农业新技术公司获得该领域的突破成绩，尤其是可持续农业的专门应用法以及植物病害的生物控制方面。

联系地址

Leonardo da Vinci大道44号， 10095 Grugliasco (都灵省)  
www.agrinewtech.com

**Institution/Company**  
AGROINNOVA - University of Turin

**Institution/Company Profile**  
AGROINNOVA is a center of competence by plant pathologists at the University of Turin. It is located on the university campus of Grugliasco (Turin) and has modern and well-equipped laboratories, greenhouses and experimental fields. AGROINNOVA brings together the skills acquired thus far by public and private, Italian and international researchers in the fields of agro-environment, agriculture and the food industry. AGROINNOVA carries out research, disseminates the resulting knowledge and technological know-how, offers lifelong learning opportunities and issues communiqués on topical issues in the above-mentioned sectors. AGROINNOVA can boast four academic professors, 40 PhD students, postdoc fellows, consultants and technicians, more than 40 ongoing research projects worldwide, and 30 high-level courses carried out during the period 2003-2010. Currently, most of its employees are based in Italy while the remainder are abroad. In recent years it has gained broad expertise in the coordination of European projects, as well as expertise in technology transfer in emerging economies such as China.

**Site Visit**  
Sustainable Agriculture

**Objectives**  
To present AGROINNOVA's fields of interest in research and agro-environmental technology transfer and to illustrate some of Agroinnova's international cooperation programs and activities in China, as examples of sustainable agriculture.

**Site Visit**  
Sustainable Agriculture and Corporate Environmental Responsibility in the Wine Sector: the VIVA Project.

**Objectives**  
To present the VIVA Project, a National pilot project launched by the Italian Ministry for the Environment, Land and Sea in July 2011 to evaluate the wine-sector's sustainability performance, based on 4 indicators: Water & Carbon Footprint, environmental impacts on vineyard and surrounding area with the participation of some of Italy's largest Italian wine-producing companies.

**Reference Address**  
Via Leonardo da Vinci 44, 10095 Grugliasco (Turin)  
www.agroinnova.unito.it

**Institution/Company**  
ARPAV, Agenzia Regionale per la Protezione Ambientale del Veneto

**Institution/Company Profile**  
Law 61, passed in 1994, entrusted environmental prevention and control duties to the relevant "Regional Agencies" which became the centers nominated for environmental vigilance and control in local areas. The Veneto Agency ARPAV was established by Regional Law no. 32, passed on October 18, 1996 and became operative on October 3, 1997. The agency pursues two closely connected objectives: protection, through environmental controls safeguarding population health and territorial safety, and prevention, through research, training, information and environmental education. It operates on the basis of three-year plans and an annual program.

**Site Visit**  
Air Quality Control

**Objectives**  
To present the activities carried out by the Provincial Departments of ARPAV in the field of environmental control, illustrating some practical examples of their monitoring activities, which are supervised by local environmental agencies.

**Site Visit**  
Industrial Pollution Control

**Objectives**  
To present the role of ARPAV in the event of environmental accidents and its coordination of other institutions in charge of emergency interventions. Emergency response within the industrial area is presented by describing the structure and the aims of the SIMAGE project (*Sistema Integrato di Monitoraggio Ambientale e Gestione delle Emergenze* / Integrated System for Environmental Monitoring and the Management of industrial risk and accidents).

**Reference Address**  
Via Lissa 6, 30171 Mestre (Venice)  
www.arpa.veneto.it (only in Italian)

**机构/公司**

Agroinnova - 都灵大学的农业创新中心

**机构/公司简介**  
坐落于都灵省，Grugliasco市校园里的农业创新中心是植物病理学家创建的都灵大学权限中心。农业创新中心备有装备良好的实验式、温室以及试验农田。都灵大学该中心把意大利及国外政府机构和私有企业研究员在农业-环保及食品工业领域中至今所获得的成绩和技能结合起来，并对上述领域的最新专题进行研究、知识与技术转让、终生教育以及交流。4位大学教授，40名博士研究生、博士后学生、顾问及技师、40项正在实施的世界性研究项目、2003至2010年间所开设的30门高级课程。目前，中心的大多数职员在意工作，其余在国外。中心具有作为欧盟项目协调单位的多年丰富经验，并在新兴经济国家，包括中国在内，进行了技术转让。

**参观焦点**  
可持续农业

**实地参观目标**  
介绍都灵大学农业创新中心在研究和转让农业环境技术领域中的成绩，并介绍中心在中国所进行的一些国际合作项目和活动，作为可持续农业的实例。

**参观焦点**  
可持续农业与葡萄酒产业的公司环境责任：VIVA 项目

**实地参观目标**  
VIVA 项目的介绍。VIVA 项目是2011年7月份意大利环境部所启动的全国示范项目，其目标为评估葡萄酒产业的环境成绩。评估基于如下4种指标：水足迹、碳足迹、对土地的影响和葡萄园。多家意大利大规模葡萄酒酿酒厂参见该项目。

**联系地址**  
Leonardo da Vinci大道44号，10095 Grugliasco (都灵省)  
www.agroinnova.unito.it

**机构/公司**

ARPAV - 威尼托大区环境预防和保护局

**机构/公司简介**  
通过1994年的第61号法律各行政大区环保局授予环境保护及相关监测的职能，因此大区环保局成为当地环境检查和守护中心。威尼托大区环保局是通过1996/10/18第32号大区法律而成立的，于1997年10月3日开始正式运作。该局主要追求两个密切相连的目标：保护目的，即通过环境检查而保护居民的身体健康和国土安全；安全及预防目的，即通过研究、培训、宣传和环境教育等方式达到此目的。该局的运作方式为一份三年计划以及一份年度规划。

**参观焦点**  
空气质量控制

**实地参观目标**  
描述威尼托大区环保局所进行的城区及工业区内的污染监控工作以及空气监测工作，并介绍本地环保分局所进行监控工作的实践。

**参观焦点**  
工业污染监控

**实地参观目标**  
介绍发生环境事故时威尼托环保局的职能及其协调作用。工业区的应急措施是通过环境监测、工业风险与事故预防体制结构和目标而介绍的。

**联系地址**  
Lissa大道6号，30171 Mestre (威尼斯省)  
www.arpa.veneto.it (意大利语)



**Institution/Company**  
Bergamo Sviluppo

**Institution/Company Profile**  
Bergamo Sviluppo was created as Bergamo Formazione in 1994 by the Bergamo Chamber of Commerce, with the aim of supporting local industries and initiatives throughout the territory in developing professional skills and projects. In 2012, along with the new name, the mission changed, broadening its activities, which now also include innovation, technology transfer and internationalization. Bergamo Sviluppo's office at POINT- POlo per l'INnovazione Tecnologica (Technogical Innovation Center) offers workshops and training activities to promote the development of new technologies and innovation in businesses, as well as other services for companies, professionals and institutions: \_ identification of technical regulations (UNI EN ISO), \_ recommendations on patents and Industrial Property, \_ access to technology databases, \_ organization of thematic training courses about innovative materials. All these services aim at encouraging companies' technological development, thus increasing their competitiveness, and facilitate the creation of new high and innovative technology enterprises. An enterprise incubator, created by Bergamo Sviluppo in 2001, has been hosted at Point from the beginning of 2014. The incubator, which promotes the creation of innovative enterprises by providing working space and training services, has two sections: one for the tertiary sector and one for the manufacturing sector.

**Site Visit**  
Science Parks and Sustainability

**Objectives**  
To introduce the importance of the activities carried out by local agencies in promoting innovation and sustainable development according the local environment and industrial sector characteristics.

**Reference Address**  
c/o Point - POlo per l'INnovazione Tecnologica  
Via Einstein / angolo via Pasubio 5, 24044 Dalmine (Bergamo)  
www.bergamosviluppo.it (only in Italian)  
www.incubatore.bergamo.it (only in Italian)

**Institution/Company**  
Bovedani Group S.p.A.

**Institution/Company Profile**  
The Bovedani Group consists of three companies and six production plants. It manufactures mechanical components to high standards and with a high degree of technological specialization making efficient use of raw materials and natural resources. The company, within the framework of a production process that reduces its environmental impact to a minimum, have made it their goal that its products and manufacturing processes should make the lowest possible use of energy and non-renewable resources. The Environmental Management System Certification obtained in July 2008 has encouraged the Bovedani Group to continue to achieve a constant improvement in its environmental performance by emphasising such strong points as selective waste collection, and the husbanding of water, soil and air resources.

**Site Visit**  
Science Parks and Sustainability

**Objectives**  
To present an example of an industry that has made itself environmentally friendly through the application of technologies to reduce environmental impact, such as mud filtration and wastewater purification equipment.

**Reference Address**  
Via Venzone 9, 33078 San Vito al Tagliamento (Pordenone)  
www.brovedani.it

**机构/公司**

Bergamo Sviluppo – 贝尔加莫发展公司

**机构/公司简介**  
原名为贝尔加莫培训， 是于1994年由贝尔加莫商会设立以便辅助本地企业和工业提高其专业技能并开发新项目。 2012年名称改为贝尔加莫发展公司并把其业务扩大到创新性、技术转让和国际化。 位于PoInT（技术创新中心）的 贝尔加莫发展公司举行新技术和企业创新性的培训班与讲习班并对公司、自由职业者和国家机构提供下列的咨询服务: – 技术标准（UNI EN ISO）方面的咨询 – 专利和工业工业产权方面的咨询 – 技术数据库存取 \_ 创新材料的专题培训班 上述服务旨在推动企业的技术创新因而提高其竞争力， 以及促进高新技术企业的创立。 2001年贝尔加莫发展公司设立了一家企业孵化器， 从2014年起坐落于技术创新中心内。孵化器包括第三产业以及制造业两个专题， 并促进创新型企业的创业， 提供办公地点以及培训服务。

**参观焦点**  
科技园与可持续性

**实地参观目标**  
介绍本地国家机构的关键作用， 按照本地的产业特点和环境推动创新性并促进可持续发展。

**联系地址**  
Point – 技术创新中心  
Einstein 路和Pasubio 路角上5号， 24044 Dalmine（ 贝尔加莫省）  
www.bergamosviluppo.it（ 意大利语）  
www.incubatore.bergamo.it（ 意大利语）

**机构/公司**

Brovedani Group S.p.A. - 波维达尼集团公司

**机构/公司简介**  
波维达尼集团由三家公司组成， 其生产厂为六个。以原来和自然资源的高效率为目标， 集团制造高质量标准以及技术专业化的机械部件。集团的经营理念为尽可能低的环境影响， 因此产品生产过程中尽可能降低能源和非可再生资源的用量。集团不断致力于提供其环保成绩， 尤其是废物收集方面以及水资源、土壤和空气质量的保护， 因此于2008年获得了环境管理的证书。

**参观焦点**  
科技园与可持续性

**实地参观目标**  
介绍环保型企业的榜样， 具体介绍减少环境影响的技术， 如磨叽泥浆过滤以及水净化设备。

**联系地址**  
Venzone街9号， 33078 San Vito al Tagliamento (波尔德诺内省)  
www.brovedani.it

**Institution/Company**  
Burgo Group S.p.A.

**Institution/Company Profile**  
The Burgo Group was founded on June 21, 1905 in Verzuolo (Cuneo), northern Italy, and is one of Europe’s leading producers of coated papers. Today the Burgo Group constitutes a complete system developed around the world of paper: production, distribution, paper recycling and processing of forestry products, the study, design, construction and engineering of paper industry plant systems, but also factoring and energy supply. The Burgo Group, as member of CEPI (Confederation of European Paper Industries), shares a commitment of promoting a responsible approach with regard to resources, sustainable forest management and the implementation of environmental management systems. In this context, the Group not only implements policies to conform with existing regulations but also takes on board voluntary protocols (Agenda 21) and promotes staff training on issues of sustainable growth. Furthermore, the Burgo Group plays an active role in, and is a promoter of, ICFPA (International Council of Forest and Paper Associations) under whose umbrella fifty-six companies in the sector at international level have signed an initial declaration of sustainability. The results can be seen from relevant recognitions for products and processes: certifications such as ISO 9001:2008, ISO 14001:2004, EMAS, FSC® and PEFC™. The Burgo Group has twelve plants in Italy and one in Belgium. The Sarego paper mill was set up in 1971 and annual strategic investments have ensured constant improvements in efficiency and productivity on top of regular maintenance of the plant’s machinery. The mill is powered by a combined cycle power/heat system co–generating plant and has an innovative waste water purification system.

**Site Visit**  
Environmental Performance of Industries

**Objectives**  
To provide a practical example of how it is possible to manage the responsible use of natural resources for industrial processes while satisfying quality and environmental standards and efficient management requirements at the same time.

**Reference Address**  
Via Guido Salvagnini, 70, 36040 Sarego (Vicenza)  
www.burgogroup.com

**Institution/Company**  
Ecoprogetto Venezia S.r.l.

**Institution/Company Profile**  
Ecoprogetto Venezia S.r.l. was established in 1998. It is a public/private company run by VERITAS S.p.A., and it manages the treatment, re-use and disposal cycle of the waste produced in the province of Venice, with the aim of ensuring the self-sufficiency of the territory served. Since its beginning, Ecoprogetto Venezia has been particularly concerned with the protection of the environment through the planning and construction of a plant capable of producing high quality and high calorific value RDF (refuse derived fuel) that can be used without altering the very delicate environmental equilibrium of the Venice area. To this end, a system employing the existing thermal cycle and energy recovery from waste collected by Veritas (produced by around 860,000 citizens from an area comprising 75% of the Province of Venice and more than 40 million tourists) was studied. A further aim was that of reducing the quantity of waste going into landfill. This project led to the establishment of a partnership with Enel, and a schedule agreement was signed in 1998 between the competent territorial institutions (Veneto Region, Province of Venice, Municipality of Venice, Ecoprogetto Venezia S.r.l. and Enel S.p.A.). After the first period of testing, with rigorous environmental controls by the institutions overseeing the project, and after obtaining an integrated environmental authorization signed by the Ministry of the Environment on 25 November 2008, cooperation with Enel officially commenced. The authorization provided for the use of RDF in co-combustion with coal, up to a maximum of 70,000 tons/year, for electric energy production in the nearby Palladio thermal plant. Over the years, the quantity of RDF used has allowed a reduction of non-renewable natural fossil resources (coal) and waste – which would have otherwise been transferred to other plants, with consequent environmental issues. The total emission reduction amounts to 65,520 tons/year of CO<sub>2</sub> (936 kg CO<sub>2</sub>/tons). In view of the positive results obtained thus far, the contract with Enel has been renewed in 2012. It includes:  
\_ An increase in thermal input by up to 10%, as well as the possible increase of the quantity used in co-combustion by up to 105,000 tons/year (leading to relevant environmental benefits for the entire community within the province and the municipality of Venice);

**机构/公司**

Burgo Group S.p.A. - Burgo集团股份有限公司

**机构/公司简介**  
早于1905年6月21月在意大利北部库内奥省Verzuolo小镇成立的Burgo公司是欧洲铜版纸的引导公。前面， Burgo集团的业务包括纸张的整个生命周期，即纸张生产及推销、纸张回收并生产再生纸、森林产品处理以及造纸厂的工程设计、施工和代理经营。作为CEPI（欧洲纸产业协会）的成员， Burgo集团承诺了将责任性地利用自然资源、进行可持续性森林管理以及实行环境管理体系。环保方面， Burgo集团不仅遵守现行的相关法律，而且自愿参与国际协议（本地21世纪议程）并对工作人员举行可持续增长内容的培训班。Burgo集团也是ICFPA（国际森林与纸业联合会）的发起人和积极成员。该联合会的五十六家国际层级纸业公司签署了首次可持续性宣言。集团的环保方面努力工作获得了明显的成果，而其生产过程和产品获得国际承认： ISO 9001:2008 ISO 14001:2004认证、欧盟环境管理与审计体系的认证、 FSC®认证以及PEFC™认证。Burgo集团所运行的造纸厂十三家，在意大利十二家，在比利时一家。Sarego造纸厂是早于1971年开工的；通过年度大量投资逐渐改善了效率、生产率以及工厂设备的维修方式。造纸厂备有热电联产及联合循环发电厂以及先进的废水净化装置。

**参观焦点**  
工业的环保成绩

**实地参观目标**  
提供自然资源和工业工程的质量、环境和管理标准的实践案例

**联系地址**  
Guido Salvagnini街70号, 36040 Sarego  
( 维琴察省)  
www.burgogroup.com

**机构/公司**

Ecoprogetto Venezia S.r.l. - 威尼斯生态项目有限公司

**机构/公司简介**  
于1998年成立的威尼斯生态项目有限公司是一家由VERITAS股份公司控股的公私合营公司。公司负责威尼斯省内所产生垃圾的整个循环，包括处理处置和回收，并保证全省辖区的垃圾处理自足。自从开业，威尼斯生态项目公司一直高度重视环保事业；以便不影响到威尼斯地区特有的生态平衡，而生产高质量高热含量的垃圾衍生燃料（RDF）。以便应用现有的热循环技术及废物转化能源技术，公司开发了一种专有系统。垃圾是VERITAS公司收集的（威尼斯省的75%辖区的86万居民，加上4千万游客所产生的垃圾）。尽量减少填埋处理的垃圾量为最终目标。该项目是与意大利电力公司的合作之下开发的，根据1998年利益各方（威尼托大区政府、威尼斯省政府、威尼斯市政府、威尼斯生态项目公司和意大利电力公司）所签署的相关协议。主管当局进行严格环境监察的试验时期结束之后， 环境部批准电力公司的Palladio发电厂每年最多可用量7万吨垃圾衍生燃料与媒体联合燃烧发电并签发了相关污染综合防治许可证，而2008年11月25日与意大利电力公司的合作正式开始了。垃圾衍生燃料的用量使矿物燃料（煤炭）用量及垃圾填埋处理量逐渐减少，对周围环境带来了不少好处，首要是排放量削减，每年二氧化碳减排量为6,552万吨（936公斤二氧化碳/吨）。鉴于所获得的良好成绩， 2012年与意大利电力公司的合作协议被延期了。该协议的重要条件如下：  
\_ 热输出上升了10%，而垃圾衍生燃料的批准可用量可将达到10,5 万吨（对威尼斯省的居民将带来重要的环境改善）；  
\_ 合同为期三年（2013年至2015年），可以延期一年（各方商量决定的）；  
\_ 三年期间垃圾衍生燃料的最多可用量为21万吨；



\_ A three-year contract (2013-2015) that can be extended by a further year (at the parties' discretion);

\_ The maximum amount of RDF to be used during the three-year period is 210,000 tons; The structure of the contract is the same as the preceding one, in order to better harmonize operational activities;

\_ Environmental monitoring continuity. The contract renewal also envisages the development of proper instruments of communication regarding the ecological footprint of RDF use. Thanks to the agreement with Enel and the recovery of separated waste (among other reasons) only 6% of waste now goes to landfill, a performance equal to that of Sweden. Ecoprogetto Venezia also manages the systems monitoring air, water and operational by-products, guaranteeing the analysis required by the integrated environmental authorization regime, as well as providing the data necessary for its technical activities aimed at improving the technology used in the production cycle.

**Site Visit**  
Integrated Waste Treatment and Energy from Waste

**Objectives**  
To present an effective example of waste management integrating different systems.

**Reference Address**  
Integrated Waste Treatment Plant  
Via della Geologia 31, 30030 Fusina (Venice)  
www.ecoprogettovenetia.it (only Italian)

**Institution/Company**  
Enel Foundation

**Institution/Company Profile**  
The Enel Foundation is a non-profit entity, promoted and fully supported by the Enel Group, devoted to research activities and study, institutional capacity building and knowledge dissemination. The foundation's main aim is to contribute to the growth of knowledge in the fields of energy, socio-economics, sustainable development and innovation at both a national and international level. It fosters thematic integration for the development of future scenarios, focusing primarily upon the 40 countries in which Enel operates. It promotes synergies and partnerships creating a network of scientific and institutional relationships. Since 2012, the Enel Foundation has cooperated in the Sustainable Development and Environmental Protection Training Program by participating in courses focusing on energy, the low carbon economy and climate change, organized with MEP, BMEPB, SEPB, MOST and NDRC.

**Field of competence**  
Energy, socio-economics, sustainable development and innovation.

**Objectives**  
To present an organisation deeply involved in exploring global society, developing new ideas and increasing the understanding of energy and the broader issues related to it through the promotion of institutional capacity building, knowledge dissemination and talent support within the scientific realm.

**Reference Address**  
Via Arno 64, 00198 Rome  
www.enelfoundation.org

\_新合同保持了原来合同的框架，这样对运行方式没有任何影响;

\_连续性的环境监测。

新合同还包括就垃圾衍生燃料增值的生态足迹的适当公开手段。

由于与意大利电力公司合作协议，加上垃圾分类收集，目前到填埋场的垃圾量只占总产量的6%，与瑞典一样。

威尼斯生态项目公司负责空气质量控制系统、废水控制系统以及副产品的质量控制系统，以便保证发电厂符合污染综合防治许可证的标准，还负责生产周期应用技术的升级工作。

**参观焦点**  
废物综合处理及服务转化能源技术

**实地参观目标**  
介绍综合性的高效废物处理方式

**联系地址**  
综合废物处理厂  
della Geologia大道31号, 30030 Fusina (威尼斯省)  
www.ecoprogettovenetia.it (意大利语)

**机构/公司**  
ENEL Foundation - 意大利电力集团公司基金会

**机构/公司简介**  
意大利电力集团公司基金会是一家由意大利电力集团公司成立的并全额拨款的非营利组织。基金会所从事的业务包括研究学习、机构能力建设以及知识传播等项目。该基金会的主要目标为提高对能源、社会经济、可持续发展、创新等方面的知识，包括在国内和国际范围内。在意大利电力集团公司有业务的40个国家，基金会推动将来情景的专题一体化并促进旨在建成科技机构和政府部门的网络的合伙协议。2012年以来，意大利电力基金会参加了对中国环保部、北京环保局、上海环保局、科技部和国家发改委共同举办的可持续发展与环保管理的培训项目，尤其是主题为能源、低碳经济以及气候变化的课程。

**业务范围**  
能源、社会经济、可持续发展以及创新。

**实地参观目标**  
介绍通过推动机构能力建设和知识传播致力于探索全球社会、发展新概念、提高能源方面以及相关的事项的知识的一家组织。

**联系地址**  
Arno 街 64号, 00198 Roma 罗马市  
www.enelfoundation.org

**Institution/Company**  
Enel S.p.A.

**Institution/Company Profile**  
Enel is Italy’s largest power company and Europe’s second listed utility by installed capacity. It is a leading integrated player in the power and gas markets of Europe and Latin America. Today Enel operates in 40 countries worldwide, has over 98,000 MW of net installed capacity and sells power and gas to around 61 million customers.

**Business overview**  
In 2012, Enel posted revenues of around 85 billion euros, EBITDA of approximately 17 billion euros and a net ordinary income of around 3.5 billion euros. As of September 30<sup>th</sup>, 2013, the group has nearly 73,000 employees and operates a wide range of hydroelectric, thermoelectric, nuclear, geothermal, wind-power, and photovoltaic plants as well as plants using other renewables. Over 42% of the power generated by Enel is carbon free. Enel is strongly committed to the development of renewable energy sources and to the research and development of new environmentally friendly technologies. Enel Green Power is the group’s publicly listed company dedicated to the development and management of power generation from renewable energy, operating around 8,700 MW of installed capacity as of September 30<sup>th</sup>, 2013, relying on hydro, wind, geothermal, solar, biomass and co-generation sources in Europe and the Americas. Enel was the first utility in the world to replace its 32 million Italian customers’ traditional electromechanical meters with modern electronic devices that make it possible to take meter readings in real time and manage contractual relationships remotely. This innovation, which is key to the development of smart grids, has attracted interest from many utilities around the world. In Spain, Endesa is installing 13 million electronic meters for its customers.

**Shareholding structure**  
Listed on the Milan stock exchange since 1999, Enel has the largest number of shareholders of any Italian company, with 1.2 million retail and institutional investors. The most important of Enel’s shareholders is the Italian Ministry of Economy and Finance with 31.24% of the company. Thanks to its Code of Ethics, Sustainability Report, its environmental protection policy and the adoption of international best practices for transparency and corporate governance, Enel’s shareholders include leading international investment funds, insurance companies, pension funds and ethical funds.

**Site Visit**  
Clean Coal Technology

**Objectives**  
To construct a converted high-technology power plant aimed at reducing electricity production costs, increasing provision reliability, moderating environmental impact on the territory, contributing to reaching Kyoto Protocol goals and, finally, reusing the site of an pre-existing industrial zone, which will also reduce the impact on the area as a whole.

**Site Visit**  
Air Pollution Source Monitoring

**Objectives**  
To introduce visitors to power plant pollution monitoring and management in Italy, using the Fusina coal power plant as an example. To illustrate a representative firm’s environmental data acquirement and management in accordance with Italian legal requirements.

**Reference Address**  
Via Viale Regina Margherita, 137, 00198 Rome  
www.enel.com

**机构/公司**  
ENEL S.p.A. 意大利电力集团股份有限公司

**机构/公司简介**  
意大利电力集团是意大利最大电力公司以及欧洲第二大电力与煤气综合性上市事业。意大利电力集团是欧洲和拉美电力和煤气市场的领先公司。目前在全球40多个国家都从事业务，其装机总功率为9.8 万兆瓦，给610万客户供电供煤气。

**业务简介**  
2011年，意大利电力公司的业务收入超过了850 亿欧元，未计利息、税项、折旧及摊销的利润（EBITDA）超过了170 亿欧元，普通净收入35亿欧元。2013年9月底集团公司的职员总数为7.3万多人并经营多种的发电厂，包括水力发电厂、火力发电厂、核电站、地热能、风能、太阳能灯可再生能源发电厂。意大利电力公司发电量的42%是无碳的。

意大利电力集团公司一直致力于发展可再生能源并研究开发环保型技术。意大利电力集团的绿色电力子公司是专门研发并经营可再生能源的上市发电公司，2013年9月底其装机功率为8.7兆瓦，主要在欧洲和北美经营水力、风能、地热能、太阳能、生物质能以及热电联合发电。

意大利电力集团是全世界首家公司把其3百20万意大利客户的电表换成电子式电表。通过电子电表可以实时测量电能消耗，即以远程方式来管理客户的电费单。该创新装置为智能电网的关键因素并引起了全球电力事业的广泛关注。西班牙的恩德萨电力公司正在安装1百30万电子电表。

**集团组织机构**  
自从1999年起，意大利电力公司是米兰交易所的上市公司，也是意大利股东最多的意大利公司，包括散户和机构投资者的总数为120 万个。其主要股东为意大利经济财政部，占股份额为31.24%。其它股东包括主导国家投资基金、保险公司、退休基金以及伦理基金。意大利电力公司高度重视社会责任以及环保事业，因此公布了其伦理准则以及可持续性报告书，另外采取了环保方面的综合性措施以及透明性和公司治理的国家最佳实践。

**参观焦点**  
清洁煤炭技术

**实地参观目标**  
介绍一家高技术转换发电厂。该发电厂的目标包括降低电力生产成本、提高供给的可靠性、减缓对周围地区的环境影响、有助于达到京都议定书的减排目标以及复兴一块老工业基地及其周围地区的经济。

**参观焦点**  
空气污染源监测

**实地参观目标**  
通过 Fusina 煤炭发电厂的案例，介绍意大利的发电厂管理与监测方式。介绍意大利发电企业依法采取并处理环境数据。

**联系地址**  
Regina Margherita 大道 137 号, 00198 罗马市  
www.enel.com

**Institution/Company**  
Environment Park S.p.A.

**Institution/Company Profile**  
Environment Park was founded in 1996 as a joint initiative of the Piedmont region, the Province of Torino, the City of Torino and the European Union. It represents an original experiment in the field of European Scientific and Technological Parks as it successfully combines technological innovation and eco-efficiency. The park's mission is to provide small and medium-sized enterprises with advanced solutions and innovative technologies in the fields of energy and the environment, through partnerships, special projects, specific training activities and the organization of thematic events.

**Site Visit**  
Science Parks and Sustainability

**Objectives**  
To illustrate the Environment Park's organizational model, the eco-friendly solutions adopted in the building and structures of the park, and some of the most significant projects carried out by the enterprises within the Park.

**Reference Address**  
Via Livorno 60, 10144 Turin  
www.envipark.com

**Institution/Company**  
Favini S.p.A.

**Institution/Company Profile**  
Favini was founded in 1736 and produces 60.000T of fine papers. It is organized in 3 divisions. The first is devoted to graphic specialties with two plants in Italy, one in Rossano Veneto and the other in Crusinallo, producing paper and board for design and print. Casting and release papers for the fashion and automotive industries are produced by the second division, in Crusinallo. Finally, the third division is in Rossano Veneto and it is devoted to stationery for business, home and education use. Favini has an environmental policy that covers the whole production process and it has gained a number of certifications: FSC, ISO 9001, ISO 14001, OHSAS 18001.

**Site Visit**  
Environmental Performance in Industry

**Objectives**  
To introduce an example of a company that monitors its environmental impact over the whole productive cycle and strives to improve its performance through best environmental practice.

**Reference Address**  
Via Alcide De Gasperi 26, 36028 Rossano Veneto (Vicenza)  
www.favini.com

**机构/公司**

Environment Park S.p.A. - 环境科技园股份公司

**机构/公司简介**  
环境园是于1996年在皮埃蒙特大区政府、都灵省政府、都灵市政以及欧盟的共同举动之下而创立的并作为欧洲科技园范围内的独特试验项目，因为把技术创新与生态效力成功地结合起来。环境园的目标是通过合伙项目、专题项目、专门的培训课程以及专题活动提供中小企业能源和环保方面的先进方案及创新性技术。

**参观焦点**  
科技园与可持续性

**实地参观目标**  
参观目标为介绍环境园的组织机构，环境园建筑物里所采用的环保型技术以及成员企业所进行的最客观项目。

**联系地址**  
Livorno 街60号, 10144 Turin 都灵市

www.envipark.com

**机构/公司**

Favini S.p.A. - Favini 股份公司

**机构/公司简介**  
Favini造纸厂是早于1736年开业的，目前的高质量纸张年度产量为6万吨。集团由三个部门组成的。第一部门经营图形产品，在Rossano Veneto工厂生产印刷用纸和图画用纸，第二部门经营时尚和汽车工业应用的型纸，在Crusinallo造纸厂生产的，第三部门在Rossano Veneto工厂生产并经营商业生活用纸。 Favini公司的环境管理体系覆盖整个生产过程并获得了多种认证：FSC、ISO 9001、ISO 14001和OHSAS 18001。

**参观焦点**  
工业的环保成绩

**实地参观目标**  
介绍一家环保型，即评价全部生产过程的环境影响，并通过环境管理体系提高了其环境成绩。

**联系地址**  
Via Alcide De Gasperi路 26 号， 36028 Rossano Veneto（维琴察省）  
www.favini.com



Institution/Company

Friuli Innovazione, Udine - 'Luigi Danieli' Science and Technology Park

Institution/Company Profile

Friuli Innovazione was set up in 1999 by the University of Udine, the Udine Industrial Association, the Fiat Research Center, Agemont, the Pordenone Industrial Association and the CRUP Foundation. At a later stage, other local partners also lent their support by endorsing and developing a shared strategy and objectives in innovation and technology transfer. In 2004, the Friuli Venezia Giulia Region made a major contribution to the initiative by appointing Friuli Innovazione to launch and manage the Luigi Danieli Science and Technology Park in Udine - an ideal space for turning ideas into projects and research into products.

Situated at the center of Europe, in the heart of a region with a vocation for innovation and integration - the ZIU (Zona Industriale Udinese) industrial area is only a few minutes from the European motorway network and within easy reach of several international airports - the Park hosts laboratories and company headquarters. The services offered are:

*Technology transfer:* to promote collaboration between enterprises and the scientific and technological research network  
*Business financing:* to inform, educate and support enterprises and researchers in identifying the most appropriate financial instruments and key operating stages, assist in their search for partners and verify their eligibility for European or Italian funds  
*Business start-up:* to support and assist the creation of high-tech enterprises by means of the Techno Seed incubator

*Hosting:* to offer space equipped with facilities and infrastructures to develop science and technology research projects and innovative businesses

Site Visit

Science Parks and Sustainability

Objectives

To underline the importance of science and technology in supporting companies and in enhancing technological innovation that will also benefit the environment.

Reference Address

Via Jacopo Linussio 51, 33100 Udine  
www.friulinnovazione.it

Institution/Company

Gruppo Maschio Gaspardo S.p.A.

Institution/Company Profile

Maschio Gaspardo is an international Group, leader in the production of agricultural equipment for tillage, seeding, crop care, green maintenance and hay making.

The Group produces a wide range of rotary tillers, power harrows, mulchers, precision planters, cereal seed drills, combination cultivator-drills, flail-mowers, ploughs, minimum tillage, spraying and hay making equipment.

The Company has 19 production plants, 15 in Italy and 4 abroad (Romania, India, China and North America). In addition, Maschio Gaspardo has 13 sales branches located in Germany, France, Spain, Russia, Romania, Ukraine, Poland, Turkey, North America, China, India, Iran and Georgia.

The company can boast 50 years of activity and exports to 100 countries around the world. In 2013 the group produced 60,000 machines, with a turnover of 280 million euros, 85% of which was generated by foreign markets.

Since 2010, the Maschio Gaspardo Group has implemented a new eco-sustainable policy both at product level, through the development of high efficiency agricultural machines, and at process level, equipping its high energy consuming plants with production systems from renewable sources and introducing energy saving systems. Investments included the realization of a 3.3 MWp photovoltaic system on the roofs of the Italian plants, the improvement of the thermal insulation of the buildings, the opening of skylights, and the introduction of monitoring and consumption reduction systems.

At the Campodarsego plant, in the province of Padua province, a 1.3 MWp photovoltaic system has been installed, consisting of 5,726 modules, for a total surface area of 22,000 sq m.

Before starting the work, more than 4,500 sq m of asbestos had to be removed and disposed of. Up to 18<sup>th</sup> April 2014, CO<sub>2</sub> emissions had been reduced by 1,638 tons and reductions were expected to reach 3,923 t CO<sub>2</sub> eq by November 2014.

The Group's active interest in the energy and environment field the during these years and its determination to obtain the fullest value from its investments led the company to initiate a Carbon Footprint study. The analysis was focused on the Italian plants of Campodarsego, Cadoneghe and Morsano al Tagliamento. The Carbon Footprint measurement process has taken into consideration two main aspects:

\_ The complete collection and elaboration of data on energy consumption

机构/公司

弗留利创新， 乌迪内 - “Luigi Danieli” 科技园区

机构/公司简介

弗留利创新是于1999年创立的， 创始者为乌迪内大学、乌迪内工业联合会、菲亚特研究中心、波尔德诺内 工业联合会以及乌迪内和波尔德诺内储蓄银行基金会。后来其它本地伙伴予以其支持， 并发展出创新及技术转让方面的共享战略。2004年， 弗留利大区政府任命弗留利创新为乌迪内科技园区的经营单位。该科技园区是把创意转化项目、把研究转化产品的理想地点。位于欧洲的中心， 在创新与一体化为传统的弗留利大区及乌迪内工业区内， 离国际机场和高速公路很近， 科技园区里有不少实验式和公司的总部。所提供的服务包括下列：

技术转让： 推动企业与科技研究网络之间的合作

企业筹资： 对企业和研究员就最适当的资助工具及相关手续提供咨询、培训及支持， 帮他们寻找合作伙伴并审查单位是否具备申请欧盟或意大利专项基金的条件

企业开发： 通过其“技术种子孵化器”支持并辅助高新技术企业的创立

东道服务： 提供具备装置及基础设施的厂房以便开发科技研究项目及创新业务

参观焦点

技术园与可持续性

实地参观目标

强调科技在支持企业升级方面的重要性，尤其是环保型创新技术。

联系地址

Jacopo Linussio 大道 51号, 33100 乌迪内市  
www.friulinnovazione.it

机构/公司

Gruppo Maschio Gaspardo S.p.A. - 马斯奇奥-盖斯帕多股份公司

机构/公司简介

Maschio Gaspardo （ 马斯奇奥-盖斯帕多）集团是一家跨国公司， 专业生产适用于耕作、播种、植保、绿地养护和牧草处理等领域的农业机械。

产品包括旋耕机、动力耙、秸秆粉碎还田机、气吸式精量播种机、谷物条播机、联合整地播种机、割草机、液压翻转犁、保护性耕作机具、喷药机和牧草设备等。

集团公司现拥有19个生产工厂， 其中意大利本土15个， 海外4个在罗马尼亚、印度、中国和北美。此外， 在德国、法国、西班牙、俄罗斯、罗马尼亚、乌克兰、波兰、土耳其、北美、中国、印度、伊朗、格鲁吉亚均设有13个销售分公司。

50年成功历史的集团出口到100多个国家和地区。2013年的机具产量为6万台， 营业额为2.8亿欧元， 其中国际生产的比重占85%。自2010年起， 马斯奇奥-盖斯帕多公司在产品上和工艺上开始实行新的生态可持续发展政策。产品上， 通过开发高效农业机器， 工艺上， 给原本高能耗的工厂安装能利用可再生能源的产能系统和节能系统。环保方面的投入被用于意大利工厂房顶3.3兆瓦的光伏发电系统， 厂房结构保温措施， 采光带的开启使用， 以及监控和降低能耗系统的引入。

在帕多瓦省的Campodarsego工厂， 功率为1.3兆瓦、总面积22000平方米、由5726块太阳能板组成的光伏发电系统已经投入使用。光伏系统实施前， 4500平方米的石棉层被清理并进行了处理。截止至2014年4月18日， 二氧化碳的排放量已减少了1638吨。

到2014年11月份预计将达到3923吨。近几年来马斯奇奥集团在能源 -环境领域的认识和充分利用投资的愿望使得公司开始着手关于“碳足迹”的研究， 分析对象便是分别位于Campodarsego、Cadoneghe 和 Morsano al Tagliamento 的三个工厂。对“碳足迹”的测试进程主要考虑到两个方面：\_ 对能耗方面的数据进行全面的收集和研

\_ Analysis of the industrial processes  
This study has demonstrated the reduction of our Carbon Footprint over a given period of time and a suitable monitoring of greenhouse gas emissions. Comparing 2012 and 2011, the results have shown:  
\_ A 23% CO<sub>2</sub> reduction relative to turnover  
\_ A CO<sub>2</sub> reduction by 10% in absolute terms equal to a saving of more than 800 tons  
At the end of the assessment process, on 20<sup>th</sup> September 2013, the Maschio Gaspardo Group received the International Carbon Trust Standard Certification as:  
\_ the first agricultural machinery company in the world to do so  
\_ the first metalworking industry in Italy likewise

**Site Visit**  
Energy Efficiency in Industry

**Objectives**  
To present a company that applies the most advanced energy efficiency measures both to its products and to its production plants.

**Reference Address**  
Via Marcello, 73 35011 Campodarsego (Padova)  
www.maschionet.com

**Institution/Company**  
ICI Caldaie S.p.A.  
**Institution/Company Profile**  
ICI Caldaie S.p.A is a company with over 50 years of history and experience in energy management and heat production. It is an Italian and European leader in heat production systems in the domestic and residential area; the cornerstones of this development are energy efficiency, environmental sustainability and cost savings for the user. The company can count on both a European and worldwide network of skills and partnerships. Its offices are in Verona and it has various foreign branches: England (Manchester), Spain (Madrid), Romania (Bucharest), China (Beijing), Russia (Moscow) and Kazakhstan (Almaty). With its ongoing attention to environmental impact, ICI Caldaie has further enhanced its products with control systems that allow a reduction in consumption while optimizing the operation of the generator and the elements connected to the system. Services offered include:  
\_ residential heating systems from 20 to 20,000 kW;  
\_ residential services for managing and optimizing heating systems using a remote control (E-term);  
\_ steam generators and fire-tube hot water generators, diathermic oil generators and heating plant elements;  
\_ industrial services for managing and optimizing the operation of generators, also using remote control;  
\_ fuel cell cogeneration systems (Sidera 30);  
\_ special projects for transportable central heating plants, water tube boilers and exchangers for biomass fumes.

**Site Visit**  
Energy Efficiency in Co-generation

**Objectives**  
To present the use of hydrogen and fuel cells for co-generation in industrial and civil boilers, with the aim of improving the systems’ energy efficiency.

**Reference Address**  
Via G. Pascoli 38, 37059 Zevio Fraz. Campagnola (Verona)  
www.icaldaie.com

\_ 对工业流程的分析  
这项研究显示我们的碳足迹在一定时期内的减少和对温室气体排放的适当控制。对比2012年和 2011年， 结果表明:  
\_ 相比较营业额二氧化碳相对减少23%  
\_ 二氧化碳绝对减少量为10%， 相当于节省800吨  
2013年9月20日 马斯奇奥盖斯帕多集团获得了国际碳信托标准的评估认证:  
\_ 世界第一家获得认证的农业机械生产企业  
\_ 意大利第一家获得认证的金属加工企业

**参观焦点**  
工业能效

**实地参观目标**  
介绍一家在产品上和工艺上应用最先进的能效技术的集团公司

**联系地址**  
Marcello 街 73号 35011 Campodarsego  
( 股帕多瓦 )  
www.maschionet.com

**机构/公司**  
ICI Caldaie S.p.A. - ICI锅炉股份公司  
**机构/公司简介**  
ICI 锅炉股份公司具有50多年的能源管理与热能生产领域的历史和经验，是住宅热能生产系统的意大利及欧洲主导公司。其发展的基础为能效、环境可持续性以及最终用户的成本节省。另外，公司的伙伴网络延长到在全欧洲国家。除了维罗纳的总部之外，公司在下列国家都有分公司：英国（曼切斯特）、西班牙（马德里）、罗马尼亚（不加雷斯特）、中国（北京）、俄罗斯（莫斯科）、哈萨克斯坦（阿拉木图）。

ICI锅炉公司致力于不断提高其环保绩效及产品的质量，所研发的产品控制系统降低了能源消耗并优化了发电机以及相关部件的操作性能。  
公司所提供的产品如下列的:  
\_ 20至20000 KW的住宅供热系统;  
\_ 通过远控系统 (E-term) 管理并优化住宅供热系统的服务;  
\_ 蒸汽发生器以及水火管锅壳式锅炉、导热油锅炉以及供热系统的部件;  
\_ 管理并优化发生器的操作性能的工业服务，包括应用远控方式;  
\_ 热电联产人类电池（Sidera 30）;  
\_ 移动集中供热系统、热水锅炉以及生物燃料烟雾转换器的特殊工程。

**参观焦点**  
热电联合发电的能效

**实地参观目标**  
介绍用于工业和生活锅炉的氢能燃料电池热电联合发电方式，目标为提高系统的能效。

**联系地址**  
G. Pascoli街 38号， 37059 Zevio镇Campagnola (维罗纳省)  
www.icaldaie.com

**Institution/Company**  
Iren Energia S.p.A.

**Institution/Company Profile**  
Iren Energia is part of the Iren holding group. Its core business is electric and thermal energy production and distribution. Alert to the importance of sustainable development and environmental protection, Iren Energia produces energy from renewable energy sources (hydroelectric plants) or similar (co-generation plants). Iren Energia owns 21 electricity production plans: 12 hydroelectric plants and 9 thermoelectric cogeneration plants. Iren Energia is certified with the International Standard Regulation on Quality (UNI EN ISO 9001:2000), Environment (UNI EN ISO 14001) and Safety (OHSAS 18001).

**Site Visit**  
Energy Efficiency – Air Pollution Control

**Objectives**  
To visit one of the biggest co-generation plants in the Piedmont Region in order to understand its functions, power supply capacity and emissions monitoring system.

**Reference Address**  
Strada del Pansa s.n., Torino  
www.irenenergia.it (only in Italian)

**Institution/Company**  
Italcementi Group

**Institution/Company Profile**  
The Italcementi Group is the world's fifth largest cement producer. The parent company, Italcementi S.p.A., is one of Italy's 10 largest industrial companies and is listed on the Italian Stock Exchange. As a member of the World Business Council for Sustainable Development (WBCSD), the Italcementi Group has signed the Cement Sustainability Initiative's Agenda for Action - the first formal commitment to bind a number of world cement industry leaders. Moreover, Italcementi has been included in “The Sustainability Yearbook 2011”, the most comprehensive publication on corporate sustainability released yearly by SAM (Sustainable Asset Management), and has adhered to the UN Global Compact, a strategic initiative promoted by the United Nations to align companies’ operations and plans with universally-accepted principles in the areas of human rights, labour, environment and ethics.

**Site Visit**  
Air Pollution Control in Industry

**Objectives**  
To present strategies for air pollution control and reduction.

**Site Visit**  
Low Carbon Industry

**Objectives**  
To present emission reduction technologies and monitoring within the framework of the emission trading scheme.

**Site Visit**  
Green Technologies and Business Innovations

**Objectives**  
To present a company that has put sustainable development as the center of its operation and is committed to a continuous innovation of process and products and increasing use of renewable energies.

**Reference Address**  
Via Camozzi 124, 24121 Bergamo  
www.italcementigroup.com

**机构/公司**

Iren Energia S.p.A. - 埃楞电能股份公司

**机构/公司简介**  
埃楞电能股份公司属于主营业务为电能和热能生产及供给的埃楞集团公司。公司意识到环保及可持续发展的重要性，因此使用可再生能源（水能发电厂）和类似（热电联产发电厂）而发电。埃楞电能公司经营21家发电厂，其中12家水能发电厂和9家热电联产发电厂。

埃丽德电能获得了国际质量标准认证（UNI EN ISO 9001:2000）、环境认证（UNI EN ISO 14001）以及安全认证（OHSAS 18001）。

**参观焦点**  
全能效– 空气污染控制

**实地参观目标**  
参观皮埃蒙特大区最大联产发电厂之一，以便了解到其性能、供电能力以及排放监测系统。

**联系地址**  
del Pansa 公路，都灵市  
www.irenenergia.it （意大利语）

**机构/公司**

Italcementi Group - 意大利水泥集团公司

**机构/公司简介**  
意大利水泥集团公司是全世界最大的水泥生产者。母公司，意大利水泥股份公司，是意大利10家最大企业之一并意大利交易上市公司。作为世界可持续发展工商理事会（WBCSD）的成员，意大利水泥集团公司已签署了水泥可持续发展创立行动计划议程，约束全球若干一流水泥工商的首次正式承诺。另外，意大利水泥集团被入选“2011年可持续性年鉴”，即由SAM可持续资产管理公司发表的有关公司可持续性的最全面年鉴。意大利水泥集团还参与了联合国的全球契约，由联合国赞助的使企业承诺依据在人权、劳工、环境和反腐败方面普遍接受的十项原则进行运作的各企业提供的 一个战略性行动倡议。

**参观焦点**  
工业的空气污染控制

**实地参观目标**  
全介绍控制并减少空气污染的措施

**参观焦点**  
低碳工业

**实地参观目标**  
介绍排放交易机制框架之下的减排技术及监测。

**参观焦点**  
绿色技术与企业创新性

**实地参观目标**  
介绍一家环保型集团公司，即把可持续发展作为其运营方式的目标、不断升级其技术并提高可再生能源的比重。

**联系地址**  
Camozzi街124号，24121贝尔加莫市  
www.italcementigroup.com



**Institution/Company**  
Latteria Montello S.p.A.

**Institution/Company Profile**  
Latteria Montello began its activities in 1947 inside a small dairy with just one wood-fired boiler. The company has developed over the years and is now leader in the premium segment of the Italian stracchino market with its “Nonno Nanni” fresh cheeses.  
The values of the company can be summarized as:  
\_ A constant pursuit of improved quality;  
\_ A genuine output and high quality raw materials and final products;  
\_ Tradition and passion for its history and its own corporate identity;  
\_ Long experience in production;  
\_ Scrupulous and accurate control of the entire production cycle.  
These values are also reflected in the importance that Latteria Montello gives to the protection of the environment.  
There are many initiatives implemented by the company for greater energy savings and efficient management of cheese wastes:  
\_ *Waste Management*: the percentage of packaging recovery has doubled during recent years; the container inside the packaging of cheese consists of 100% recyclable materials, thus reducing environmental impact as much as possible.  
\_ *Water Management*: wastewater is conveyed into a biological purification plant and eventually used in agriculture.  
\_ *Energy savings*: a number of process indicators have been set up for monitoring the development and consumption of resources (water, gas, energy power) in order to identify any eventual non-standard and unjustified points of consumption.  
*Reduction of CO<sub>2</sub>*: minimization CO<sub>2</sub> emission during production (purchase of containers for “spread out” packaging which will be completed at the dairy, concentration of the whey coming from processing, centralization of the management system of product washing) and distribution (reduction of vehicular traffic).  
\_ *Clean electrical energy*: Nonno Nanni uses only clean electricity from renewable energy sources, such as solar, water and wind.  
*Cogeneration*: Nonno Nanni uses a 1MW electricity output methane cogenerator plant  
Carbon footprint: Latteria Montello has developed a project aimed at calculating and minimizing its ‘Carbon Footprint’. The study, performed using strict scientific criteria, took into account the entire production chain, both direct (CO<sub>2</sub> generated from the production of cheese) and indirect (CO<sub>2</sub> generated by the production of milk in the barn) of

4 Nonno Nanni cheeses (Stracchino, Stracchino con Fermento Probiotico, Squaquerello and Robiola). In order to offset its environmental impact and any pollution produced, Nonno Nanni has contributed to two environmental sustainability initiatives, one in Italy and one abroad.

**Site Visit**  
Environmental Impact Reduction in Firms

**Objectives**  
To present a company investing in the protection of the environment over the whole production cycle.

**Reference Address**  
Via Fante d’Italia 26, 31040 Giavera del Montello (Treviso)  
www.nonnonanni.it

**机构/公司**

Latteria Montello S.p.A. - Montello挤奶厂股份公司

**机构/公司简介**  
Montello挤奶厂是早于1947年开业的，当时是一家只有一台木材蒸汽锅炉的小型挤奶厂。年又一年公司不断发展扩大，而目前其Nonno Nanni（奶尼老爷）冷湿奶酪（stracchino）系列产品是意大利相关市场环节的引导品牌。  
公司一直坚持下列原则：  
\_ 不断寻求质量的改善；  
\_ 高质原料，以生产纯真并优秀质量的制品；  
\_ 尊重上一代传下来的传统，热爱公司的历史和特色；  
\_ 挤奶的长久经验；  
\_ 产品的严格并精确检验。  
和上述原则一致的，Montello挤奶厂公司高度重视环保事业。  
公司采取了节能方面和奶酪生产过程的废料管理方面的如下措施：  
\_ 废物管理：最近几年包装的回收率增加了一倍；奶酪塑料盆100%用料为可回收材料，因此大量减少了对环境的影响。  
\_ 水管理：废水被输送到生物净化装置，处理之后就用于灌溉农田。  
\_ 能：若干工艺指数设置监测资源消耗（包括水、天然气和电能），以便查到标准外的高峰消耗。  
\_ 二氧化碳排放削减：尽量削减二氧化碳排放量，又在生产环节（购买可延伸、厂内安装的奶酪盒、工艺乳浆的浓度、产品清洗环节的集中化），既在物流环节（减少了路上运输）。  
\_ 清洁电能：奶尼老爷生产厂的全部电能来自可再生能源，如太阳能、水能和风能。  
\_ 热电联合发电：奶尼老爷生产厂备有1兆瓦电能容量的甲烷联合发电装置  
\_ 碳足迹：挤奶厂开发旨在计算并尽可能减少生产厂的碳足迹。该计算模式基于严格的科学标准和数据，而考虑到4种奶尼老爷奶酪（Stracchino、带有益生菌发酵剂的Stracchino、Squaquerello和Robiola）生产的全

部环节的因素，包括直接的（奶酪生产过程的二氧化碳排放量）以及间接的（牛厩里生产牛奶的二氧化碳排放量）。为了抵消对环境的影响以及所产生的污染，奶尼老爷产品生产公司参与了意大利和国外的不少环境可持续性举措。

**参观焦点**  
企业削减的环境的影响

**实地参观目标**  
介绍一家公司在全部生产过程的环保型上投入了大量投资。

**联系地址**  
Fante d’Italia街 26号, 31040 Giavera del Montello（特雷维索省）  
www.nonnonanni.it

**Institution/Company**  
L. Lavazza S.p.A.

**Institution/Company Profile**  
The Lavazza Company was founded in 1895 by Luigi Lavazza in a grocery store in the historic centre of Turin. Since its creation, the company has grown worldwide by exporting Italian coffee culture. Innovation and research are at the heart of the company and Lavazza has created products and technologies that have improved the quality of coffee and its conservation, enriching its gastronomic presence. Lavazza is one of the most successful Italian companies in the world today.

**Site Visit**  
Corporate Social and Environmental Responsibility

**Objectives**  
The main objective of this visit was to make better known some of Lavazza’s projects with regard to sustainability during the coffee production cycle. During the visit, the delegation had the opportunity to learn about Lavazza’s involvement in the Tierra projects and the Rainforest Alliance, designed to improve the environmental and living conditions of the different communities involved in the coffee production cycle as well as the instruments used to assess them.

**Reference Address**  
Strada Settimo 410, 10156 Turin  
www.lavazza.com

**Institution/Company**  
Tecnopolo Roma S.p.A.

**Institution/Company Profile**  
The Rome Industrial Technology Park Company is a corporation created in 1995 on the initiative of the Rome Chamber of Commerce, which holds 95% of the shares. Other shareholders are the Municipality of Rome (through the municipal agencies, ACEA, AMA, ATAC), the Latium Region (through the regional financing agency Filas and the Latium Development Agency), the Province of Rome and ENEA, the Italian National Agency for New Technology, Energy and Sustainable Economic Development. The Park Company implements initiatives designed to promote, improve and stimulate the development of high-tech industry through its Tiburtino Technology Park, and the Castel Romano Technology Park, recently acquired and re-launched. The Rome Technology Park system was conceived to achieve the following objectives:  
\_ create organized systems capable of attracting high-tech companies and projects  
\_ increase and improve development and employment in the Rome metropolitan area  
\_ promote activities aimed at developing research and technology transfer in order to raise companies’ level of competitiveness  
\_ encourage the Roman entrepreneurial system to adopt innovative business models characterized by advanced technology, sustainability and energy saving. More than 80 companies have chosen to locate to the Tiburtino Technology Park. Typically they are run by enthusiastic young people and are able to position themselves successfully within the technology markets by turning out innovative products and services. Tecnopolo Tiburtino’s activity is aimed at supporting local SME and proposing real estate solutions within well-equipped areas. From the outset, the real estate development was conceived taking into account planning parameters based on functionality and utilization. The park system is structured to host two projects with different missions and different locations. The Tiburtino Technology Park, east of Rome, mainly hosts aerospace, electronics and ICT companies. The Castel Romano Technology Park, south of Rome, is oriented toward study, research and technology transfer in the fields of metallurgy, biotechnology and the environment.

**机构/公司**

L. Lavazza S.p.A. - 乐维萨股份公司

**机构/公司简介**  
乐维萨公司 是于1895年由卢伊吉乐维萨在都灵市的一家杂货店里成立的。创立以来，公司不断地扩大了而把意大利咖啡文化传导全世界。公司的根本原则为创新性和技术升级，因此乐维萨公司所创立的产品和技术提高了咖啡的质量以及保存能力并使公司产品举世闻名。目前，乐维萨公司是世界最有名的意大利公司之一。

**参观焦点**  
公司治理以及环境责任（创新中心）

**实地参观目标**  
实地参观的主要目标为深化乐维萨公司在咖啡生产周期中所进行的一些可持续性的项目。参观过程中，代表团有机会更好地了解乐维萨公司所参与的“土地项目”以及“热带雨林联盟认证”。该项目的目标为提高各地咖啡耕种农民社团的生活条件以及相关的评价方式。

**联系地址**  
创新中心  
Settimo公路410号，10156都灵市  
www.lavazza.com

**机构/公司**

Tecnopolo Roma S.p.a - 罗马科技工业园区股份公司

**机构/公司简介**  
罗马技术工业园区是一家于1995年成立的股份公司，控股单位为罗马商会（持有95%的股权），其它股东为罗马市政府（通过其下属的ACEA、AMA、ATAC事业）、拉齐奥大区政府（通过Filas大区金融机构以及拉齐奥发展委员会）、罗马省政府以及意大利新技术、能源与可持续发展委员会。为了推进高新技术工业的发展，罗马科技工业园区公司设立了蒂泊蒂诺科技园并最近收购了并重新开发了罗马城堡镇科技园。以便优化科技园区系统的管理，两个科技园区位于不同的地理位置，而业务范围也不同；位于罗马的东部的蒂泊蒂诺科技园主要行业为航空、电子、信息通信技术等科技型行业，而罗马南部的城堡镇科技园更关注冶金学、生物技术及环保领域的研究开发及技术转让。达到下列几个方面的目标是罗马科技园区的构建概念：以吸引高新技术企业及创新型项目而造成最佳的条件及设施框架 促进罗马市区的经济发展并创造就业的机会 推向研发及技术转让，以便提高本地企业的竞争力 刺激罗马企业家采选一种以先进技术为特征、以环保节能为目标的创新型的管理方式。 80多家公司的总部在蒂泊蒂诺科技园里，而大部分的企业家为满兴奋、高素质的年轻人，有能力研发出创新含量的产品及服务而成功地逐渐站稳技术市场的较大份额。 蒂泊蒂诺科技园持有已装备的厂房及办公楼的不动产权，销售或租赁给中小企业，按照各自所需的大小面积，因为整个园区的布置设计符合物流方便、结构合理使用的原则。

**参观焦点**  
科技园与可持续性

Site Visit

Science Parks and Sustainability

Objectives

To underline the importance of science and technology in supporting companies’ start-ups and enhancing technological innovation that could also benefit the environment.

Reference Address

Via Ardito Desio 60, 00131 Rome  
www.tecnopolo.it

Institution/Company

TEN Center – Venice International University

Institution/Company Profile

“Element opposes element”. This is how Bernardo Trevisan described the lagoon in 1718, as an environment subject to the actions of different forces, natural or man-made, which oppose one another. The lagoon is in fact a wetland coastal area in a continual state of instability which communicates with the sea through openings, or inlets, in such a way that the movement of water inside it is governed by the tide. Lagoon morphology thus depends on the relationship between the amounts of solid material brought in by the sea or the rivers and the erosive forces of waves and tides. Communication between the lagoon and the sea guarantees, among other things, the survival of the lagoon and its unique brackish water environment. The physical shape of the lagoon is modified and formed through the daily entrance and exit of the sea through the lagoon inlets. The sea can also be considered one of the main risk factors involved in the evolution of the lagoon basin, especially when the erosive actions of wave motion and coastal currents predominate over the build-up of sediment accumulation. About 78% of the lagoon surface is covered by vast expanses of water which are criss-crossed by a dense network of channels of varying depth. The sea and the lagoon are connected through the three inlets of Lido, Malamocco and Chioggia. The land system of the lagoon territory is made up partly of completely dry land, natural or artificial (coastal strips, reclaimed areas, islands and banks), which represents about 8% of the overall surface area of the lagoon. The remaining 92% is made up of the water system which includes canals (11.9%) and shallows, mud flats and salt marshes (80.1%).

Site Visit

The safeguarding of Venice

Objectives

To get to know the fragile ecosystem of the Venetian Lagoon, its strengths, weaknesses, and the human impact on it.

Site Visit

Porto Marghera and the Industrial Development of the Venice Lagoon

Objectives

To understand industrial development within the Venice lagoon, its social, economic and environmental impacts and their evolution.

Reference Address

Isola di San Servolo, 30100 Venice  
www.univiu.org/ten

实地参观目标

强调科学技术的重要性，尤其是在支持创业方面及促进环保型技术升级方面。

联系地址

Ardito Desio 大道 60号, 00131 罗马市  
www.tecnopolo.it

机构/公司

环境主题网络中心 – 威尼斯国际大学

机构/公司简介

“相互对抗的多种元素” 1718年Bernardo Trevisan 是这样描述威尼斯泻湖，来比喻受到互相对抗的自然和人造力量影响的环境。威尼斯泻湖是一块不稳状态中的沿海湿地而通过Lido、 Malamocco 和Chioggia三个进水口通往大海，使之其内水飘动由海潮控制。因此，泻湖的形态依赖海流河流所带进来的固体物与波浪侵蚀力的互动关系。大海与泻湖之间的涌流保证泻湖的生存以及其唯一的淡盐味水环境。泻湖的物理形态是由通过进水口日常流进的海水来形成并更改的。 另一方面，大海也是对泻湖进展主要风险之一，尤其当波动的侵蚀力和沿海水流比沉积物累计量大时。泻湖面积的78%由广大水域组成并由不同深度渠道的密集网络交叉的。泻湖地区的土地系统总面积为8%并全部由干土，包括自然土地和人造土地（沿海带、土地复垦、岛屿及堤岸）形成的。剩余的92%由水系统组成的，包括渠道（11.9%）和浅水、泥滩以及盐沼地（80.1%）。

参观焦点

威尼斯保卫

实地参观目标

了解威尼斯泻湖的易碎生态系统，包括其强点和弱点以及人类的影响。

专业领域

全玛格拉港口以及威尼斯泻湖的工业发展

实地参观目标

了解威尼斯泻湖的工业进展以及其社会、经济和环境影响。

联系地址

San Servolo岛, 30100威尼斯  
www.univiu.org/ten



**Institution/Company**  
Turboden S.r.l.

**Institution/Company Profile**  
Turboden is a leading European company in the design, manufacture and service of ORC (Organic Rankine Cycle) turbogenerators. This state-of-the-art unit generates heat and power from renewable sources and from heat recovery from industrial processes, engines and gas turbines  
Founded in Milan in 1980, in 2013 Turboden became part of Mitsubishi Heavy Industries group of companies, providing a wide range of products and services for thermal power generation systems. Since its foundation, Turboden has focused its activity on the design and production of ORC modules particularly suitable for distributed generation.  
Main application fields include:  
\_ Biomass cogeneration/trigeneration for district heating networks, sawmills, wood pellet factories, MDF industries, thermal baths, greenhouses, refrigeration plants (with absorption chiller)  
\_ Waste heat recovery: electrical power production from exhaust streams in industrial processes (e.g. cement, glass, steel, oil & gas, waste incineration, other ferrous and non-ferrous metals)  
\_ Small combined cycles: electrical power production from reciprocating engines or gas turbines  
\_ Geothermal: mainly from medium-to-low sources (100-200 °C)  
\_ Concentrated Solar power (CSP): electric energy production from medium high temperature solar collectors  
Turboden ORC units can generate up to 15 MW of electricity per unit. Larger installations can be obtained by coupling a number of units.

**Site Visit**  
Energy Efficiency in Industry

**Objectives**  
To present a company that produces turbogenerators mainly fuelled by renewable sources, thus maximizing CO2 emission reductions and energy efficiency in industrial and public installations.

**Reference Address**  
Via Cernaia, 10, 25124 Brescia  
www.turboden.com

**Institution/Company**  
University of Siena, Environmental Legal Team

**Institution/Company Profile**  
The University of Siena is one of the oldest universities in Europe, which celebrated its 750<sup>th</sup> anniversary in 1990. The University of Siena has expanded through the centuries from the original School of Law, School of Grammar, and School of Medicine. It is currently composed of 14 Departments and has approximately 20,000 undergraduate and postgraduate students . The Environmental Legal Team (ELT) is a university-based research and consultancy group of legal experts, directed by Prof. Massimiliano Montini, which specialises in International and European environmental and energy law and policy. ELT has its headquarters at the Department of Business and Law (Dipartimento di Studi Aziendali e Giuridici) within the University of Siena. The ELT operates in conjunction with the Regulation for Sustainability (R4S) research group, an interdisciplinary group providing innovative research on legal and economic aspects of sustainability. R4S builds upon the legacy of the research center REPROS, active at the University of Siena from 2008 to 2012.

**Field of Competence**  
International and European environmental and energy law and policy, climate change and regulation for sustainability.

**Objectives**  
To provide specific knowledge on International and European environmental and energy law and policy.

**Reference Address**  
Piazza San Francesco, 7, 53100 Siena  
www.elт.unisi.it

**机构/公司**

Turboden S.r.l. - Turboden 有限公司

**机构/公司简介**  
Turboden是设计、制造并经营ORC(有机郎肯循环)涡轮式发电机的欧洲引导公司。ORC涡轮式发动机用可再生能源和工业过程余热回收发电。  
在米兰于1980年创立的， 2013年Turboden成为了三菱中工业的分公司，提供火力发电装置的广大系列产品和服务。  
自从公司的创立， Turboden的核心业务为适应分散式发电ORC发电机的设计和生产。主要的应用领域包括:  
区域供热网络应用的生物量联合发电/冷热电三联发电、锯机、木屑颗粒机、中纤板、温泉设施、温室、冷却装置（备有吸收式冷冻机）。  
余热回收： 工业过程余热回收发电（包括水泥厂、玻璃厂、钢铁厂、石油与天然气、废物焚烧厂、其它含铁和非含铁金属生产过程）  
小型联合循环发电厂： 往复蒸气机联合装置或燃气涡轮发电  
地热能： 主要用中低温来源 （100-200 °C）  
聚光太阳能发电（ CSP ）： 中高温集热器  
每台Turboden发电机发电量为15兆瓦，需要更大发电量可以结合多台发电机。

**参观焦点**  
工业能效

**实地参观目标**  
介绍一家生可再生能源产涡轮式发电机的公司， 这样减少二氧化碳排放量并提高能效。

**联系地址**  
Cernaia 路10 号， 25124 Brescia布雷西亚  
www.turboden.com

**机构 / 公司**

锡耶纳大学， 环境法团队

**机构 / 公司简介**  
锡耶纳大学是欧洲最古老大学之一， 于1990年庆祝了成立750周年。最早的锡耶纳大学只有三个学院： 法律学校、语法学校和医学学校。经过多次扩大， 今天锡耶纳大学由14个学院组成。目前大学生人数2万多， 包括本科生、研究生和博士生。  
队长为Massimiliano Montini接受的环境法团队是锡耶纳大学由一批高素质的法律专家组成的研究组， 就国际环境法、欧盟环境法、欧盟能源法与相关政策进行研究并提供咨询服务， 所在地为锡耶纳大学的商务与法律学院。  
环境法团队与R4S（可持续性的规则）研究组配套工作； 后者就可持续发展的经济及法律方面进行跨科目研究。 R4S继承了REPROS， 从2008年至=年为锡耶纳大学的联合研究中心的遗产。

**参观焦点**  
国际和欧盟的环境、能源、气候变化法律和政策以及可持续性管理。

**实地参观问目标**  
提供国际和欧盟环境法、能源法及相关政策的详细体知识。

**联系地址**  
San Francesco广场 7号, 53100 锡耶纳市  
www.elt.unisi.it

**Institution/Company**  
Valcucine S.p.A.

**Institution/Company Profile**  
Valcucine was founded in 1980 in Pordenone. The company produces environmentally friendly fitted kitchens and furniture, using advanced technologies. The plant covers a total area of 33,000 m<sup>2</sup> and employs 173 people. The entire production process of Valcucine has been established with the maximum attention to environmental impact. The finished items are studied in detail, linking design and eco-compatibility. In fact, the productive process conserves raw materials and energy, creates products using recycled materials, reduces toxic emissions and pollutants, and assures durable products.

**Site Visit**  
Green Industry

**Objectives**  
To present an example of an environmentally friendly industry.

**Reference Address**  
Via Savio 11, 33170 Pordenone  
www.valcucine.com

**Institution/Company**  
VEGA Parco Scientifico Tecnologico di Venezia

**Institution/Company Profile**  
VEGA - Parco Scientifico Tecnologico di Venezia S.c.a.r.l. – is one of the most important technological science parks of Italy, with 150 companies and 1,800 employees, operating in the leading sectors of technological innovation: ICT, Nanotechnology, Green Economy. It is located near to the historical centre of Venice, in the industrial area of Porto Marghera. VEGA offers its participating enterprises the opportunity to collaborate on technological content, increasing competitiveness in the global market, and has produced a new model of culture and management in ‘Enterprise 2.0’. VEGAIncube hosts start-ups, spin-offs specializing in ICT, green and nanotechnologies, with the support of a business tutor. The enterprises are selected based on innovative ideas and economic sustainability. Moreover, VEGA has designed, in collaboration with the Boston MIT Media Lab, ‘Pandora’ - the hub for nomadic workers, the media building and the green building zero-emissions machine, capable of emitting oxygen, eliminating pollution and producing electricity and thermal energy. Furthermore, VEGA supports the promotion and transfer of innovative green technology via the creation of pilot plans and technological platforms for the development of sustainable industrial processes in the chemical industry sector, agri-food industry, energy and the reclamation of industrial areas.

**Site Visit**  
Science Parks and Sustainability

**Objectives**  
VEGA aims toward the development of ‘Smart Cities’ to increase the productivity of urban areas (considering in particular that the area in question is a reclamation site) through advanced systems based on high connectivity, social media, and technological innovation.

**Site Visit**  
Land Reclamation and Redevelopment

**Site Visit Objectives**  
VEGA offers a good example of how a reclamation site can provide an opportunity for the economic and environmentally-sustainable re-development of an industrial area. VEGA is the first science and technology park in Italy to have achieved certifications of its integrated quality-environmental management system, recognised at an international level (ISO 9001 – ISO 14001). VEGA, built over a former polluted industrial site

**机构/公司**

Valcucine S.p.A.- 瓦乐厨房股份公司

**机构/公司简介**  
Valcucine公司 是于1980在波尔德诺内市成立的。公司应用先进技术而生产求购处方家具及其它家具。工厂总面积为3,3万平方米，全体工作人员为173人。公司的整个生产过程均高度重视环保事项。成品的各个细节都被详细地研究，以便把现代化设计和环保考虑综合起来。生产过程尽量节省原料及能源，用回收材料而造成产品，减少有毒及污染的物排放量并保证耐用产品。

**参观焦点**  
绿色工业

**实地参观目标**  
介绍环境友好工业的一个实例。

**联系地址**  
Savio路，11号，33170波尔德诺内市  
www.valcucine.com

**机构/公司**

VEGA - 威尼斯科技园联营有限责任公司

**机构/公司简介**  
由150家公司并聘用1800个工作人员的VEGA – 威尼斯科技园联营有限公司是意大利最重要技术园之一，主要从事技术创新的相关领域：信息通信技术、纳米技术以及绿色经济。威尼斯技术园位于威尼斯中心的附近，在玛格拉港工业区内。威尼斯科技园成员企业有机会升级其技术内容，提升其国际市场上的竞争力，开发一种新的企业文化和管理方式模式，即Enterprise 2.0。威尼斯科技园的inCube企业孵化器对从事信息通信技术、绿色技术和纳米技术的创业企业和衍生企业提供商务指导服务。孵化器的企业是根据其创新性概念以及经济可行性参数而筛选的。另外，与波斯顿麻州理工大学实验室的合作之下，威尼斯科技园设计了名为“潘多拉”的建筑物作为移民工作人员的中心、媒介楼以及节能建筑零排放机器。该机器能够排放氧气、消去污染并生产电能和热能。通过试点项目以及技术平台，威尼斯科技园支持创新性绿色技术的转让以便开发可持续性的工业过程，尤其是在化学工业、农业食品工业、能源与工业区修复。

**参观焦点**  
科技园与可持续性

**实地参观目标**  
威尼斯科技园旨在开发“智慧城市”以便提升城区的生产率（尤其是修复地点）通过基于高度连接性、社会媒介以及技术创新的先进系统。

**参观焦点**  
污染地区修复及再开发

**实地参观目标**  
威尼斯科技园提供被修复地区能改成工业区的环保型经济再开发的良好模范。威尼斯科技园是意大利首次科技园获得了环境-质量综合管理体系的国际认证（ISO 9001 – ISO 14001）。

after its reclamation, is the City of Technology and Innovation for the Venice Municipality and the Veneto region.

Reference Address

Via della Libertà 12, 30175 Marghera (Venice)  
www.vegapark.it (only Italian)

Institution/Company

Veritas S.p.A.

Institution/Company Profile

Veritas S.p.A. is the principal multi-utility in the Veneto region in terms of size and revenues, and one of the biggest in Italy: it is the eighth largest integrated water cycle service and the fifth largest environmental service, behind companies also operating in energy management but in more densely populated areas.

The company serves all the municipalities within the province of Venice and part of the province of Treviso, in addition to the more than 30 million tourists visiting Venice, the coast and the surrounding areas each year.

Veritas provides its services (many of which are certified) to citizens, businesses and the territory in general. It operates in the integrated water and environmental services field, and sells and distributes energy through its subsidiaries. Furthermore, it provides urban, community, territorial and industrial services and manages cemeteries, wholesale markets and environmental reclamation work.

The Wastewater Treatment plant in Fusina

The plant has a capacity to service a population of 330,000 Eq., with an average flow of 100’000 m<sup>3</sup>/day. The three treatment lines process water from different sources:

- \_ the civil sewage from Mestre, Marghera and the Mirese area (17 Municipalities)
- \_ the industrial sewage water from Porto Marghera Industrial zone
- \_ water from contaminated groundwater wells

The aim is to reduce the pollution load of the waters entering the Lagoon of Venice and to optimize the use of water resources by reusing the treated water in the industrial installations in Porto Marghera.

The treatment system applies the Best Available Technologies and includes an artificial wetland area which is used for the finishing treatment and can also be used as a recreational area.

The Drinking Water Treatment plant in Ca’ Solaro

The plant has a treatment capacity of 1000 l/s and the raw water comes from the Sile River, 10.5 km away, via an artificial canal.

Water quality at the entrance and at the output of the system is checked with continuous monitoring instruments. Manual samplings and analyses are periodically performed in order to comply with the quality standards set by Italian law, in accordance with a program approved by the Health Authority. The plant provides only a fraction of the drinking water distributed by Veritas in the province

位于被修复的污染工业地区里的威尼斯科技园作为威尼斯市政府和威尼托大区的技术之城。

联系地址

Via della Libertà街12号， 30175玛各拉（威尼斯省）  
www.vegapark.it（意大利语）

机构/公司

Veritas S.p.A. -威尼斯能源、水资源、领土与环境服务股份公司

机构/公司简介

威尼斯能源、水资源、领土与环境服务股份公司是威尼托大区规模和营业额最大的国有多种公益事业，以及全国最大事业之一，综合水循环方面占全国第八，环境服务方面占全国第五位。

公司对威尼斯省所辖城镇、特雷维佐省所辖的部分城镇以及每年参观威尼斯及其周围地区的3千万旅游者提供服务。

Veritas 公司给居民和工业提供废物处理的服务（大部业务分已获得相关认证）。公司提供污水和城市垃圾的综合服务，并通过其分公司供电。另外，公司还提供城市、社团、土地及工业方面的服务并处理坟墓和葬礼服务，批发市场的清洁及环境回收工程。

Fusina污水处理厂

处理厂的水用量为33万人口当量，平均流量为10万立方米/天，备有处理如下来源污水的三条处理线：

- \_来自Mestre、Marghera 和 Mirese 地区的生活污水（17所城镇）
- \_玛格拉工业区的工业废水
- \_来自地下水井的污染水

目标为削减进入威尼斯泻湖水量的污染负荷并通过被净化的工业废水的回用而优化水资源的应用。处理系统应用最佳可用技术并包括用于最后处理环节的一块人造的湿地。该湿地也用于娱乐公用区。

Ca’ Solaro饮用水处理厂

通过一条人造水道，原水来自10.5公里远的Sile河；处理量为1000升/秒。管道系统输出各端部都进行连续性水质监测。依照卫生局所批准的计划，定期的还进行人工的取样分析，以检查是否符合意大利法律所规定的标准。

我公司在威尼斯省内供水量的一小部分是该处理厂处理的，大部分来自位于附近特雷维索省和帕多瓦省的地下水井。水饮用化之外，我公司还经营威尼斯市、Cavallino镇、Treporti镇、Mogliano



of Venice. The greater part comes in fact from groundwater wells mainly located in the neighboring Provinces of Treviso and Padua. Besides potabilization, the plant also operates as the management center for the waterworks network of the Municipalities of Venice, Cavallino Treporti, Mogliano, Preganziol and Quinto di Treviso. The control room receives data from, and supervises the functioning and quality parameters of water distributed by, several minor plants, including groundwater wells, high lift stations, storage tanks etc. Electromechanical and instrumentation maintenance for around twenty plants are also managed from the site of Ca’ Solaro – Favaro Veneto.

Site Visit  
Integrated Waste Water Management

Objectives  
To present an example of urban and industrial wastewater treatment combined with water reuse.

Site Visit  
Drinking Water Supply

Objectives  
To present a drinking water treatment facility and discuss initiatives for the protection of public health.

Reference Address  
Santa Croce 489, 30135 Venice  
www.gruppovertas.it (only Italian)

Institution/Company  
ZIPR – Consorzio per la Zona Industriale Ponterosso - Industrial Development Consortium of Ponterosso

Institution/Company Profile  
Within its geographic area of expertise, the consortium aims to create adequate conditions for the implementation and development of industrial activities by managing infrastructures and business services. The consortium promotes sustainable development and recognizes the relevance of the natural environment in the valuation process and in the economic and social development of the area. Priority is given to promoting new settlements and satisfying the consortium members’ requirements in order to create the necessary conditions to set up and develop productive activities in the industrial and small business sector. This can be achieved by managing the infrastructures and services offered to businesses, evaluating and reinforcing the positive environmental outcomes and equally preventing, eliminating or minimising events that could lead to environmental emergency situations. For all these reasons the ZIPR decided to adopt a Quality and Environmental integrated Management System that complies with UNI ESO 14001:2004 and UNI EN ISO 9001:2000 standards. The consortium specifically deals with:  
\_ Land acquisition and design of industrial areas equipped with infrastructures destined for industrial settlements including promotional activities regarding the new company settlements; design and building development plans, as well as tooling up public areas;  
\_ Sale or assignment of lots to enterprises in equipped areas;  
\_ Building of plants, laboratories, warehouses for industrial and handicraft activities;  
\_ Sale or rent of industrial buildings or plants in equipped areas;  
\_ Building and management of enterprises’ wastewater treatment plants;  
\_ Recovering industrial buildings for production purposes;  
\_ Management of combined production systems and distribution networks of energy and heat self-sufficiency systems;  
\_ Supply of any other services to established enterprises. The ZIPR is provided with a double sewerage system: a 14,920-meter-long sewerage network and an 8,014-meter-long white water system. A treatment plant collects the wastewater at the bottom of the sewerage system. It is based on activated sludge processes which treat the wastewater with the best cutting-edge technologies.

镇、Preganziol镇以及 Quinto di Treviso镇地下水道网络的控制室。控制室接收来自若干小型水处理厂，包括地下水井、喷站、蓄水库等的数据、检查水工程的实用性并监测水质质量标准。 Favaro Veneto镇的 Ca’ Solaro处理厂还负责二十多家处理厂所应用仪器仪表的电子机械维修。

参观焦点  
污水综合管理

实地参观目标  
介绍生活污水和工业废水处理方式以及废水回用。

参观焦点  
饮用水供给

实地参观目标  
介绍一家饮用水处理厂并讨论以保护人类健康而所需的措施。

联系地址  
Santa Croce城区 489号， 30135威尼斯  
www.gruppovertas.it（意大利语）

机构/公司  
ZIPR – 红桥工业开发区联营企业  
机构/公司简介  
该联营公司的目标是对成员企业提供开业并发展业务的可持续性条件。联营公司持有开发区的基础设施并提供相关的商业服务。联营公司鼓励可持续发展并意识到当地社会经济发展过程中自然环境起着是一个非常关键的作用，因此保护周围环境意味着发挥当地区域的潜在力。联营公司的核心业务为吸引新开企业并满足成员企业的需求，即建设良好生产环境使其生产业或零售业健全发展。因此，联营公司负责基础设施和服务的管理方面，鼓励环保型技术并防治或减少能够引起环境紧急情况的因素。联营公司采取了符合 UNI EN ISO 9001: 2000族标准的环境综合管理系统。联营公司的具体业务如下列的：  
购买土地产权，设计备有基础设施的工业分区，进行相关的宣传活动；设计并建设厂房的开发计划以及装备加工机械；把备有设备的场地分配或出售给企业；建立工厂、厂房、仓库以及手工车间；出售或出租备有设备的工业楼或工厂；建立并管理企业的废水处理厂；修复工业楼以商务用途；管理电热联产自足系统以及相关配电网络；给成员企业提供其它所需服务；ZIPR备有两套地下水管道体制，即14.920米长的下水道网络以及8.14米长的白水系统。收集废水的处理厂采用活性污泥法，即废水的最佳尖端技术。排到Roja小何之前，出水又进行一次处理，在三块海水沉淀池，通过一台不断横行流动的淹没机制。这样，水是由海水里的双齿围沙蚕而自然地净化。

Before reaching the river Roja, the outgoing water is treated once again in a marine-plant system made up of three settling ponds, thanks to a non-stop horizontal submerged flow system. Water is treated naturally thanks to the presence of *Phragmites*.

**Site Visit**  
Science Parks and Sustainability

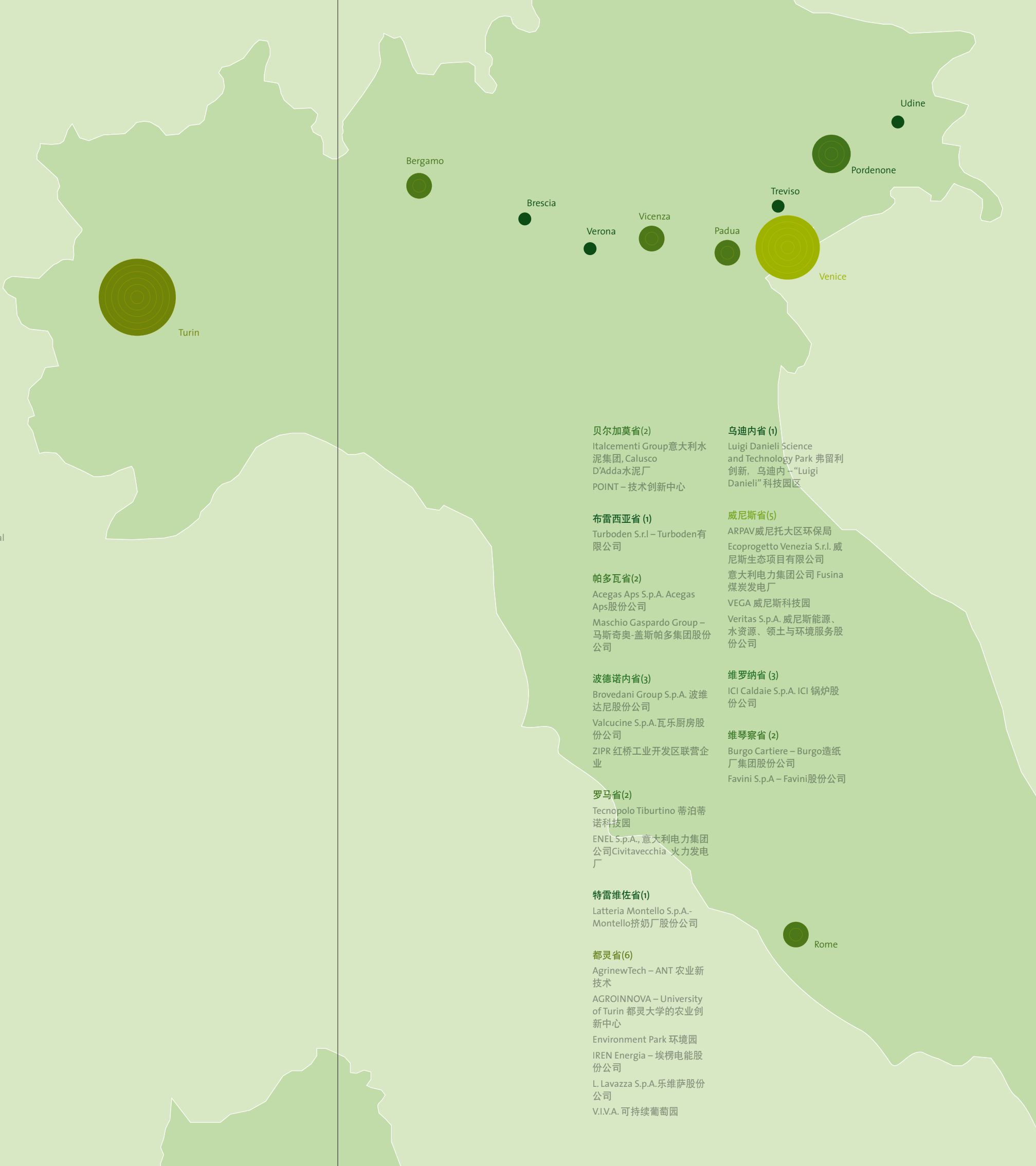
**Objectives**  
To introduce the role of industrial zones in helping companies to reduce their impact on the environment.

**Reference Address**  
Via Forgaria, 11, 33078, San Vito al Tagliamento (Pordenone)  
www.zipr.it

**参观焦点**  
科技园与可持续性

**实地参观目标**  
介绍工业区在援助企业降低其环境影响方面所发挥的重要作用。

**联系地址**  
Forgaria 街11号, 33078 San Vito al Tagliamento (波尔德诺内省)  
www.zipr.it



#### Bergamo (2)

Italcementi Group  
POINT – POlo per  
l'INnovazione Tecnologica

#### Brescia (1)

Turboden

#### Padua (2)

Acegas Aps S.p.A.  
Maschio Gaspardo Group

#### Pordenone (3)

Brovedani Group S.p.A.  
Valcucine S.p.A.  
ZIPR Ponterosso Consortium

#### Rome (2)

Tecnopolo Tiburtino  
Enel S.p.A. - Civitavecchia  
Thermal Power Plant

#### Treviso (1)

Latteria Montello S.p.A.

#### Turin (6)

AgrinewTech – ANT  
AGROINNOVA –  
University of Turin  
Environment Park  
IREN Energia  
L. Lavazza S.p.A.  
V.I.V.A. Sustainable Wine

#### Udine (1)

Luigi Danieli Science and  
Technology Park

#### Venice (5)

ARPAV  
Ecoprogetto Venezia S.r.l.  
Enel S.p.A. – Fusina Thermal  
Power Plant  
VEGA  
Veritas S.p.A.

#### Verona (1)

ICI Caldaie S.p.A.

#### Vicenza (2)

Burgo Cartiere  
Favini S.p.A

#### 贝尔加莫省(2)

Italcementi Group意大利水  
泥集团, Calusco  
D'Adda水泥厂  
POINT – 技术创新中心

#### 布雷西亚省(1)

Turboden S.r.l – Turboden有  
限公司

#### 帕多瓦省(2)

Acegas Aps S.p.A. Acegas  
Aps股份公司  
Maschio Gaspardo Group –  
马斯奇奥-盖斯帕多集团股份  
公司

#### 波德诺内省(3)

Brovedani Group S.p.A. 波维  
达尼股份公司  
Valcucine S.p.A. 瓦乐厨房股  
份公司  
ZIPR 红桥工业开发区联营企  
业

#### 罗马省(2)

Tecnopolo Tiburtino 蒂泊蒂  
诺科技园  
ENEL S.p.A., 意大利电力集团  
公司Civitavecchia 火力发电  
厂

#### 特雷维佐省(1)

Latteria Montello S.p.A.-  
Montello挤奶厂股份公司

#### 都灵省(6)

AgrinewTech – ANT 农业新  
技术  
AGROINNOVA – University  
of Turin 都灵大学的农业创  
新中心  
Environment Park 环境园  
IREN Energia – 埃楞电能股  
份公司  
L. Lavazza S.p.A. 乐维萨股份  
公司  
V.I.V.A. 可持续葡萄园

#### 乌迪内省(1)

Luigi Danieli Science  
and Technology Park 弗留利  
创新, 乌迪内 – “Luigi  
Danieli” 科技园区

#### 威尼斯省(5)

ARPAV威尼托大区环保局  
Ecoprogetto Venezia S.r.l. 威  
尼斯生态项目有限公司  
意大利电力集团公司 Fusina  
煤炭发电厂  
VEGA 威尼斯科技园  
Veritas S.p.A. 威尼斯能源、  
水资源、领土与环境服务股  
份公司

#### 维罗纳省(3)

ICI Caldaie S.p.A. ICI 锅炉股  
份公司

#### 维琴察省(2)

Burgo Cartiere – Burgo造纸  
厂集团股份公司  
Favini S.p.A – Favini股份公司



Training Profile Data

培训简况及数据



Training courses

2014

Delegation	Course	General Schedule	Participants
CASS	Environment and Health	Mar. 2 <sup>nd</sup> – 13 <sup>th</sup> 2014	37
CASS	Green Growth	Mar. 16 <sup>th</sup> – 27 <sup>th</sup> 2014	39
MEP	Air Pollution Prevention and Control	May 4 <sup>th</sup> – 12 <sup>th</sup> 2014	26
BMEPB and SEPB	Air Quality Control	Jun. 8 <sup>th</sup> – 18 <sup>th</sup> 2014	41
MOST	High-Technology and Science Parks for Sustainable Development	Jun. 21 <sup>st</sup> – Jul. 2 <sup>nd</sup> 2014	27
MEP	Air Pollution Prevention and Control	Jun. 29 <sup>th</sup> – Jul. 7 <sup>th</sup> 2014	19
MOST	Innovation in Firms and Green Technologies	Sep. 6 <sup>th</sup> - 17 <sup>th</sup> 2014	27
TSTC	Sustainable Industry and Eco-Innovation Management in Coastal Urban Areas	Oct. 19 <sup>th</sup> – 29 <sup>th</sup> 2014	32
MOST - Beijing	Industrial Energy Efficiency	Oct. 20 <sup>th</sup> – 23 <sup>rd</sup> 2014	27
BMEPB - Beijing	Industrial Pollution Control	Oct. 21 <sup>st</sup> 2014	60
SEPB - Shanghai	Industrial Pollution Control	Oct. 23 <sup>rd</sup> 2014	63
MOST	Industrial Energy Efficiency	Oct. 25 <sup>th</sup> – Nov. 5 <sup>th</sup> 2014	27
BMEPB and SEPB	Industrial Pollution Control	Nov. 16 <sup>th</sup> – 26 <sup>th</sup> 2014	41

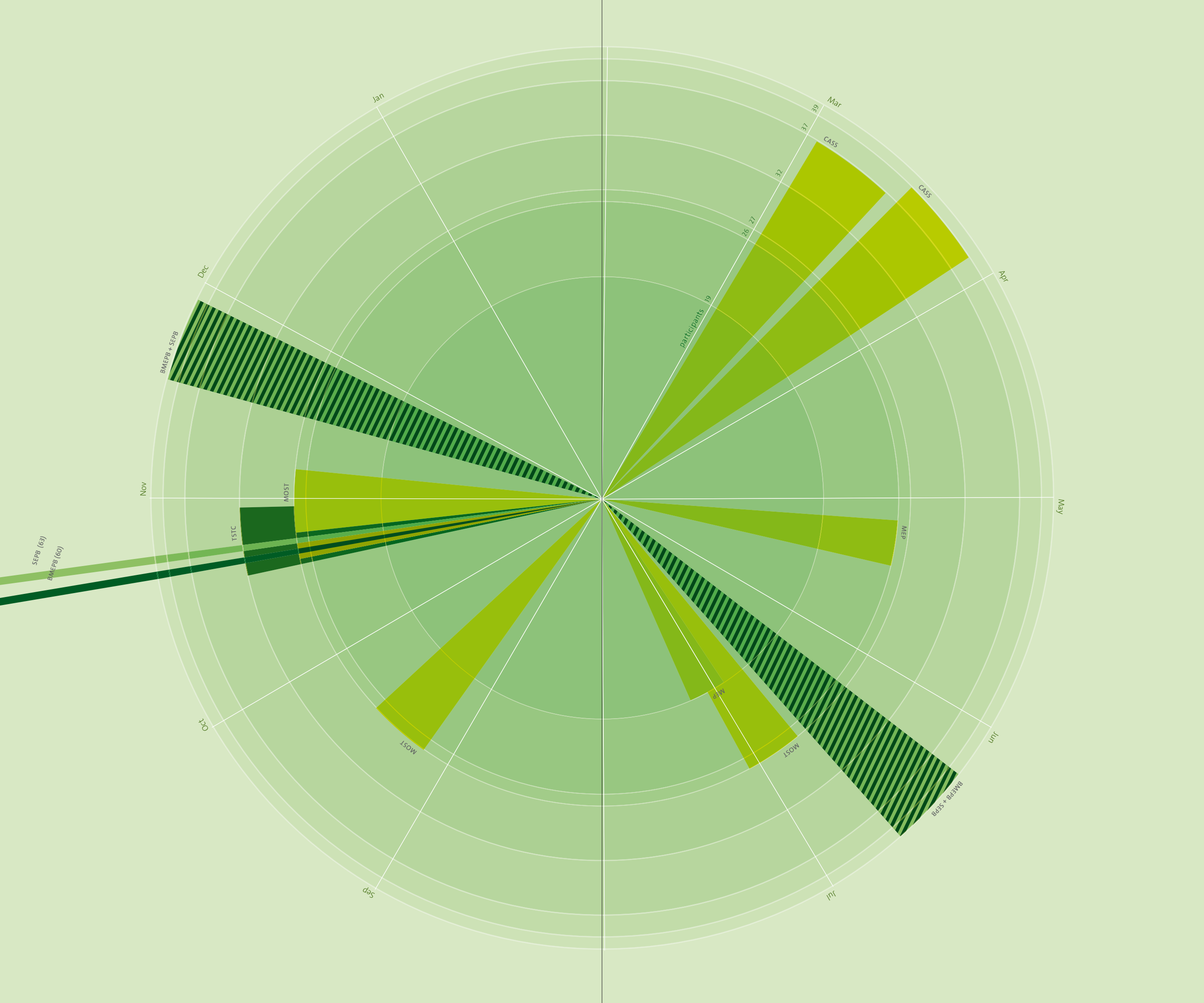
Total courses in Italy 2014: 10  
Total courses in China 2014: 3  
Total participants 2014: 466

培训课程

2014 年

代表团	课程	总日程	人数
中国社会科学院	环境与健康	2014年3月2日至13日	37
中国社会科学院	绿色增长	2014年3月16日至27日	39
中国环境保护部	空气污染防治	2014年5月4日至12日	26
北京市环保局 和 上海市环保局	空气质量控制	2014年6月8日至18日	41
中国科学技术部	可持续发展的高新技术与科技园	2014年6月21日至7月2日	27
中国环境保护部	空气污染防治	2014年6月29日至7月7日	19
中国科学技术部	企业创新性以及绿色技术	2014年9月6日至17日	27
天津市科学技术委员会	沿海地区的可持续性 工业与生态创新管理	2014年9月19日至29日	32
中国科学技术部 – 北京	工业能效	2014年10月20日至23日	27
北京市环保局 – 北京	工业污染控制	2014年10月21	60
上海市环保局 – 上海	工业污染控制	2014年10月23日	63
中国科学技术部	工业能效	2014年10月25日至11月5日	27
北京市环保局 和 上海市环保局	工业污染控制	2014年11月16日至26日	41

2014年在意大利的课程总数: 10  
2014年在中国的课程总数: 3  
2014年参加者总人数: 466



Training lecturers

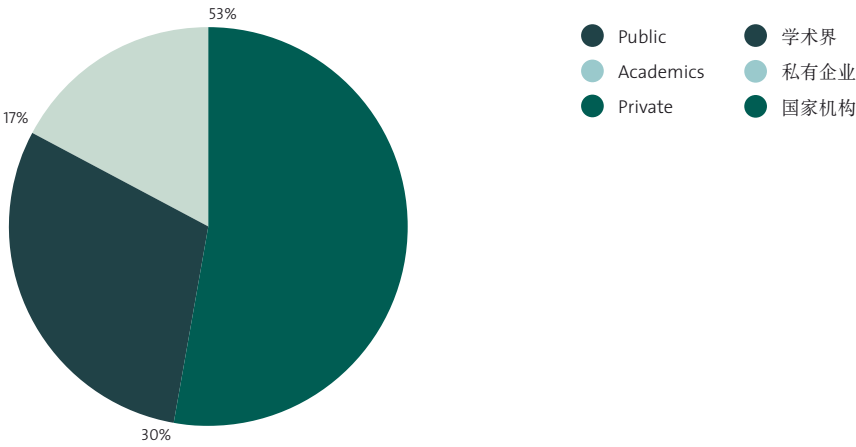
More than 111 lecturers/speakers from academia, the public sector and private companies were invited to cover a wide range of topics, discuss different theoretical and practical aspects of environmental management and sustainable development, present case studies and exchange experiences with the participants.

培训讲师

为了涵盖广泛范围的课题，并能够讨论环境管理以及可持续发展的不同理论和实践方面、介绍案例研究并与培训参加者进行经验交流的目标，来自学术界、国家机构和私有公司的111多位讲师受到邀请

Figure 1. Lecturers' affiliation

图1. 讲师来源



Training participants

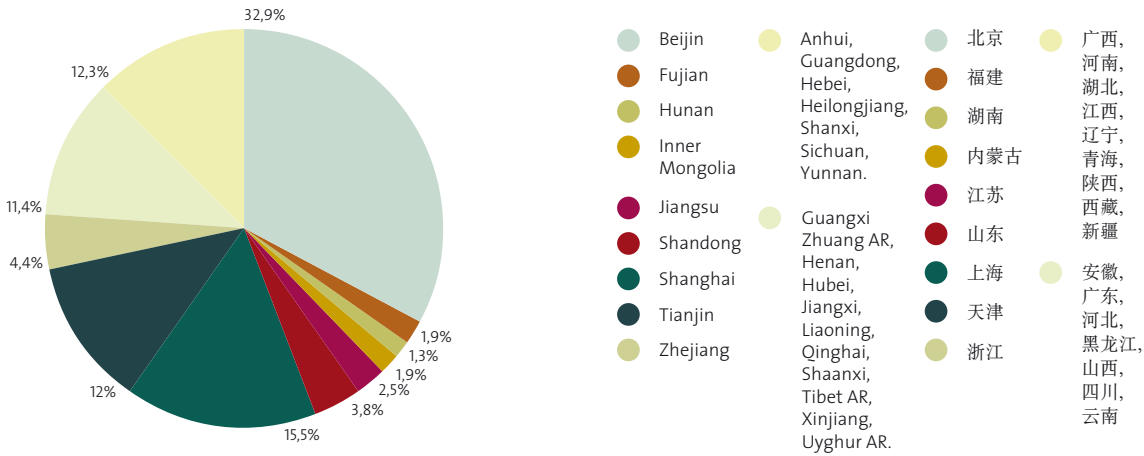
More than 460 participants attended the Advanced Training Program this year. The largest group of trainees came from Beijing, and the number coming from the other municipalities, provinces and autonomous regions was approximately the same as in previous years. The large number of provinces involved ensured that the needs, peculiarities and specific issues of all China's regions were represented.

培训参加者

今年参加高级培训计划共有460多人。培训参加者的大部分来自北京，来自中国各省市及自治区的人数大概保持了前几年的比例。参加者来自中国各省市，因此代表各个省市的需要、特征和具体议题。

Figure 2. Trainees' provenance

图2. 培训参加者来源

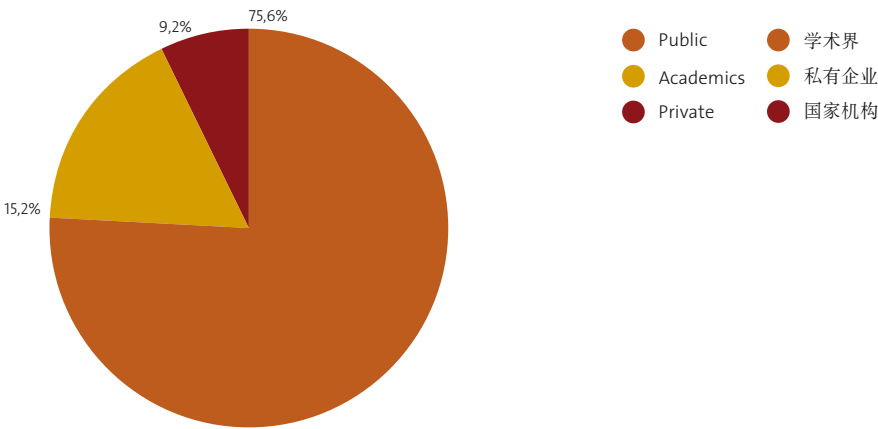


The training courses were aimed at Chinese government officials, academics and representatives of the private sector involved in the broad field of environmental management.

国家机构、学术界和私有领域的培训参加者。

Figure 3. Trainees' affiliation

图3. 培训参加者来源







ACEA	ACEA S.p.A. - <i>Azienda Comunale Energia e Ambiente</i> / Rome Water & Energy Supply (and Wastewater Disposal) Agency
AMA	AMA Roma S.p.A. - <i>Azienda Municipale Ambiente</i> / Rome Waste Collection & Treatment Agency
ANT	AgriNewTech - Agricultural and Environmental Biotechnological Agency
APSTI	<i>Associazione Parchi Scientifici e Tecnologici Italiani</i> / Italian Science and Technology Parks Association
ARPA Piemonte	<i>Agenzia Regionale per la Prevenzione e Protezione Ambientale del Piemonte</i> / Piemonte Regional Agency for Environmental Prevention and Protection
ARPAV	<i>Agenzia Regionale per la Prevenzione e Protezione Ambientale del Veneto</i> / Veneto Regional Agency for Environmental Prevention and Protection
ATER	<i>Azienda Territoriale per l'Edilizia Residenziale, Provincia di Venezia</i> / Province of Venice Public Housing Agency
ATAC	ATAC S.p.A. - <i>Agenzia del trasporto autoferrotranviario del Comune di Roma</i> / Rome Mobility Agency
BMEPB	Beijing Municipal Environmental Protection Bureau
CASS	Chinese Academy of Social Sciences
CEPI	Confederation of European Paper Industries
CNR	<i>Consiglio Nazionale delle Ricerche</i> / National Research Council
CNR-IIA	<i>L'Istituto sull'Inquinamento Atmosferico del Consiglio Nazionale delle Ricerche</i> / National Research Council, Institute for Atmospheric Pollution
CO2	Carbon Dioxide
CRUP	CRUP Foundation - <i>Fondazione Cassa di Risparmio di Udine e Pordenone</i>
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
ELT	Environmental Legal Team
EMAS	Eco-Management and Audit Scheme
EN	European Norm
ENEA	<i>Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile</i> / Italian National Agency for New Technologies, Energy and Sustainable Economic Development
ENEL	<i>Ente Nazionale per l'Energia Elettrica</i> / National Agency for Electrical Energy
EPB	Environmental Protection Bureau
eq	Equivalent
ETS	Emissions Trading Scheme
EU	European Union
EZI	<i>Ente Zona Industriale</i> / Porto Marghera Industrial Association
FIRE	<i>Federazione Italiana per l'Uso Razionale dell'Energia</i> / Italian Federation for Rational Energy Use
FSC®	Forest Stewardship Council
GWh	gigawatt-hour
ICFPA	International Council of Forest and Paper Associations
ICT	Information and Communication Technology

ACEA	罗马市政供电供水股份公司
AMA	罗马市政环境股份公司
ANT	农业新技术
APSTI	意大利科技园协会
ARPA Piemonte	皮埃蒙特大区环保局
ARPAV	威尼托大区环保局
ATER	威尼斯省住宅楼房管理局
ATAC	罗马市政交通股份公司
BMEPB	北京市环境保护局
CASS	中国社会科学院
CEPI	欧洲纸产业协会
CNR	意大利国家研究委员会
CNR-IIA	意大利国家研究委员会 - 空气污染研究所
CO2	二氧化碳
CRUP	乌迪内和波尔德诺内储蓄银行基金会
EBITDA	未计利息、税项、折旧及摊销的利润
ELT	环境法律研究小组
EMAS	欧盟管理与审计体制
EN	欧盟标准
ENEA	意大利新技术、能源与可持续发展委员会
ENEL	意大利国家电力公司
EPB	环保局
eq	当量
ETS	排放交易机制
EU	欧盟
EZI	玛格拉港口工业区工业协会
FIRE	意大利能源联盟
FSC®	森林管理委员会
GWh	千兆瓦小时
ICFPA	国际森林与纸业联合会
ICT	信息通信技术
IMELS	意大利环境、领土与海洋部
ISO	国际标准化组织

IMELS	Italian Ministry for the Environment, Land and Sea
ISO	International Organization for Standardization
ISPRA	<i>Istituto Superiore per la Protezione e la Ricerca Ambientale</i> / Higher Institute for Environmental Protection and Research
kW	kilowatt
LCA	Life Cycle Assessment
l/s	liter per second
m²	square meter
m³/day	cubic meter per day
MEP	Ministry of Environmental Protection of China
MDF	Medium Density Fibreboard
MOST	Ministry of Science and Technology of China
MW	megawatt
MWp	megawatt peak
OHSAS	Occupational Health & Safety Advisory Services
ORAR	<i>Osservatorio Regionale Aria</i> / Regional Air Observatory
ORC	Organic Rankine Cycle
NDRC	National Development and Reform Commission of China
PCDDs/PCDFs	polychlorinated dibenzodioxins/polychlorinated dibenzofurans
PEFC™	Programme for the Endorsement of Forest Certification
PhD	Doctor of Philosophy
PIF	<i>Progetto Integrato Fusina</i> / Fusina Integrated Project
PM2.5	Particulate Matter 2.5 micrometers or less in diameter ('fine particles')
PMO	Project Management Office
POInT	<i>POlo per l'INnovazione Tecnologica</i> / Technological Innovation cluster
R&D	Research and Development
REPROS	Interdepartmental Center on Regulation, Environmental Protection and Sustainable Development
RES	Renewable Energy Sources
R4S	Regulation for Sustainability
RDF	Refuse Derived Fuel
S.C.p.A.	<i>Società Consortile per Azioni</i> / Joint-stock Consortium Company
S.c.r.l.	<i>Società Consortile a Responsabilità Limitata</i> - Limited-liability Consortium Company
S.p.A.	<i>Società per Azioni</i> - Joint-stock Company
S.r.l.	<i>Società a Responsabilità Limitata</i> / Limited Liability Company
SAM	Sustainable Asset Management
SEPB	Shanghai Municipal Environmental Protection Bureau
SICP	Sino-Italian Cooperation Program

ISPRA	意大利环境保护与研究院
kW	千瓦
LCA	生命周期评价
l/s	升秒
MOST	中国科学技术部
m²	平方米
m³/day	立方米天
MEP	中国环境保护部
MDF	中纤板
MOST	中国科学技术部
MW	兆瓦
MWp	兆瓦
OHSAS	职业健康安全管理体系族
ORAR	大区级空气质量观测局
ORC	有机郎肯循环
NDRC	中国国家发展和改革委员会
PCDDs/PCDFs	多氯代二苯并二恶英/多氯代二苯并呋喃
PEFC™	森林认证体系
PhD	博士
PIF	Fusina综合项目
PM2.5	直径2.5微米以下的颗粒物
PMO	项目管理办公室
POInT	技术创新中心
R&D	研究开发
REPROS	法规、环保与可持续发展的联合研究中心
RES	可再生能源
R4S	可持续发展管理
RDF	废物衍生燃料
S.C.p.A.	联营股份公司
S.c.r.l.	联营有限责任公司
S.p.A.	股份公司
S.r.l.	有限责任公司
SAM	可持续资产管理

SIMAGE	<i>Sistema Integrato di Monitoraggio Ambientale e Gestione delle Emergenze /</i> Integrated System for Environmental Monitoring and the management of industrial risk and accidents
SME	Small & Medium Enterprises
T	Ton
TEN	Thematic Environmental Networks Center
TSTC	Tianjin Science and Technology Committee
UN	United Nations
UNI	<i>Ente Nazionale Italiano di Unificazione -</i> Italian National Standards Agency
VEGA	VEnice GAteway for Science and Technology
VERITAS	<i>Veneziana Energia Risorse Idriche Territorio Ambiente Servizi /</i> Venice Energy, Water Resources, Territorial & Environmental Services
VIU	Venice International University
VOC	Volatile Organic Compounds
WBCSD	World Business Council for Sustainable Development
ZIPR	<i>Zona Industriale Ponte Rosso /</i> Ponte Rosso Industrial Estate
ZIU	<i>Zona Industriale Udinese /</i> Udine Industrial Estate

SEPB	上海市环境保护局
SICP	中意环保合作项目
SIMAGE	环境监测、工业风险与事故预防体制
SME	中小企业
T	吨
TEN	环境主题网络中心
TSTC	天津市科学技术委员会
UN	联合国
UNI	意大利国家规范化当局
VEGA	威尼斯科技园
VERITAS	威尼斯能源、水利、土地、环境和服务
VIU	威尼斯国际大学
VOC	挥发性有机化合物
WBCSD	世界可持续发展工商理事会
ZIPR	红桥工业开发区
ZIU	乌迪内工业区

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