

**2013**  
Sustainable  
Development  
and Environmental  
Management  
Advanced Training  
Program  
Report

可持续发展与  
环境管理高级  
培训项目  
年报告



**Cooperation Program  
for Environmental Protection**

**Sustainable Development  
and Environmental Management  
Advanced Training Program**

Report 2013

中意环保合作项目

可持续发展与环境管理  
高级培训项目

2013年报告

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**8 Chinese partners, 21 training sessions, 921 participants** and more than **170 lecturers & speakers**: these are the figures of the 10<sup>th</sup> edition (2013) of the Sino-Italian Sustainable Development and Environmental Management Advanced Training Program.

In 2013 a **new partner**, the Chinese Ministry of Industry and Information Technology (MIIT), joined the Sino-Italian Advanced Training Program with two courses - one in China and the other in Italy - focusing on "Industrial Energy Efficiency". Established in March 2008, MIIT is the State Agency of the People's Republic of China, responsible not only for the development of the national industrial strategy, the implementation of industrial policies, the promotion of innovation and energy saving in the industrial sector, but also for the regulation and development of the production of information and electronic goods, the software industry and the promotion of the national knowledge economy. This year the structure of the Sino-Italian Advanced Training Program was slightly modified in terms of length, and with regard to the places selected for the site visits and the lectures. Each course was arranged with the overall goal to promote cooperation between Italian and Chinese experts in the various fields, but also to further stimulate a closer cooperation among the Chinese institution partners in the program: common needs and China's environmental emergencies being potential topics covered to find joint solutions. Following this approach and methodology, for the second year, Beijing and Shanghai EPBs attended joint training sessions in Italy, resulting in improved and fruitful cooperation and finding common solutions to similar local problems.

The **Rome-Venice-Turin route**, comprising a 7-day course at VIU, remains the center of this capacity-building experience, with its *ad hoc* choice of site visits and involved experts. In 2013, **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 offering the best practices available in Italy for sustainability to the Chinese participants, in order to further enhance 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 Section 2.

**Environmental Monitoring and Control**, with a focus on water and air, was quite a popular theme in 2013 with four courses dedicated to this subject.

The other seven training sessions addressed the topic of **Environmental Management and Sustainable Development** through a broader perspective.

**Low Carbon Economy and Innovation** was also highly requested by the Chinese partners with three courses focusing on it. However, **Energy and Climate Change** was surely the key topic of 2013. The relationship between climate change and greenhouse gases (GHG) is well known and a global effort to limit their emissions into the atmosphere is ongoing. Effective policies and tools to assess them represent one of the first steps to help address the problem. Additionally, to contribute to the mitigation of climate change and to combat increasing energy demands, it is necessary to promote efficient energy use and alternative energy sources, in order to ensure that this demand is met and to contribute to sustainable development. The four topics highlighted in bold represent the **4 categories** in which we have organized the 21 training sessions: although the issues addressed in each individual training course are more specific and inclusive, we have adopted these labels to create **common topic areas for reflection**.

Section 6 gathers the lists of lectures and site visits scheduled in the 10<sup>th</sup> edition of the Sino-Italian Advanced Training Program. Invited speakers were equally selected from the academia, research centers, public institutions and the private sector.

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

2013年中意合作项目举办了第十届可持续发展与环境管理高级培训课程。中方政府机构为8个、培训班为21次、参加培训的中国政府官员和专家人数为921人、讲师为170多人。

2013年中华人民共和国工业和信息化部新参加了培训项目，对其官员专门举办了两次专题为《工业能效》培训班，分别在中国成都和意大利举行。于2008年3月份设立的工信部负责提出新型工业化发展战略和政策、拟订并组织实施工业、通信业、信息化的发展规划、推进工业的创新及节能、拟订电子产业、信息产业和软件产业的发展规划并推进全国的知识经济。

2013年稍微改变了培训班的安排，变化涉及到了培训班为期、实地参观地点及教室讲座的内容几个方面。在安排每次培训班我们首先考虑到合作项目的最终目标，即促进意方中方环保事业之间的合作。同时，还旨在促进培训参加者所属单位之间的合作：中国各地的环境问题和紧急情况共同之处不少，最好共同研究可行性的解决方案。鉴于此概念，今年北京环保局和上海环保局又作为单一培训团参加了意大利培训班，成功地配合并分析类似情况的最佳处理方针。

培训课程包括在**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7天的培训班作为每次能力建设经验的核心。2013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企业和机构均在。

焦点为空气质量和水质的**环境监测和治理**，是2013年培训项目4次培训班的主要话题。2次培训班的话题为广泛角度之下的**环境管理与可持续发展**。**低碳经济与可持续发展**也是中方所要求的内容，作为3次培训班的专题。但是，2013年培训项目最为关键话题为**能源与气候变化**。气候变化与温室气体的关系已广泛意识到了，而全球各国正在致力于限制温室气体排放量。有效政策以及评价工具作为应对该问题的初步措施。以便保证能源需求的满足并实现可持续发展，唯一的道路就是鼓励节能以及代替能源的利用，这样我们才能减缓气候变化并应对能源需求的不断增加。上述用黑体字的4个话题为我们组织21次培训班的4个范畴，即要进行**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6段列出第十届**理高级培训课程**的全部讲座及参观地点。

讲师来自意方学术界、研究中心、国家机关以及私有企业。

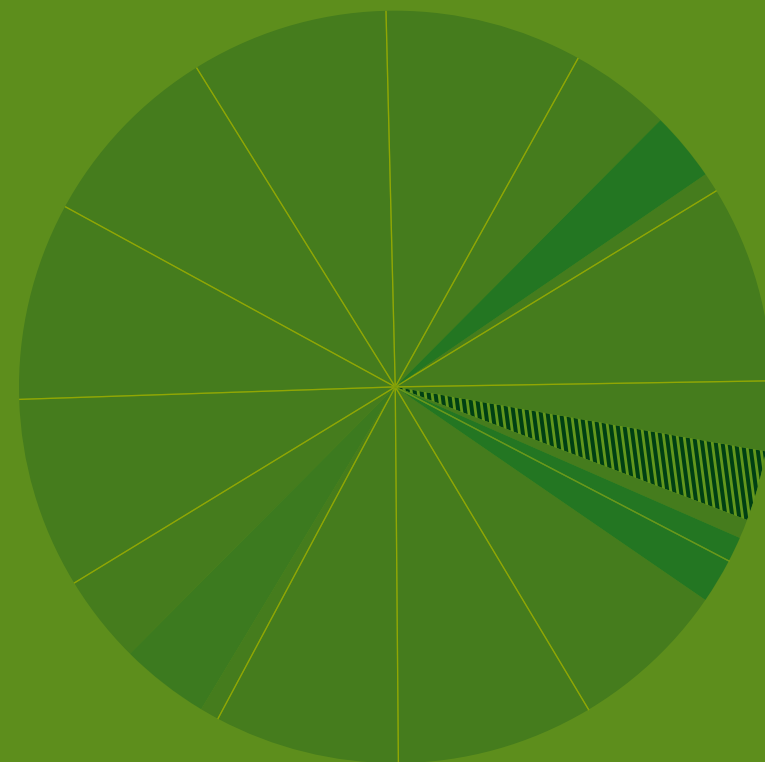
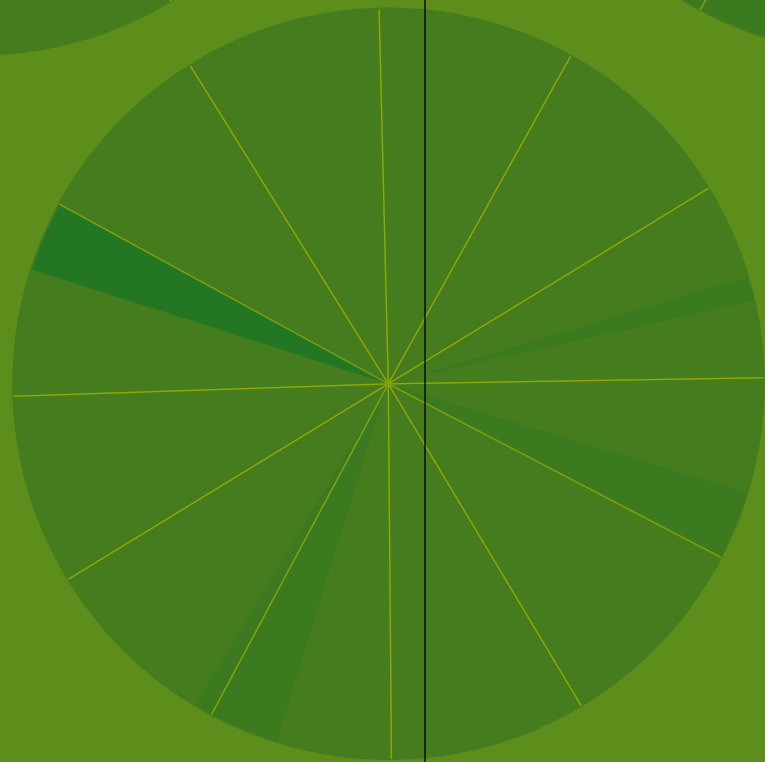
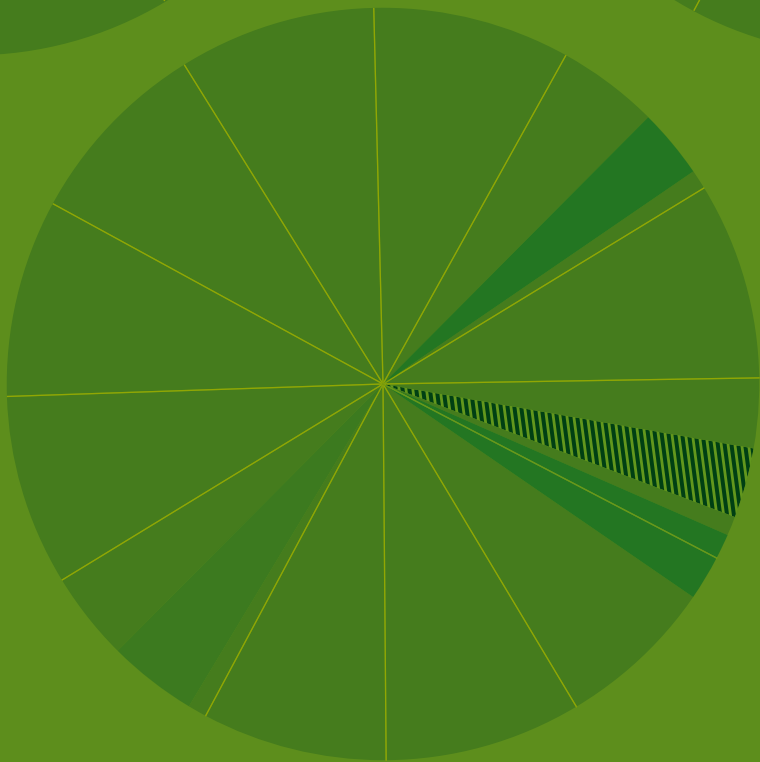
由于不少专家和讲师来自都灵大学的农业创新中心、意大利环境部、意大利电力公司基金会及锡耶纳大学的环境法团队对培训项目的支持很重要，作为不少教室讲座所在地并提供不少专家讲师，因此报告第2段里还提供该单位的简介。



Training Contents



培训内容



## Environmental Management and Sustainable Development

The environmental, social and economic pillars are the frameworks of sustainable development. In order to preserve the environment and guarantee the needs of future generations, environmental management needs to combine several aspects such as waste, water, air pollution, energy & energy efficiency, urban development, climate change, rural ecology and agriculture, both at a global and local scale.

### Seven courses:

Delegation	Module	Period and Location
CASS	Waste Management	March 3 <sup>rd</sup> – 14 <sup>th</sup> 2013, Italy
BMEPB and SEPB	Eco-City	June 2 <sup>nd</sup> – 13 <sup>th</sup> 2013, Italy
MEP	Multilateral Environmental Agreements (MEAs) and Biodiversity Protection	October 20 <sup>th</sup> – 28 <sup>th</sup> 2013, Italy
CASS – Beijing	Eco-Management: Strategies and Policies	October 21 <sup>st</sup> – 25 <sup>th</sup> 2013, Beijing
BMEPB - Beijing	Eco-city	October 22 <sup>nd</sup> 2013, Beijing
SEPB - Shanghai	Eco-city	October 25 <sup>th</sup> 2013, Shanghai
CASS	Eco-friendly City	November 10 <sup>th</sup> – 21 <sup>st</sup> 2013, Italy

### Main objectives

- To present the adopted strategies, policies and legislation in force on sustainable development and environmental management, both at the EU and local level.
- To explore sustainable urban and industrial development and related issues through specific case studies.
- To focus on topics of special interest: energy efficiency, air pollution, water and waste management, industrial ecology, land reclamation, sustainable urban development and sustainable agriculture.

### Topics

#### Policies and Legal Aspects of Sustainable Development

- *Italian Environmental Policy and the Role of the Italian Ministry of the Environment, Land and Sea*, P. Manzione and A. Negrin, Department for Environmental Research and Development, IMELS
- *The Italian Ministry for the Environment, Land and Sea and the Italian Environmental Policy*, A. Negrin, Italian Ministry for the Environment, Land and Sea, IMELS
- *The Italian Ministry for the Environment, Land and Sea*, E. Vignola, Department for Environmental Research and Development, IMELS
- *Italian Policy for Waste Management: European Directive Implementation*, V. Librici, Kyklos Acea S.p.A.
- *MEAs Enforcement Instruments in Italy*, A. Burali, IMELS
- *Overview on EU Organization and MEAs*, F. Volpe, Environmental Legal Team, University of Siena
- *MEAs and EU Policies on Natural Resources Conservation: EU Bio-diversity & MEAs Tools*, A. De Tejada, UNEP, Embassy of Spain

## 环境管理与可持续发展

可持续发展的框架基于环保、社会与经济发展三个支柱。为了保护环境并保障我们子孙后代的需求将得到满足，全球层面以及当地政府层面的环保管理应该包括废物管理、水利资源管理、空气污染防治、能源与节能、城市发展、气候变化、农村生态环境、农业等领域，并进行综合性的监管方式。

### 七门课程:

代表团	课程	时间和地点
中国社会科学院	废弃物管理	2013年3月3日至14日,意大利
北京市环保局 和 上海市环保局	生态城市	2013年6月2日至13日,意大利
中国环境保护部	多边环境协议以与生物多样性保护	2013年10月20日至28日,意大利
中国社会科学院 - 北京	生态管理策略	2013年10月21日至25日,北京
北京市环保局 - 北京	生态城市	2013年10月22,北京
上海市环保局 - 上海	生态城市	2013年10月25日,上海
中国社会科学院	环保型城市	2013年11月10日至21日,意大利

### 主要目标

- 介绍欧盟层级和地方政府层级在可持续发展和环保管理方面所实施的政策以及相关现行法律。
- 通过具体的案例研究探索城市和工业可持续发展的相关议题。
- 下列焦点为特别关注的：气候变化、节能、污水和垃圾管理、生态工业、土地恢复、城市可持续发展、可持续农业。

### 主题

#### 可持续发展的经济与法律方面

- 意大利环境、领土与海洋部的职责及其环保政策， P. Manzione 和 A. Negrin， 意大利环境、领土与海洋部
- 意大利环境、领土与海洋部的职责及其环保政策， A. Negrin， 意大利环境、领土与海洋部
- 意大利环境、领土与海洋部的环保政策， E. Vignola， 意大利环境、领土与海洋部
- 意大利废物管理政策以执行实施欧盟相关指令， V. Librici， Kyklos Acea 股份公司
- 多边环境协议的执行方式， A. Burali， 意大利环境、领土与海洋部
- 欧盟组织机构及其环保政策简介， F. Volpe， 锡耶纳大学环境法团队

- *MEAs and EU Policies on Natural Resources Conservation: Environmental Assessment & EU Policies Biodiversity and Compensation Practical Case: La Breña II Reservoir*, A. De Tejada, UNEP, Embassy of Spain
- *Circular Economy and Green Growth - The Fourth Technological Revolution was Called by Mankind*, J. Qi, Institute of Quantitative and Technical Economics, CASS
- *Social Conflicts Related to Environment and its Governance*, H. Tang, School of Politics and Administration, South China Normal University
- *Economics of Ageing: Welfare-Improving Challenges to Sustainable Development*, A. Brugiavini, Venice International University, Ca' Foscari University of Venice
- *New Frontiers for Sustainable Development: Public Policy and Social Responsibility*, I. Musu, Venice International University, Ca' Foscari University of Venice
- *The Vallerani System from Africa to China: Remembering his Inventor and his Experience*, N. Capodagli, Consultant
- *Climate Change: the Historic Responsibility and Obligation of Humankind*, W. Dong, State Key Laboratory of Earth Surface Processes and Resource Ecology, Beijing Normal University
- *Eco-Cities in Europe: Principles and Foundation*, A. Fidanza, Department for Environmental Research and Development, IMELS
- *Sustainable Urban Planning*, A. Fidanza, Department for Environmental Research and Development, IMELS
- *EU Environmental and Energy Policies*, M. Montini, University of Siena, Environmental Legal Team
- *Emission Trading Schemes*, S. Borghesi, University of Siena
- *Energy Efficiency and Load Management: Some Basic Concepts and the Role of Tariff Regulation*, A. Lorenzoni, University of Padua
- *Sustainable Energy Systems: Promoting Renewable Energy Resources (RES) and Energy Efficiency in Liberalized Markets*, A. Lorenzoni, University of Padua
- *Ecosystem Services: Evaluation and Payment*, L. Ilieva, Ca' Foscari University of Venice
- *Multilateral Environmental Agreements and Climate Change*, C. Ferrara, ENEL Regulation, Environment and Innovation
- *Best Practices for the Management of Natural Protected Areas. The Experience of Dolomiti Bellunesi National Park*, E. Vettorazzo, Dolomiti Bellunesi National Park
- *Development and Enforcement of Key Chemicals and Wastes-related MEAs: Stockholm, Basel Convention and Rotterdam Convention*, C. Boljkovac, Senior UN Consultant
- *Legislation Development and Enforcement of Key Chemicals and Wastes-related MEAs: Stockholm, Basel Convention and Rotterdam Convention*, C. Boljkovac, Senior UN Consultant
- *A.R.P. - The Regional Park Agency of the Lazio Region*, G. Tallone, Agenzia Regionale Parchi

- 就自然保护的多边环境协议和欧盟政策：欧盟生物多样性与多边环境协议工具，A. De Tejada，联合国环境规划署，驻意大利西班牙大使馆
- 就自然保护的多边环境协议和欧盟政策：环境影响评价与欧盟政策。生物多样性与环境补偿的案例研究：西班牙 La Breña II 水坝，A. De Tejada，联合国环境规划署，驻意大利西班牙大使馆
- 循环经济与绿色增长——人类呼唤第四次技术革命，齐建 中国社会科学院数量经济和技术经济研究所
- 与环境有关的社会冲突及其管理，唐昊博士，华南师范大学政治和行政学院副教授
- 老龄化时代的经济学：提高福利对可持续发展的影响，A. Brugiavini，威尼斯国际大学，威尼斯卡·弗斯卡里大学
- 可持续发展的新领域：公共政策与社会责任，I. Musu，威尼斯国际大学“环境主题网络”，威尼斯卡·弗斯卡里大学
- 从非洲到中国的瓦勒拉尼系统：它的发明者及经验，N. Capodagli，咨询师
- 气候变化：人类社会的历史责任和义务，董文杰，北京师范大学地表过程与资源生态国家重点实验室
- 欧洲的神态城市的基本原则，A. Fidanza，意大利环境、领土与海洋部可持续发展、成气候变化与能源司
- 可持续城市规划，A. Fidanza，意大利环境、领土与海洋部环境技术研发处
- 欧盟环境能源政策，M. Montini，锡耶纳大学环境法团队
- 碳排放交易体系，S. Borghesi，锡耶纳大学
- 能源效率与负荷管理：一些基本概念和价格管制的作用，A. Lorenzoni，帕多瓦大学
- 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，A. Lorenzoni，帕多瓦大学
- 生态系统服务：评价与报偿，L. Ilieva，威尼斯卡·弗斯卡里大学
- 多边环境协议与气候变化，C. Ferrara，意大利电力公司，管理，环境与创新部
- 自然保护区管理的最佳实践。贝卢诺多洛米蒂山脉国家公园自然保护区的经验，E. Vettorazzo，贝卢诺多洛米蒂国家公园管理局
- 发展及实施关键化学品与废物多方环境协议：斯德哥尔摩公约、巴塞尔公约和鹿特丹公约，C. Boljkovac，联合国高级咨询师
- 关键化学品与废物多方环境协议的执法情况：斯德哥尔摩公约、巴塞尔公约和鹿特丹公约，C. Boljkovac，联合国高级咨询师
- A.R.P.-拉齐奥大区的自然保护公园管理局，G. Tallone，大区级公园管理局

### Climate Change and Rural Ecology

- *Climate Change: Effects on Agriculture, Food Security and Plant Diseases*, M. L. Gullino, AGROINNOVA - University of Turin
- *Rural Ecology: the Chongming Case Study*, M. Pugliese, AGROINNOVA - University of Turin
- *Control of Invasive Species: Policies and Practices*, M. Pugliese, AGROINNOVA - University of Turin
- *GMOs and Food Security*, D. Spadaro, AGROINNOVA - University of Turin

### Waste and Wastewater Management

- *From Waste to Resource. From Research to Business*, M. L. Gullino and M. Pugliese, AgriNewTech
- *Integrated Waste Management*, L. Morselli, University of Bologna
- *Sustainable Waste Management*, A. Confalonieri, Monza Park Agriculture School
- *Waste Management and Health*, C. Maignan, Municipality of Venice
- *Hospital Waste*, I. Pavan, University of Turin
- *Hazardous Waste Management*, A. Borsarelli, Environmental Engineering Consultancy Firm
- *Water Resource Management and Monitoring*, F. Mion, ARPAV
- *Waste as a Growth Opportunity - The Experience of Sogliano al Rubicone*, R. Costantini, Sogliano Ambiente S.p.A.
- *Biowaste Management: Waste Recycling. Compost Production: Kyklos Case Study*, A. Filippi, Kyklos Acea S.p.A.
- *The Ravenna Incineration Plant F3*, M. Facchini, HERAmbiente S.p.A.
- *Contarina Group Integrated Waste Management*, M. Galli, Contarina S.p.A.
- *P.I.F. Progetto Integrato Fusina*, M.C. Zaccone, Veritas S.p.A.

### Smart Cities & Energy Efficiency

- *Smart and Sustainable Cities*, A. Federico, Sustainable Development Foundation
- *Assessment of Urban Sustainability*, A. Federico, Sustainable Development Foundation
- *Smart City*, E. Filippi, Osservatorio Nazionale Smart City
- *Environment and Health at City Level*, C. Maignan, Municipality of Venice
- *Environmental Safety Risk Prevention*, Z. Zhang, China's Environmental Publishing Co., Ltd.
- *Environment and Health*, G. Yang, Peking Union Medical College
- *Main Principles of Eco-building*, F. Zaggia, Favero e Milan Ingegneria S.p.A.
- *Low Carbon Communities and Eco-Building*, F. Zaggia, Favero e Milan Ingegneria S.p.A.
- *Sustainable Mobility*, M. Morazzo and A. Costa, ENEL Foundation
- *Smart Cities for Sustainable Development*, A. Lorenzoni, University of Padua
- *Smart Grids for Sustainable Cities*, M. Morazzo, ENEL Foundation

### 气候变化与农村生态环境

- 气候变化对农业、食品安全与植物病害的影响, M.L.Gullino, 都灵大学农业创新中心
- 农村生态环境: 崇明岛东滩的案例, M.Pugliese, 都灵大学农业创新中心
- 入侵物种控制: 政策与实践, M.Pugliese, 都灵大学农业创新中心
- 转基因与食品安全, D.Spadaro, 都灵大学农业创新中心

### 废物废水管理

- 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
- 垃圾综合管理, L. Morselli, 波洛尼亚大学
- 可持续性的废物管理, A. Confalonieri, 蒙扎公园农业学校
- 垃圾管理与健康, C. Maignan, 威尼斯市政府官员
- 医疗废物, I. Pavan, 都灵大学
- 有害垃圾管理, A. Borsarelli, 环境工程咨询公司
- 水资源管理与监测, F. Mion, 威尼托大区环保局
- 将废物转化发展机会 – Sogliano al Rubicone 经验, R. Costantini, Sogliano Ambiente 股份公司
- 生物垃圾管理: 垃圾回收: 堆肥生产 Kyklos Acea 案例研究, A. Filippi, Kyklos Acea 股份公司
- 拉文纳F3垃圾焚烧厂, M. Facchini, Herambiente 股份公司
- Contarina 集团公司的综合废物管理, M. Galli, Contarina 股份公司
- Fusina 综合项目 - 威尼斯污水综合处理厂, M.C. Zaccone, Veritas 股份公司

### 智慧城市与能效

- 智慧城市与可持续性城市, A. Federico, 可持续发展基金会
- 城市可持续性的评价, A. Federico, 可持续工作基金会
- 智慧城市, E. Filippi, 智慧城市全国专家委员会
- 城镇级的环境与健康, C. Maignan, 威尼斯市政府官员
- 环境安全风险防范, 张志敏教授, 中国环境出版有限责
- 环境与健康, 杨功焕教授, 协和医科大学
- 生态建筑的主要概念, F. Zaggia, Favero & Milan 工程公司
- 地铁社区与生态建筑物, F. Zaggia, Favero & Milan 工程公司
- 可持续交通, M. Morazzo 和 A. Costa, 意大利电力集团公司基金会
- 实现可持续发展的智慧城市, A. Lorenzoni, 帕多瓦大学
- 可持续城市的智能电网, M. Morazzo, 意大利电力集团公司基金会



- *SMART Grids: Case Studies*, M. Morazzo, ENEL Foundation
- *Smart Cities and Energy: Case Studies in Towns and Rural Areas*, A. Lorenzoni, University of Padua
- *Urban Ecology and Eco-Cities Development - Enel Contribution in Smart Cities Development*, F. Gasparin, ENEL S.p.A.
- *The R.E.G.E.S. Project - Results – 2010*, S. Bastianoni, University of Siena
- *Siena Carbon Free 2015*, P. Casprini, Province of Siena
- *Certosa Island – Venice*, E. Colonnello, M. Giovannini and A. Barbanti, Vdv S.r.l.
- *ICT for Sustainable Mobility: the BikeDistrict Project*, M. Quaggiotto, BikeDistrict S.n.c.
- *Turin Smart City Strategy for Sustainable Freight Logistics*, M. Curto, Polytechnic University of Turin

#### Air Pollution and Emissions Control

- *Air Pollution Control and Health Protection in the EU*, F. Petracchini, CNR, Institute for Atmospheric Pollution
- *Air Pollution Control and Health Protection in the EU Cities and Veneto Region*, L. Zagolin, Air Observatory, ARPAV
- *Air Pollution and Traffic Control - Sustainable Transport and Technologies: ITS*, P. Squillante, Thetis, S.p.A.

#### Site Visits

- *Sustainable Agriculture*, AGROINNOVA - University of Turin
- *Biotechnologies Applied to Agriculture and the Environment*, AgriNewTech
- *Italian National Parks*, Dolomiti Bellunesi National Park
- *Eco-Cities in Practice*, Siena Province
- *Green Areas in City*, VdV S.r.l. - Certosa Island Park
- *Eco-building in Practice*, TiFS S.r.l.
- *Hazardous Waste Management*, HERAmbiente S.p.A.
- *Energy and Heat Recovery from Waste*, Acegas Aps S.p.A.
- *Waste Recycling*, Centro Riciclo Vedelago S.r.l.
- *Integrated Waste Treatment and Energy from Waste*, Ecoprogetto Venezia S.r.l.
- *Sludge and Leachate Management*, Depuracque Servizi S.r.l.
- *Urban and Industrial Wastewater Treatment*, Veritas S.p.A.
- *Water Pollution Prevention in Practice*, SMAT S.p.A.
- *Integrated Waste Water Management*, Treviso Municipality

- 智能电网：案例研究，M. Morazzo，意大利电力集团公司基金会
- 智慧城市与能源：城镇与农村地区的案例研究，A. Lorenzoni，帕多瓦大学
- 城市生态学与生态城市的发展——意大利电力集团公司对生态城市发展的贡献，F. Gasparin，意大利电力集团股份有限公司
- 锡耶纳 R.E.G.E.S.（温室气体减排）项目2010年成绩，S. Bastianoni，锡耶纳大学
- 2015年锡耶纳不含碳城市的目标，P. Casprini，锡耶纳省政府官员
- 威尼斯的Certosa 岛屿，E. Colonnello、M. Giovannini 和 A. Barbanti, VdV（威尼斯风）有限公司
- 可持续交通所应用的信息通信技术：自行车区项目，M. Quaggiotto，BikeDistrict 集体公司
- 都灵市智慧城市的可持续性货运物流，M. Curto，都灵理工大学和帕多瓦大学

#### 空气污染与排放控制

- 欧盟的空气污染防治与健康保护，F. Petracchini，意大利国家研究委员会-空气污染研究所
- 欧盟城市和威尼托大区的空气污染防治与健康保护，L. Zagolin，威尼托大区环保局空气污染监管处
- 空气污染与交通控制——可持续性交通与智能交通系统技术，P. Squillante，Thetis 股份公司

#### 现场访问

- 可持续农业，实验室和温室，都灵大学农业创新中心
- 在农业和环保领域中所应用的生物技术，AgriNewTech（农业新技术）
- 意大利国家公园，贝卢诺多洛米蒂国家公园
- 生态城市的实践，锡耶纳省的零排放规划
- 城市绿地，VdV（威尼斯风）有限公司 - Certosa 岛屿公园
- 生态建筑的实践，Tifs Ingegneria（Tifs工程）有限责任公司
- 有毒废物管理，HERAmbiente 股份公司
- 废物能量回收与废热回收，Acegas Aps 股份公司
- 废物回收利用，Vedelago回收中心有限责任公司
- 垃圾综合处理，废物能量回收 - 威尼斯环保项目有限公司
- 污泥及渗漏处理，Depuracque 有限责任公司
- 城市污水和工业污水处理厂，Veritas 股份公司
- 防治水污染的实践，都灵市政水利股份公司
- 污水综合管理，特雷维佐市政

## Environmental Monitoring and Control

Environmental monitoring is of great importance in supporting the adoption of sound environmental policies. Through continuous data collection and analysis we can better understand the changes in the environment and identify the pollution sources not only at the national and local level, but also when dealing with pollution events occurring on a larger scale. Environmental monitoring performed by the local protection agencies in the industrial/productive sector is also fundamental in controlling the enforcement of environmental laws and ensuring that emission limits are respected.

### Four courses:

Delegation	Module	Period and Location
CASS	Water Pollution Prevention and Control	March 17 <sup>th</sup> – 28 <sup>th</sup> 2013, Italy
MEP	Water Pollution Prevention and Control	September 8 <sup>th</sup> – 19 <sup>th</sup> 2013, Italy
MEP	Water Pollution Prevention and Control	November 3 <sup>rd</sup> – 11 <sup>th</sup> 2013, Italy
BMEPB and SEPB	Pollution Control Strategy and Instruments	December 1 <sup>st</sup> – 12 <sup>th</sup> 2013, Italy

### Main objectives

- To present the European and national legislation on environmental monitoring, as well as the role of the institutions in charge of its implementation and environmental information management.
- To provide participants with international, national and local experience on environmental monitoring, and to discuss examples of environmental taxes and administrative penalties, as well as the setup and management of environmental monitoring networks.
- To present the competencies and fields of action of the main Italian institutions in charge of supervising and inspecting the law enforcement.
- To provide examples of pollution source monitoring systems such as continuous emission monitoring systems and early warning systems.

### Topics

#### Policy and Institutions

- *The Italian Ministry for the Environment, Land and Sea and the Italian Environmental Policy*, A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *The Italian Ministry for the Environment, Land and Sea*, A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Italian Environmental Policy and the Role of the Italian Ministry for the Environment, Land and Sea*, A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
- *2013: United Nations International Year of Water Cooperation*, V. Leonardi, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Overview on EU Organisation and EU Environmental Policy*, M. Montini and A. Barreca, University of Siena, Environmental Legal Team
- *Air Pollution Control: Implementation of the European Policy at Local Level*, F. Petracchini, CNR, Institute for Atmospheric Pollution

## 环境监测与监管

环境监测发挥极为重要的作用，尤其是有利于采取健全的环保政策。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。

### 四门课程:

代表团	课程	时间和地点
中国社会科学院	水污染防治	2013年3月17日至28日,意大利
中国环境保护部	水污染防治	2013年9月8日至19日,意大利
中国环境保护部	水污染防治	2013年11月3日至11日,意大利
北京市环保局 和 上海市环保局	污染防治的战略与工具	2013年12月1日至12日,意大利

### 主要目标

- 介绍环境监测的欧盟和意大利相关法律以及管理局在环境信息方面的职能;
- 对参加者提供环境监测的国际、国家和本地政府层级经验的介绍,
- 讨论环境税和行政处罚的实例以及环境监测网络的设立和管理;
- 介绍意大利负责环境监察及执法工作的国家部门及其职能;
- 提供污染源监测系统, 如排放连续监测系统和预警系统的实例;

### 主题

#### 政策与管理部

- 意大利环境、领土与海洋部的环保政策, 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
- 意大利环境、领土与海洋部简介, 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, 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
- 2013年:联合国国际水源合作年, V. Leonardi, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 欧盟组织机构及其环保政策简介, M. Montini 和 A. Barreca, 锡耶纳大学经济学院环境法团队
- 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
- 欧盟水资源保护框架法, A. Barreca, 锡耶纳大学环境法团队

- *The European Legislative Framework for Water Protection*, A. Barreca, University of Siena, Environmental Legal Team
- *The European Legislative Framework for Water Protection and Case Studies*, A. Barreca, University of Siena, Environmental Legal Team
- *Case Studies on the European Legislative Framework for Water Protection*, F. Volpe, University of Siena, Environmental Legal Team
- *Water Quality Control in Europe and Italy*, M. Bocci, Ca' Foscari University of Venice
- *Italian Policies and Competencies on Integrated Water Management*, V. Leonardi, Department for Sustainable Development, Climate Change and Energy, IMELS
- *Italian Competences and Policy on Drinking Water*, V. Leonardi, 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
- *Water, Health and Development: Examples and Challenges*, S. Borghesi, University of Siena
- *The Environmental Control and Water Monitoring Activities in Veneto Region*, M. Ostoich, ARPAV
- *Water Monitoring in Veneto Region. The Role of ARPAV*, F. Mion, ARPAV
- *The Po River Basin Authority and Water Resources Management*, B. Bertolo, Po River Water Basin Authority
- *Water Basin Management: Zoning through Protected and Conditioned Areas*, B. Bertolo, Po River Basin Authority
- *Public Participation and Information Disclosure in River Basin Management*, B. Bertolo, Po River Basin Authority
- *The Air Pollution Monitoring System of the Veneto Region*, L. Zagolin, Air Observatory, ARPAV

#### Environmental Monitoring and Control

- *European Scale Assessment of Pollutant Loads to Rivers, Lakes and Coastal Waters*, F. Bouraoui, JRC
- *Intercalibration of Surface Waters Good Ecological Status Definitions across Europe*, W. van de Bund, JRC
- *Monitoring of Chemical Pollutants in European Surface Waters, Groundwaters, Wastewaters, Sewage Sludge*, R. Loos, JRC
- *The Institute of Ecosystem Study: Role and Structure*, P. Guilizzoni
- *Correlates of Occurrence of Alien Species in Freshwater Habitats*, D. Fontaneto
- *Water Monitoring Fixed Stations*, F. Riminucci, ProAmbiente S.c.r.l.
- *Mobile Stations*, A. Del Bianco, ProAmbiente S.c.r.l.
- *In Situ Monitoring Techniques Direct Measurements for In-field Air Quality Monitoring*, E. Cozzani, ProAmbiente S.c.r.l.
- *Emission Monitoring Techniques and CEMs*, L. Zagolin, Air Observatory, ARPAV

- 欧盟水资源保护框架法的案例研究, A. Barreca, 锡耶纳大学环境法团队
- 关于欧盟水资源保护框架法的案例研究, F. Volpe, 锡耶纳大学环境法团队
- 欧盟和意大利的水资源防治政策, M. Bocci, 威尼斯卡·弗斯卡里大学
- 意大利水资源综合管理政策的主管部门, V. Leonardi, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 意大利饮用水政策的主管部门, V. Leonardi, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 意大利空气质量的政策及主管部门, V. Leonardi, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
- 污染防治的可交易许可证, S. Borghesi, 锡耶纳大学
- 水、健康与发展的相互关系 - 实例与挑战, S. Borghesi, 锡耶纳大学
- 威尼托大区的环保防治与水资源监测, M. Ostoich, 威尼托大区环保局
- 威尼托大区的水源监测。威尼托大区环保局的职责, F. Mion, 威尼托大区环保局
- 波河流域管理局与水资源管理, B. Bertolo, 波河流域管理局
- 流域管理: 保护区和人类活动区的分别, B. Bertolo, 波河流域管理局
- 流域管理中的公众参与和信息公开, B. Bertolo, 波河流域管理局
- 威尼托大区的空气污染监测系统, L. Zagolin, 威尼托大区环保局空气污染监管处

#### 环境监测与监控

- 河流、琥珀及沿岸水污染负荷的欧盟级评价, F. Bouraoui, 欧盟联合研究中心
- 欧盟成员国就地表水良好生态状态的相互定准, W. van de Bund, 欧盟联合研究中心
- 欧盟地表水、地下水、污水及污泥的化学污染物监测, R. Loos, 欧盟联合研究中心
- 生态系统研究所的组织机构与职责, P. Guilizzoni, 生态系统研究所
- 淡水生境里外源种出现率, D. Fontaneto, 生态系统研究所
- 水源监测固定站, F. Riminucci, ProAmbiente 合营有限公司
- 移动监测站, A. Del Bianco, ProAmbiente 合营有限公司
- 在场监测技术。场空气质量在场监测的直接测量, E. Cozzani, ProAmbiente 合营有限公司
- 排放监测技术与排放连续监测系统, L. Zagolin, 威尼托大区环保局
- 气溶胶在场监测技术与战略, C. Carbone, ProAmbiente 合营有限公司

- *In-situ Aerosol Monitoring Techniques and Strategies*, C. Carbone, ProAmbiente S.c.r.l.
- *Remote Sensing in the Atmosphere*, I. Kostadinov, ProAmbiente S.c.r.l.
- *Satellite Remote Sensing as a Powerful Tool for Air Quality Monitoring*, A. Cacciari, ProAmbiente S.c.r.l.
- *Gold Mining and Arsenic in Streams*, N. Guerrini, ISE
- *Antibiotics in the Environment, Impact on Bacterial Communities and Human Health*, G. Corno, ISE
- *Environmental Bio-Monitoring*, V. Meineri, ecoBioqual S.r.l.
- *Study on Biological Monitoring Program in the Waterways in Shanghai Metropolitan Area*, V. Meineri, ecoBioqual S.r.l.
- *Italcementi Group - Calusco d'Adda*, G. Bottinelli & G. Marconi, Italcementi Group

#### Water and Wastewater Management & the Venice Case Study

- *Integrated Groundwater Management - Issues & Opportunities*, V. Re, Ca' Foscari University of Venice
- *Integrated Groundwater Management - From Theory to Practice*, V. Re, Ca' Foscari University of Venice
- *The Evolution of the Environmental Problem in Venice: towards a Sustainable City*, P. Campostrini, CORILA
- *Water Quality Monitoring in Venice*, M. Bocci, Ca' Foscari University of Venice
- *Water Pollution Prevention and Control in the Venice Lagoon*, S. Carrer, Thetis S.p.A.
- *Water Pollution Prevention and Control in the Lagoon of Venice: Point and Non-point Sources*, S. Carrer, Thetis S.p.A.
- *Presentation of the Industrial Monitoring and Alarm System SIMAGE in Venice: Design, Establishment and Management of the System*, G. Puliero, ARPAV
- *Wastewater and Organic Waste Management: Innovative Italian Experiences with Relation to the Increasing Environmental Concerns*, P. Pavan, Cà Foscari University of Venice
- *PIF Progetto Integrato Fusina - Wastewater Treatment Integrated Project*, M.C. Zaccone, Veritas S.p.A.

- 大气中的遥感, I. Kostadinov, ProAmbiente 合营有限公司
- 作为空气污染监测重要工具的卫星遥感, A. Cacciari, ProAmbiente 合营有限公司
- 采金与小河流中砷含量的关系, N. Guerrieri, 生态系统研究所
- 环境中的抗生素及其对菌群和人类健康的影响, G. Corno, 生态系统研究所
- 环境生物监测, V. Meineri, ecoBioqual有限公司
- 上海城区水道生物监测计划的研究, V. Meineri, ecoBioqual 有限公司
- 意大利水泥集团公司—— Calusco d'Adda 工厂的简介, G. Bottinelli 和 G. Marconi, 意大利水泥集团公司

#### 水资源、污水管理以及威尼斯泻湖案例研究

- 水资源综合管理 – 事项与机会, V. Re, 威尼斯大学
- 水资源综合管理 – 从理论到实践, V. Re, 威尼斯大学
- 威尼斯环境问题的演变: 成为可持续发展城市, P. Campostrini, 威尼斯泻湖研究活动管理委员会
- 威尼斯的水质监测, M. Bocci, 威尼斯卡·弗斯卡里大学
- 防治威尼斯泻湖水污染的防治措施, S. Carrer, Thetis 股份公司
- 防治威尼斯泻湖水污染的防治措施: 点源和非点源污染, S. Carrer, Thetis 股份公司
- 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, G. Puliero, 威尼托大区环保局
- 意大利就污水管理及有机垃圾管理的创新型经验及越来越大的居民关注, P. Pavan, 威尼斯卡·弗斯卡里大学
- Fusina 综合项目 – 威尼斯污水综合处理厂, M.C. Zaccone, Veritas 股份公司

**Site visits**

- *Environmental Monitoring Instruments*, ProAmbiente S.c.r.l.
- *Environmental Monitoring*, ISE
- *Air Quality Control* , ARPAV
- *Environmental Emergency Response in Practice*, ARPAV
- *Water Pollution Prevention in Practice*, Thetis S.p.A.
- *Sludge and Leachate Treatment*, Depuracque S.r.l.
- *Integrated Waste Water Management*, Treviso Municipality
- *Urban and Industrial Wastewater Treatment*, Veritas S.p.A.
- *Drinking Water Treatment*, SMAT S.p.A.
- *Wastewater Treatment Plant*, SMAT S.p.A.
- *Environmental Protection and Research*, ISPRA
- *Low Carbon Industry*, Italcementi Group

**现场访问**

- 环境监测工具, ProAmbiente 合营有限公司
- 环境监测, 生态系统研究所
- 空气质量监控, 威尼托大区环保局
- 环境应急的实践, 威尼托大区环保局
- 防治水污染的实践, Thetis 股份公司
- 污泥及渗漏处理, Depuracque 有限责任公司
- 污水综合管理, 特雷维佐市政
- 城市污水及工业污水处理厂, Veritas 股份公司
- 饮用水处理法, 都灵市政水利股份公司
- 污水处理厂, 都灵市政水利股份公司,
- 环境保护与研究, 意大利环境保护与研究院
- 低碳工业, 意大利水泥集团创新研究中心

## Low Carbon Economy and Innovation

Living in low-energy and low-emission buildings, travelling with electric and hybrid cars, using public transport, manufacturing products and providing services employing low carbon technologies; this is what a low carbon society means.

Further research, innovative technologies and new investments are important tools to improve and encourage the use of low carbon technologies and clean energy.

### Three courses:

Delegation	Course	General Schedule
<b>MOST</b>	High-Technology and Science Parks for Sustainable Development	May 18 <sup>th</sup> - 30 <sup>th</sup> 2013, Italy
<b>MOST</b>	Innovation of Enterprises and Green Technologies	June 29 <sup>th</sup> - July 11 <sup>th</sup> 2013, Italy
<b>TSTC</b>	Eco-City Building and Innovation Management	September 1 <sup>st</sup> - 12 <sup>th</sup> 2013, Italy

### Main objectives

- To analyze low carbon policies implemented at the 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 a local scale.
- To present examples of innovative technologies used by industries to become more environmentally friendly and low carbon.
- To present the most advanced technologies for low carbon mobility by also using innovative fuels.
- To underline the importance of science parks for technology transfer and innovation.
- To present the main characteristics of energy efficiency and renewable energy and their application at an urban scale.

### Topics

#### Low Carbon Economy and Policy

- *European Emission Trading Scheme*, M. Germini, ENEL Foundation
- *The Italian Ministry for the Environment, Land and Sea*, 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
- *Sustainable Urban Planning and Green Building*, A. Fidanza, Department for Sustainable Development, Climate Change and Energy, IMELS

#### Low Carbon Economy and Innovation Promotion

- *Innovation in the Energy Sector: Challenges and Strategies*, J. Arrojo, ENEL Regulatory, Environment and Innovation
- *Research and Innovation: Direct and Systemic Incentives*, M. Dal Co, Agency for a Digital Italy and CITTC-Italy-China Center for Technological Transfer

## 低碳经济和创新技术

低碳经济意味着人民住在低能耗、低排放建筑物里、人民使用公交工具、私人汽车为电动汽车或混合汽车，而且在生产商品和提供服务过程中采用低碳技术。

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。

### 三门课程:

代表团	课程	时间和地点
<b>中国科学技术部</b>	可持续发展的高新技术与科技园	2013年5月18日至30日,意大利
<b>中国科学技术部</b>	企业创新技术与绿色技术	2013年6月29日至7月11日,意大利
<b>天津市科学技术委员会</b>	生态城市建设及创新管理	2013年9月1日至12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。
- 介绍低碳交通的最先进技术，包括创新性燃料。
- 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

#### 低碳经济及相关政策

- 欧盟排放交易机制，M. Germini，意大利电力集团公司基金会
- 意大利环境、领土与海洋部介绍，A. Negrin，意大利环境、领土与海洋部可持续发展、成气候变化与能源司
- 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、成气候变化与能源司
- 可持续城市规划与绿色建筑，A. Fidanza，意大利环境、领土与海洋部可持续发展、成气候变化与能源司

#### 低碳经济与创新性鼓励

- 能源产业中的创新挑战与战略，J. Arrojo，意大利电力集团公司，管理，环境与创新部
- 研究与创新：直接与系统性的激励，M. Dal Co，意大利信息化署和中意技术转移中心

- *Promoting Innovation: Italian Perspectives*, M. Dal Co, Agency for a Digital Italy and CITTIC-Italy-China Center for Technological Transfer
- *Green Growth: Production, Research and Environmental Protection at Local Level*, G. Simonetto, Veneto Innovazione
- *LCA Methodology and its Applications*, M. Vale, Aghetera S.r.l.
- *Presentation of Kilometro Rosso Activities*, L. Marabini, Kilometro Rosso
- *Presentation of Luigi Danieli Science and Technology Park Activities*, F. Feruglio and E. Micelli, Friuli Innovazione
- *Presentation of the Central Environmental and Energy Management - CEEM Project*, F. Pozzar, Friuli Innovazione
- *Presentation of Geko Engineering S.r.l.*, P. Boscarior and L. Moro, Geko Engineering S.r.l.
- *Presentation of Dermap S.r.l.*, D. Gulic, Dermap S.r.l.
- *Energy Management in Science Parks*. S. Scalari, Enel Engineering & Research
- *VEGA Park: We Develop Enterprises*, G. Tassinato, VEGA
- *Support Technology Transfer: the Mission of Consorzio Roma Ricerche*, L. Fiorentino, Consorzio Roma Ricerche
- *Technology Based Start-ups Development: BIC Lazio and ITech Incubator Mission*, R. Giuliani, BIC Lazio
- *Organic Waste Valorization, New Technologies for Sustainable Agriculture: from Waste to Resource from Research to Business*, M.L. Gullino and M. Pugliese, AgriNewTech
- *Innovation of Enterprises: Strategic Research*, S. Pasini, ENEL Engineering and Research
- *Innovation of Enterprises and Green Technologies in Practice: the ENEL Experience*, C. Papa, Enel Green Power, Innovation Department
- *Innovation: Italian Perspectives*, M. Dal Co, Agency for a Digital Italy and CITTIC-Italy-China Center for Technological Transfer
- *Mobility Management for Science Parks and Industrial Districts: Guidelines for Mobility Management*, M. Infunti, iMpronta
- *Towards a Sustainable Mobility: Guidelines for Mobility Management*, M. Infunti, iMpronta
- *Mobility Management for Science Parks and Industrial Districts: the Moma.biz Project*, M. Infunti, iMpronta
- *Case Studies of Successful Mobility Management in Italy and Europe*, M. Infunti, iMpronta
- *ICT for Sustainable Mobility: the BikeDistrict Project*, M. Quaggiotto, BikeDistrict S.n.c.

- 促进创新: 意大利的观点, M. Dal Co, 意大利信息化署和中意技术转移中心
- 绿色增长: 地方层级的生产、研究及环保政策, G. Simonetto, Veneto Innovazione 公司
- 生命周期评价方法和应用, M. Vale, Aghetera 有限公司
- 《红公里》公司业务的简介的简介, L. Marabini, 红公里科技园
- 《Luigi Danieli》科技园区业务的简介, F. Feruglio 和 E. Micelli, 弗留利创新
- 环境与能源集中管理的简介——CEEM项目, F. Pozzar, 弗留利创新
- Geko 工程有限公司的简介, P. Boscarior 和 L. Moro, Geko 工程有限公司
- 有限公司的简介, D. Gulic, Dermap 有限公司
- 科技园的能源管理, S. Scalari, 意大利电力集团公司, 工程与研究部
- 威尼斯威噶科技园: 我们的目标就是企业的发展, G. Tassinato, 威尼斯威噶科技园
- 技术转让的支持: 罗马研究联营公司的任务, L. Fiorentino, 罗马研究联营公司
- 科技创业企业的发展: 拉齐奥大区的企业创新中心与高技术孵化器任务, R. Giuliani, 拉齐奥大区企业创新中心
- 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
- 企业创新的战略研究, S. Pasini, 意大利电力集团公司, 工程与研究部
- 企业创新与绿色技术的实践: 意大利电力集团公司的经验, C. Papa, 意大利电力集团绿色电力公司创新部
- 创新: 意大利的观点, M. Dal Co, 意大利信息化署和中意技术转移中心
- 科技园及工业区的交通管理指南, M. Infunti, iMpronta
- 走向可持续性交通: 交通管理指南, M. Infunti, iMpronta
- 科技园及工业区的交通管理: Moma.biz 项目, M. Infunti, iMpronta
- 意大利和欧洲成功的交通管理案例研究, M. Infunti, iMpronta
- 可持续交通所应用的信息通信技术: 自行车区项目, M. Quaggiotto, BikeDistrict 集体公司

### Energy Efficiency, Low Carbon Communities & the Venice Case Study

- *High Efficiency Coal Conversion*, V. Mancurti, ENEL GEM
- *Integrated Waste Managemen*, L. Morselli, University of Bologna, Rimini Branch
- *Acegas Aps Padova Incineration Plant*, S. Trapanotto, External Consultant, Acegas-Aps S.p.A.
- *Energy Efficiency at Urban Scale*, M. Fauri, University of Trento
- *History of Venice: Urban and Environmental Aspects*, F. Zennaro, TEN Center, VIU

### Site Visits

- *High-Technology and Science Parks*, Environment Park
- *High-Technology and Science Parks*, Luigi Danieli Science and Technology Park
- *High-Technology and Science Parks*, Distretto High-Tech Monza Brianza
- *High-Technology and Science Parks*, Kilometro Rosso
- *High Technology and Science Parks*, VEGA
- *High Technology and Science Parks*, TecnopoloTiburtino
- *Science Parks and Sustainability*, LABOR S.r.l
- *Science Parks and Sustainability*, CHOSE Lab
- *Green Industry*, Valcucine S.p.A.
- *Energy Efficiency Technologies and Environmentally Friendly Production*, Albea Tubes Italy S.p.A.
- *Environmentally Friendly Industry*, Brovedani Group S.p.A.
- *Environmentally Friendly Industrial Production and Management*, Marelli Motori S.p.A.
- *Environmentally Friendly Industry*, ZIPR
- *Eco-building in Practice*, Italcementi Group
- *Ecobuilding in Practice*, TiFS Ingegneria S.r.l.
- *Solar Technologies*, Angelantoni Industrie S.p.A.
- *Energy Efficiency in Co-generation*, ICI Caldaie S.p.A.
- *Clean Coal Technology, High-Efficiency Coal Conversion*, ENEL S.p.A.
- *Biotechnologies Applied to Agriculture and the Environment*, AgriNewTech
- *Corporate Social and Environmental Responsibility*, L. Lavazza S.p.A.

### 能效、低碳城市及低碳团体与威尼斯案例研究

- 高效煤转化技术, V. Mancurti, 意大利电力集团公司, 能源管理部
- 垃圾综合管理, L. Morselli, 波洛尼亚大学
- Acegas Aps 帕多瓦焚烧厂简介, S. Trapanotto, Acegas-Aps 公司的外部顾问
- 城镇层级的能效, M. Fauri, 特兰托大学
- 威尼斯历史: 城市和环境方面, F. Zennaro, 环境主题网络中心 - 威尼斯国际大学

### 现场访问

- 高新技术园区, 环境园区
- 高新技术园区, 《Luigi Danieli》科技园区
- 高新技术园区, 蒙扎布里安扎高技术企业群
- 高新技术园区, 《红公里》技术园
- 高新技术园区, 威尼斯科技园
- 高新技术园区, 罗马蒂泊蒂诺技术园区
- 科技园与可持续性, LABOR 有限公司
- 科技园与可持续性, 混合有机太阳能研发中心实验式
- 环保型工业, Valcucine 股份公司
- 能效技术与环保型生产, 意大利阿贝尔化妆品罐股份公司
- 友善环境工业, Brovedani 集团股份公司
- 环保型工业生产与管理, 意大利马拉利股份公司
- 环保型工业, 《红桥》工业开发区联营公司
- 生态建筑物的实践, 意大利水泥集团
- 生态建筑的实践, Tifs Ingegneria (Tifs工程) 有限责任公司
- 太阳能技术, 安吉拉通力机械股份公司
- 热电联合发电的能效, ICI 锅炉股份公司
- 清洁煤炭技术, 高效煤转换, 意大利电力集团公司
- 在农业和环保领域中所应用的生物技术, AgriNewTech (农业新技术)
- 企业社会责任与环保责任, L. Lavazza 股份公司创新中心



## Energy and Climate Change

The effort to limit the emission of greenhouse gases (GHG) in the atmosphere is a global issue and the first step in addressing the problem is to assess it. This is why research and the implementation of GHG inventories for data collection are equally important to define successful policies.

Moreover, to contribute to the mitigation of climate change and to deal with increasing energy demands, the promotion of efficient energy use and of new and renewable energy sources is necessary, both to ensure that this demand is met and to pursue sustainable development.

### Seven courses:

Delegation	Course	General Schedule
NDRC	Capacity Building on Climate Change	June 16 <sup>th</sup> – 27 <sup>th</sup> 2013, Italy
NDRC	Climate Change: Policy, Greenhouse Gas Emission Inventory and Communication	October 13 <sup>th</sup> – 24 <sup>th</sup> 2013, Italy
MOST - Beijing	Industrial Energy Efficiency	October 21 <sup>st</sup> – 23 <sup>rd</sup> 2013, Beijing
MIIT - Chengdu	Industrial Energy Efficiency	October 28 <sup>th</sup> 2013, Chengdu
MOST	Industrial Energy Efficiency	November 16 <sup>th</sup> – 28 <sup>th</sup> 2013, Italy
CASS	Clean Energy and Climate Change	November 24 <sup>th</sup> – December 5 <sup>th</sup> 2013, Italy
MIIT	Industrial Energy Efficiency	December 8 <sup>th</sup> – 18 <sup>th</sup> 2013, Italy

### Main objectives

- To explore the global policies and economic solutions to deal with climate change and related issues.
- To analyze the situation concerning climate change, with a particular focus on strategies and policies for adaptation and mitigation.
- To provide an overview of the Emission Trading Scheme and its implementation at a local scale.
- To present the collection and analysis of emission data in order to provide a valuable starting point for policy makers.
- To discuss the methodology for the national and regional emission inventories compilation and present the main data sources and data quality assessment.
- To explore alternative and more environmentally friendly energy sources by underlining their effectiveness, cost and impact.

### Topics

#### Introduction to Policy and Economic Issues

- Overview on EU Organisation and EU Environmental Policy, M. Montini and A. Barreca, University of Siena, Environmental Legal Team
- EU Policies for Climate Change: Focus on the EU Climate and Energy Package, M. Montini and A. Barreca, University of Siena, Environmental Legal Team
- EU Environmental and Energy Policies, M. Montini, University of Siena, Environmental Legal Team

## 能源与气候变化

越来越多的温室气体排放量已经成为了全球关注并致力于控制的问题。评价工具作为应对该问题的初步措施。有效政策基于温室气体清单以及将来情景的分析研究。

以便保证能源需求的满足并实现可持续发展，唯一的道路就是鼓励节能以及代替能源的利用，这样我们才能减缓气候变化并应对能源需求的不断增加。

### 七门课程:

代表团	课程	时间和地点
国家发展和改革委员会	气候变化能力建设	2013年6月16日至27日,意大利
国家发展和改革委员会	气候变化: 政策、温室气体清单与国家信息通报	2013年10月13日至24日,意大利
中国科学技术部 - 北京	工业能效	2013年10月21日至23日,北京
工业和信息化部 - 成都	工业能效	2013年10月28日,成都
中国科学技术部	工业能效	2013年11月16日至28日,意大利
中国社会科学院	清洁能源与气候变化	2013年11月24日至12月5日,意大利
工业和信息化部	工业能效	2013年12月8日至18日,意大利

### 主要目标

- 探索应对气候变化及相关问题的全球政策和经济方案。
- 分析气候变化状况，尤其是气候变化的适应和减缓策略性政策。
- 提供排放交易机制的简介并介绍各级政府实施概况。
- 介绍排放数据的收集和分析方式，以便给决策者提供可观的政策起点。
- 讨论中央政府层级和本地支付层级编制排放清单的方式并介绍主要的数据来源以及数据质量评价。
- 探索更加环保型的可替代能源并分析其效力、成本和环境影响。

### 主题

#### 政策与经济方面

- 欧盟组织机构及其环保政策简介，M. Montini 和 A. Barreca，锡耶纳大学环境法团队
- 欧盟的气候变化政策：欧盟能源气候一揽子指令为焦点，M. Montini 和 A. Barreca，锡耶纳大学环境法团队

- *EU Legislative Framework on Energy Efficiency*, F. Volpe, University of Siena, Environmental Legal Team
  - *EU Energy Efficiency Policies Implementation: Case Studies*, F. Volpe, University of Siena, Environmental Legal Team
  - *The European Emission Trading System (EU-ETS) and Eco-innovation*, S. Borghesi, University of Siena
  - *The EU Emissions Trading Scheme*, G. Montemauri, ENEL Regulatory, Environment and Innovation
  - *European Emission Trading Scheme: Target Allocation to Countries and Main Polluters*, M. Germini, ENEL Foundation
  - *The Italian Ministry for the Environment, Land and Sea*, P. Manzione, 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*, 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 and Italian Policies for Climate Change*, A. Negrin, Department for Sustainable Development, Climate Change and Energy, IMELS
  - *The Flexible Mechanisms of Kyoto Protocol and Market Potential for Post 2012 in Italy*, V. Leonardi, Department for Sustainable Development, Climate Change and Energy, IMELS
  - *National Communications on Climate Change under the UNFCCC*, A. Barreca, University of Siena, Environmental Legal Team
  - *The White Certificates Market for Energy Efficiency*, A. Lorenzoni, University of Padua
  - *Policies and Measures for Climate Change*, V. Leonardi, Department for Sustainable Development, Climate Change and Energy, IMELS
  - *Policies for Climate Change: Evaluating the CDM Experiences in Developing Countries*, A. Barreca, University of Siena, Environmental Legal Team
  - *Economic Instruments for Climate Change: Cap & Trade vs Carbon Taxes*, I. Musu, Ca' Foscari University of Venice and TEN Center, VIU
  - *Industry, Energy Efficiency and the Green Economy*, I. Musu, Ca' Foscari University of Venice and TEN Center, VIU
  - *Green Growth and the Energy-Environment Challenge*, I. Musu, Ca' Foscari University of Venice and TEN Center, VIU
- Energy Efficiency & Renewable Energy**
- *Sustainable Energy Actions: Results from EU Projects*, G. Vicentini, Province of Turin
  - *Energy Efficiency in European Industries*, A. Lorenzoni, University of Padua
  - *The Energy Managers in Italy: History, Data and Figures of the of Energy Managers in Italy*, D. Forni, FIRE
  - *Implementing a Structured Energy Management Model in a Leading Industrial Group*, G. Mameli, Finmeccanica S.p.A.
  - *Energy and Climate Strategy for a Sustainable Plant: Calusco Case*, M. Ojan, Italcementi Group

- 欧盟环境能源政策, 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
  - 碳排放交易体系与生态创新, S. Borghesi, 锡耶纳大学
  - 碳排放交易体系, G. Montemauri, 意大利电力集团公司, 管理, 环境与创新部
  - 欧盟排放交易体系: 成员国配额分配及与污染大国, M. Germini, 意大利电力集团公司基金会
  - 意大利环境、领土与海洋部介绍, P. Manzione, 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, 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气候变化政策, 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
  - 京都议定书灵活机制与2012年以后意大利市场潜在力, V. Leonardi, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
  - 意大利气候变化政策与措施向UNFCCC的国家信息通报, A. Barreca, 锡耶纳大学环境法团队
  - 能效白皮书证明书, A. Lorenzoni, 帕多瓦大学
  - 候变化政策与措施, V. Leonardi, 意大利环境、领土与海洋部可持续发展、气候变化与能源司
  - 气候变化政策: 评价发展中国家的清洁发展机制经验, A. Barreca, 锡耶纳大学环境法团队
  - 气候变化减缓的经济手段: 限量与交易机制与碳税的比较, I. Musu, 威尼斯卡·弗斯卡里大学、威尼斯国际大学“环境主题网络”中心
  - 工业、能效与绿色经济, I. Musu, 威尼斯卡·弗斯卡里大学、威尼斯国际大学“环境主题网络”中心
  - 绿色增长与能源-环保挑战, I. Musu, 威尼斯卡·弗斯卡里大学、威尼斯国际大学“环境主题网络”中心
- 能效与可再生能源**
- 可持续性能源措施: 欧盟项目的成绩, G. Vicentini, 都灵省政府官员
  - 欧盟工业的能效, A. Lorenzoni, 帕多瓦大学
  - 意大利企业的能源经理人的历史与数据, D. Forni, 意大利能源联盟
  - 一家零星工业集团的能源经理模型, G. Mameli, Finmeccanica 股份公司

- *Energy Efficiency Technologies*, A. Lorenzoni, University of Padua
- *Energy Efficiency in the Industrial Use of Electricity: Electrical Motors and Lighting*, G. Gallo, Foundation Torino Smart City
- *Industrial Energy Efficiency and the Role of Energy Managers*, D. Di Santo, FIRE
- *Energy Management: the Finmeccanica Model Case Study*, G. Mameli, Finmeccanica S.p.A.
- *Energy Saving Projects and Financing Mechanisms*, L. Bano, Galileia S.r.l.
- *Italian Projects for Energy Efficiency in the Industrial Sector: ENEA Research Activities*, R. Preka and M.A. Segreto, ENEA
- *Energy Audit*, R. Selva, eEnergia S.r.l.
- *Energy Management System and ISO 50001*, R. Selva, eEnergia S.r.l.
- *Energy Management System in Practice*, G. Pedrocchi, eEnergia S.r.l.; M. Manente and G. Stevanato, San Benedetto S.p.A.
- *Economic Feasibility of the Technological Solutions for Industrial Energy Efficiency*, M. Fauri, University of Trento and Polo Tecnologico per l'Energia S.r.l.
- *Energy Efficiency in the Industrial Use of Electricity*, G. Gallo, Foundation Torino Smart City
- *Eco-design & Industry*, E. Ancilli, Archea Associati
- *Smart Grids for Energy Efficiency*, A. Costa, ENEL Foundation
- *Smart Grids: Case Studies in Towns and Rural Areas*, M. Morazzo, ENEL Foundation
- *Smart Cities for Sustainable Development*, A. Lorenzoni, University of Padua
- *ABB Global Approach to Energy Efficiency*, L. Zanella, ABB S.p.A.
- *ABB Global Approach to Energy Efficiency - The Energy Audit as a Tool to Support the Decision of Implementation and Measure of the Savings Achieved*, P. Grigollo, ABB S.p.A.
- *SmartSharing™ for Energy Efficiency - Adaptive Load Sharing Controller*, D. Pareschi, ABB S.p.A.
- *Energy Efficiency Motor and Drives Systems - Industrial Solutions*, M. Leone, ABB S.p.A.
- *Italian Projects for Energy Efficiency in Industrial Areas: ENEA Research Activities*, R. Preka and M.A. Segreto, ENEA
- *Technological Solutions for Industrial Energy Efficiency*, A. Riberti, ENEL S.p.A.
- *Energy Efficiency in Industrial Buildings*, A. Gasparella, Free University of Bozen-Bolzano
- *Wind Energy and the Energy Market*, L. Battisti, University of Trento
- *Geothermal Energy: from the Heart of the Earth. Geothermal Energy Discovery*, R. Bertani, ENEL Green Power, International Geothermal Association
- *Geothermal Energy: from the Heart of the Earth. Geothermal Energy in China*, R. Bertani, ENEL Green Power, International Geothermal Association
- *Photovoltaic Plants: Key Elements, Trends and Critical Aspects*, F. Bignucolo, Galileia S.r.l.

- 可持续性工厂的能源与气候战略: Calusco d'Adda 水泥厂案例, M. Ojan, 意大利水泥集团
- 能效技术, A. Lorenzoni, 帕多瓦大学
- 工业用电能效: 电动发动机及照明系统, G. Gallo, Energy Gate 都灵智慧城市基金会
- 工业能效与能源经理人的职责, D. Di Santo, FIRE, 意大利能源联盟
- 能源管理: 意大利芬梅卡尼卡模型研究案例, G. Mameli, Finmeccanica 股份公司
- 节能项目与投资机制, L. Bano, Galileia 有限公司
- 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
- 能源审计, R. Selva, eEnergia 有限公司
- 能源管理体系与 ISO 50001, R. Selva, eEnergia 有限公司
- 能源管理体系的实践, G. Pedrocchi, eEnergia 有限公司; M. Manente 和 G. Stevanato, San Benedetto 矿泉水股份公司
- 工业能效技术方案的经济可行性, M. Fauri, 特兰托大学及能源技术园区有限公司
- 工业用电能效, G. Gallo, 都灵智慧城市基金会
- 生态设计与工业, E. Ancilli, Archea 合伙制事务所
- 智慧电网与能效, A. Costa, 意大利电力集团公司基金会
- 智能电网: 城镇与农村地区的案例研究, M. Morazzo, 意大利电力集团公司基金会
- 实现可持续发展的智慧城市, A. Lorenzoni, 帕多瓦大学
- ABB 集团公司的能效全面方案, L. Zanella, ABB 股份公司
- ABB 集团公司的能效全面方案——作为所节省电能的测量工具及支持节能措施工具的能源审计, P. Grigollo, ABB 股份公司
- 能效的 SmartSharing™ ——自适应负载均分控制器, D. Pareschi, ABB 股份公司
- 能效发动机及传动系统——工业方案, M. Leone, ABB 股份公司
- 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
- 工业能效的技术方案, A. Riberti, 意大利电力集团公司
- 工业建筑物的能效, A. Gasparella, 波尔察诺私有大学
- 风能与能源市场, L. Battisti, 特兰托大学

- *Biofuels and Sustainable Development*, D. Chiaramonti, University of Florence
- *Turin Province Energy Balance: Energy Efficiency and Renewable Energies in Turin Province*, S. De Nigris, Province of Turin, Air Quality and Energy Resources Department
- Tools for Climate Change Assessment, Mitigation and Adaptation**
- *EU Adaptation Policies: an Introduction*, S. Castellari, CMCC
- *EU Adaptation Policies: a Case Study for Good Practice*, S. Castellari, CMCC
- *Mitigation of Climate Change through Sound Production and Use of Energy: the Use of Renewables, Energy Conservation and Efficiency*, L. Bano, Galileia S.r.l.
- *Mitigation of Climate Change in Practice: Energy Efficiency and Renewable Energy Policies at Urban Scale: the Padova Case Study*, L. Bano, Galileia S.r.l.
- *Compilation of the Italian GHG Emission Inventory and Communication*, D. Gaudioso, ISPRA
- *Smart Transition to a Low Carbon Economy: Implementing in Italy the European 2014-2020 Funding Schemes*, V. Piana, Economics Web Institute
- *How to Push the Fastest Possible Diffusion of Eco-Innovations: Policies and Examples in Emerging Strategic Industries*, V. Piana, Economics Web Institute
- *EMEP/EEA Air Pollutant Emission Inventory Guidebook*, R. De Lauretis, ISPRA
- *Greenhouse Gas Emission Inventory and Communication at Regional Level*, S. Caserini, Polytechnic University of Milan
- *GHG Inventories Compilation in Agriculture: the Cuneo Province Case Study*, E. Brizio, Fondazione per l'Ambiente T. Fenoglio
- *Soil and Forest Carbon Stocks Inventories: Piedmont Case Studies*, F. Petrella, IPLA
- *ENEL Experience in Implementing Climate Change Policies*, G. Montemauri, ENEL S.p.A.
- *Clean Energy and Climate Change: the ENEL Experience*, M.C. Serra, ENEL S.p.A.
- *Covenant of Mayors: GHG Emission Control Strategies at City Level*, G. Gallo, Foundation Torino Smart City
- *City of Venice - Covenant of Mayors: A European Initiative Towards CO<sub>2</sub> Emissions Reduction*, S. Tola, AGIRE
- *Venice Safeguard and Climate Change*, C. Nasci, Thetis S.p.A.
- *Main Principles of Eco-building*, F. Zaggia, Favero & Milan Engineering
- *Eco-buildings for Climate Change Mitigation: Case Studies*, F. Zaggia, Favero & Milan Engineering

- 地热能是来自地心的。地热能研究, R. Bertani, 意大利电力集团公司绿色电力子公司
- 来自地心的地热能。中国的热能, R. Bertani, 意大利电力集团公司绿色电力子公司
- 太阳能发电站的关键因素、趋势和临界方面, F. Bignucolo, Galileia 有限责任公司
- 生物燃料与可持续发展, D. Chiaramonti, 佛罗伦萨大学
- 都灵省的能源平衡: 都灵省的能效与控制室能源, S. De Nigris, 都灵省政府空气质量与能源处
- 气候变化评价、缓解与适应措施**
- 欧盟气候变化适应政策的简介, S. Castellari, 欧洲-地中海气候变化中心
- 欧盟气候变化适应政策: 案例研究与最佳实践, S. Castellari, 欧洲-地中海气候变化中心
- 通过能源的合理利用而减缓气候变化: 可再生能源、节能和能效, L. Bano, Galileia 有限责任公司
- 气候变化减缓政策的实践: 城镇层级的能效与控制室能源, 帕多瓦案例研究, L. Bano, Galileia 有限公司
- 编制意大利排放清单及国家信息通报, D. Gaudioso, 意大利环境保护与研究院
- 走向低碳经济转型的智慧之路: 在意大利欧盟 2014-2020 年周期融资规划的执行, V. Piana, 经济学网络研究所
- 如何推动生态创新技术的快速发展: 新兴战略产业的政策与案例, V. Piana, 经济学网络研究所
- 欧盟环境监测和评价计划及欧盟环境局空气污染物清单指南, R. De Lauretis, 意大利环境保护与研究院
- 大区级的温室气体排放清单及国家信息通报, S. Caserini, 米兰理工大学
- 农业领域温室气体清单编制: 库内奥省的案例研究, E. Brizio, Teobaldo Fenoglio 环境基金会
- 土壤和森林的碳储量: 皮埃蒙特大区的案例研究, F. Petrella, 意大利林业与环境研究所
- 意大利电力公司在执行气候变化相关政策方面的经验, G. Montemauri, 意大利电力集团公司
- 清洁能源与气候变化: 意大利电力公司的经验, M.C. Serra, 意大利电力集团公司
- 欧盟市政盟约: 城市级的温室气体控制战略, G. Gallo, 都灵智慧城市基金会

### Site Visits

- *Energy Efficiency Management*, Acqua Minerale San Benedetto S.p.A.
- *Energy Efficiency Solutions for Industries*, ABB S.p.A.
- *Energy Efficiency Management*, Zanardi Fonderie S.p.A.
- *Efficient Energy Generation: Distributed Energy Generation and District Heating*, Agsm Verona S.p.A.
- *Industrial Energy Efficiency*, Martini & Rossi S.p.A - Bacardi-Martini Group
- *Industrial Energy Efficiency*, AlbaPower S.p.A.
- *Safeguard of Venice*, Thetis S.p.A.
- *Eco-building in Practice*, TiFS S.r.l.
- *High-Efficient Steam Generators*, ICI Caldaie S.p.A.
- *Low Carbon Industry*, Italcementi Group

- 威尼斯市 - 欧盟市政盟约: 旨在二氧化碳减排目标的欧盟举动, S.Tola, AGIRE - 威尼斯能源局
- 威尼斯保护与气候变化, C.Nasci, Thetis 股份公司
- 生态建筑的主要概念, F.Zaggia, Favero & Milan 工程公司
- 减缓气候变化的生态建筑: 案例研究, F.Zaggia, Favero & Milan 工程公司

### 现场访问

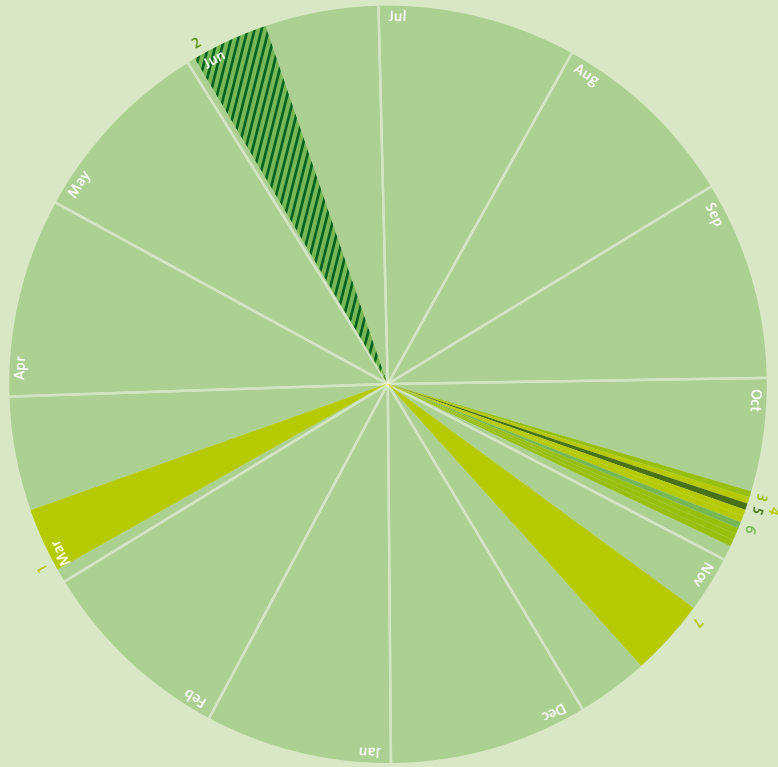
- 能效管理, San Benedetto 矿泉水股份公司
- 工业的能效方案, ABB 集团公司
- 能效管理, Zanardi 铸造厂股份公司
- 高效发电: 分散式发电与集中供热, 维罗纳市综合服务股份公司
- 工业能效, 马天尼罗西股份公司 - 百加地马天尼集团
- 工业能效, AlbaPower 股份公司
- 威尼斯的保护, Thetis 有限责任公司
- 生态建筑的实践, Tifs 有限责任公司
- 高效蒸汽发生器, ICI 锅炉股份公司
- 低碳工业, 意大利水泥集团

### Environmental Management and Sustainable Development

- 1 Waste Management
- 2 Eco-City
- 3 Multilateral Environmental Agreements (MEAs) and Biodiversity Protection
- 4 Eco-Management: Strategies and Policies
- 5 Eco-city
- 6 Eco-city
- 7 Eco-friendly City

### 环境管理与可持续发展

- 1 废弃物管理
- 2 生态城市
- 3 多边环境协议以与生物多样性保护
- 4 生态管理策略
- 5 生态城市
- 6 生态城市
- 7 环保型城市

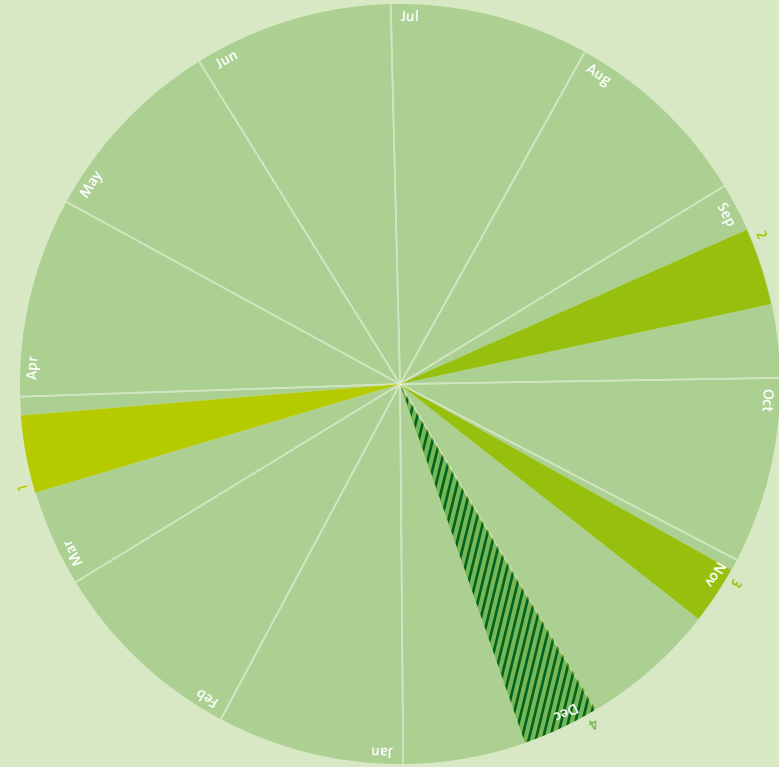


### Environmental Monitoring and Control

- 1 Water Pollution Prevention and Control
- 2 Water Pollution Prevention and Control
- 3 Water Pollution Prevention and Control
- 4 Pollution Control Strategy and Instruments

### 环境监测与监管

- 1 水污染防治
- 2 水污染防治
- 3 水污染防治
- 4 污染防治的策略与工具

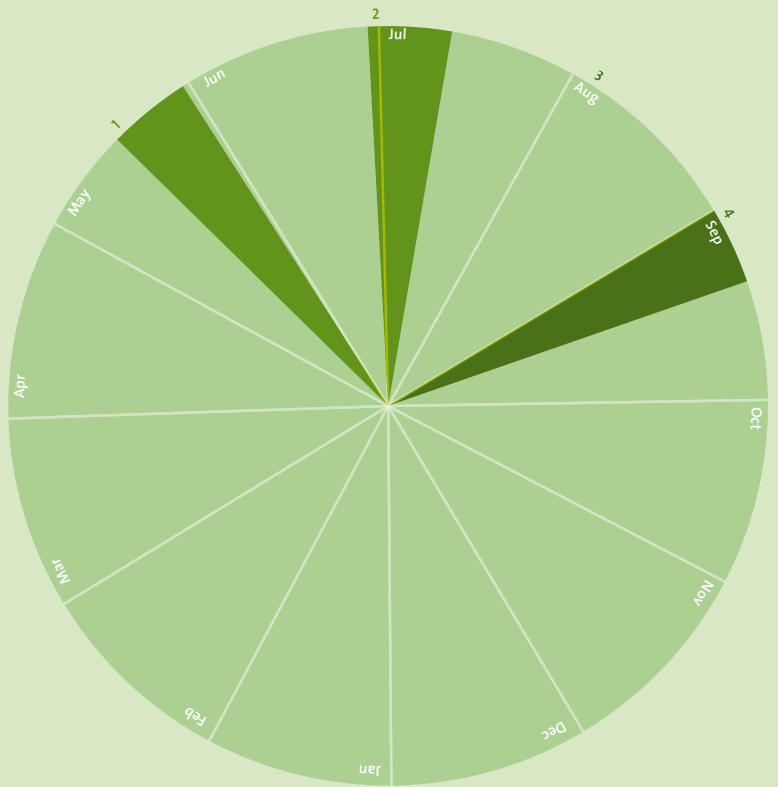


### Low Carbon Economy and Innovation

- 1 High-Technology and Science Parks for Sustainable Development
- 2 Innovation of Enterprises and Green Technologies
- 3 Eco-City Building and Innovation Management

### 低碳经济和创新技术

- 1 可持续发展的高新技术与科技园
- 2 企业创新技术与绿色技术
- 3 生态城市建设及创新管理

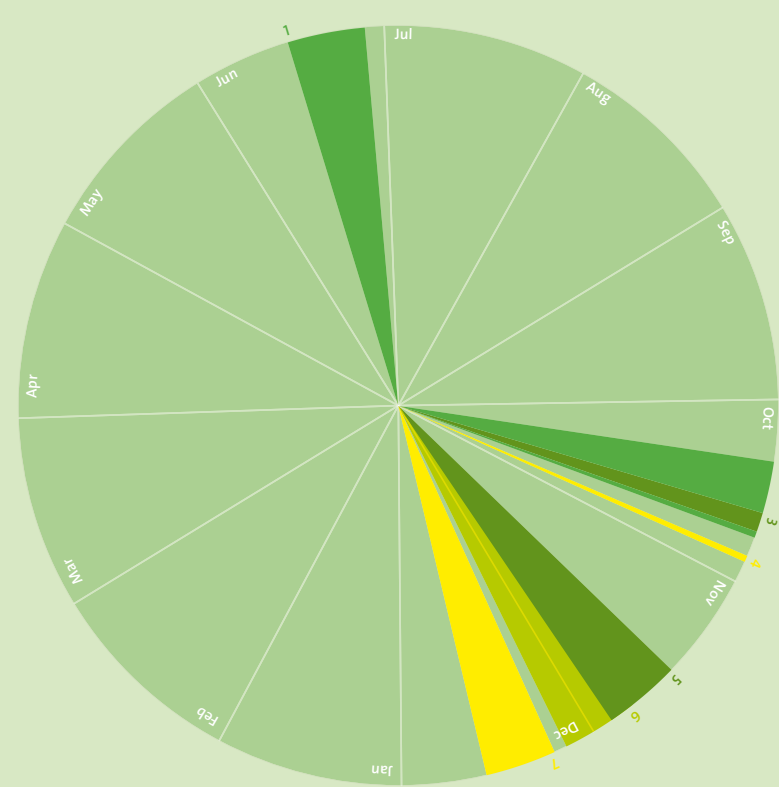


### Energy and Climate Change

- 1 Capacity Building on Climate Change
- 2 Climate Change: Policy, Greenhouse Gas Emission Inventory and Communication
- 3 Industrial Energy Efficiency
- 4 Industrial Energy Efficiency
- 5 Industrial Energy Efficiency
- 6 Clean Energy and Climate Change
- 7 Industrial Energy Efficiency

### 能源与气候变化

- 1 气候变化能力建设
- 2 气候变化：政策、温室气体清单与国家信息通报
- 3 工业能效
- 4 工业能效
- 5 工业能效
- 6 清洁能源与气候变化
- 7 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

ABB S.p.A.

### Institution/Company Profile

ABB is a global leader in power and automation technologies. Based in Zurich, Switzerland, the company employs 150,000 people and operates in approximately 100 countries. The firm's shares are traded on the stock exchanges of Zurich, Stockholm and New York.

In Italy ABB employs 6,000 people, distributed in operational units in the whole territory. ABB's success has been driven particularly by a strong focus on research and development. The company maintains seven corporate research centers around the world and has continued to invest in R&D through all market conditions. Today, ABB stands as the largest supplier of industrial motors and drives, the largest provider of generators to the wind industry, and the largest supplier of power grids worldwide. ABB is organized into five divisions according to the customers and industries served:

- \_ power products;
- \_ power systems;
- \_ discrete automation and motion;
- \_ low voltage products;
- \_ process automation.

ABB has a wide range of products and services based on pioneering innovative technologies to reduce energy consumption and improve productivity. Their technologies are used along the entire energy value chain from the extraction of resources, the liquefaction of natural gas or refinement of petroleum products, to their transformation into electricity and their efficient use in industry, transportation and buildings. Thanks to their experience, ABB is able to help industrial and utility customers improve energy efficiency by providing specialists to audit energy use and identify areas for improvement, providing equipment, systems and solutions to use energy more efficiently.

### Site Visit

Energy Efficiency Solutions for Industries

### Objectives

To introduce a company providing customised technological solutions to both industries and utilities in order to improve their energy performance.

### Reference Address

Via Luciano Lama 33, 20099 Sesto San Giovanni (Milan)

www.abb.com

### Institution/Company

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

### Institution/Company Profile

Acegas Aps Group is the most important multiutility company in northeast Italy. In particular, the company operates in the management and distribution of water resources, electric 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 handling, total facility management, district heating, public lightning, traffic light management and re-lining (telecommunication networks). Established after the merger between Acegas and Aps on December 18, 2003, the company is currently mainly active in Trieste and Padova, 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 works have been done in order to respect the ever-lower emission levels set by Italian law. This led to the achievement of the EMAS certification in 2001.

The current three lines of the plant can treat the waste coming from 20 municipalities in the Padua area, producing 78.4 GWh of electric energy per year.

The typologies treated are:

- \_ municipal solid waste;
- \_ special non-hazardous waste;
- \_ infectious medical waste (provided that it doesn't contain hazardous substances according to 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

Energy and Heat Recovery from Waste

### Objectives

To show advanced technologies to recover energy and heat from waste incineration and the continuous monitoring of emissions from the plant, whose data is made available to the public in order to guarantee their involvement in the environmental issues of the territory.

### Reference Address

Viale Navigazione Interna 34, 35129 Padua  
www.gruppo.acegas-aps.it (only in Italian)

### 机构/公司

ABB S.p.A. ABB 股份公司

### 机构/公司简介

ABB是一家跨国公司，专长于电机、能源、自动化等领域。总公司设于瑞士苏黎世，在全球100多个国家设有分公司或办事处，全体工作人员为15万多人。公司的股票分别在苏黎世、斯德哥尔摩及纽约的股票市场上市买卖。

ABB意大利分公司的职业为6千人，在全国的经营单位工作。

高度重视研究开发是ABB公司业绩的主要驱动力。公司在全球设有七个研究中心，并无论市场的条件好坏，一直增加研发投入。

目前，ABB公司是工业发动机和驱动器全世界最大制造商、风能产业发电机及电网的全球最大供应商。

ABB公司由五个部门组成，按照客户的产业种类：

- \_ 发电产品；
- \_ 发电系统；
- \_ 离散自动化与运动控制；
- \_ 低压产品；
- \_ 流程自动化。

ABB的广泛产品系列基于降低能耗并提高生产率的先锋创新技术。该技术用于全部能源价值链，包括资源开采环节、天然气液体化或石油产品精炼过程、转换成电能环节、工业高效应用、运输及建筑物。

借鉴其经验，ABB可以帮助其工业事业客户提高能效，提供专家来审计能耗、识别可改善的领域并提供设备、系统以及节能的解决方案。

### 参观内容

工业能效解决方案

### 实地参观目标

介绍一家科技型公司给企事业提供节能能效方面的定制解决方案。

### 联系地址

Luciano Lama 大道33号，

20099 Sesto San Giovanni (米兰省)

www.abb.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。

焚烧厂经过了几次扩大升级，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。

### 参观内容

废物能源与热能回收

### 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)



**Institution/Company**

Acqua Minerale San Benedetto S.p.A.

**Institution/Company Profile**

San Benedetto S.p.A. is one of the most important companies producing bottled water in Italy. It was founded in 1956 in Scorzè, near Venice, and the plant was constructed on top of a functioning artesian well.

The expansion towards foreign markets started in the early '90s and it keeps growing. Nowadays the San Benedetto group is active in 80 countries. Profits in 2012 reached 712 million Euros; employees are 1,500.

The company utilizes advanced technologies able to accelerate the production process and to guarantee the bottles are not dangerous. Half liter plastic bottles now utilize only 11 gr of plastic. The experience and know-how acquired in the past 25 years led to the production of this eco-friendly line of bottles. This is a great result coming from research investments that, since 1983, have been able to reduce the quantity of plastic, and therefore energy used, by up to 30%. The weight difference between 1985 and 2007 saved 16,700 million tons of PET.

The CO<sub>2</sub> footprint of 2011 was 30% less than 2008. The quality of the water is guaranteed by 800 analyses daily.

In 2009 the company signed a project with the Italian Ministry for the Environment, Land and Sea, which aims at reducing even more CO<sub>2</sub> emissions coming from the bottled water life cycle.

**Site Visit**

Energy Efficiency Management

**Objectives**

To present how a company can reconcile production and protection of the environment by improving the energy management strategy.

**Reference Address**

Viale Kennedy 65, 30037 Scorzè (Venice)  
www.sanbenedetto.it

**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 transfer the results of many years of research into the environmental and agricultural field to its members.

The company works mainly in the valorization of organic wastes, 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 actual applications of academic research in the agricultural and environmental field. 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**

Acqua Minerale San Benedetto S.p.A. - 圣本尼迪托矿泉水股份公司

**机构/公司概况**

San Benedetto股份公司是意大利生产瓶装矿泉水最大公司之一。公司于1956在威尼斯附近Scorzè镇成立的，在目前还正在供水的自流井上。

1990年代初公司上了国际市场，至今其全球市场份额不断地增长。目前，San Benedetto股份公司在全世界80多个国家和地区的市场上出售其产品。公司的全体工作人员为1,500人，2012年其利润达到了7.12亿欧元。

公司所使用的先进技术加快生产过程并保证瓶装的安全。目前，500毫升塑料瓶所应用的塑料含量仅仅为11克。这种生态友好的生产系列是25年的经验以及高技术诀窍的良好结果。公司高度重视研究，在研发领域投资了大量资金并获得了很大的成绩，尤其是1983年以来能够减少塑料用量的30%和相当多的能耗。另外，1985年和2007年之间，减少了1,67万吨的聚酯产量。

San Benedetto公司天天进行800次的水质分析，这样就能保证矿泉水的高质量。

2009年，公司参与了意大利环境部的项目，目标为进一步减少生产过程的二氧化碳排放量。

**现场访问**

可持续工业

**现场访问目标**

介绍一家能够把生产目标和环保考虑结为一体的公司并通过可持续包装材料而达到减排目标。

**联系地址**

Kennedy大道65,  
30037 Scorzè (镇威尼斯)  
www.sanbenedetto.it

**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。

**参观内容**

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, developed 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, knowledge and technology transfer, lifelong learning and communication on up-to-date topics in the above-stated sectors. AGROINNOVA's special features include 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 rest are abroad. AGROINNOVA mainly operates in Grugliasco and at the Ministry for the Environment, Land and Sea in Rome. In past years it has gained broad expertise in the coordination of European projects, as well as in the knowledge of technology transfer in emerging economies such as China.

### Field of competence

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.

### Reference Address

Via Leonardo da Vinci 44, 10095 Grugliasco (Turin)  
www.agroinnova.org

### Institution/Company

Agsm Verona S.p.A.

### Institution/Company Profile

Agsm Verona S.p.A. (Azienda Generale Servizi Municipali di Verona S.p.A.) is a multiutility service company that provides services in the fields of electricity, gas and heating in the city of Verona (Italy). In addition it also manages public lighting, energy management in buildings and optic fiber telecommunication network.

The group is among the 10 most important utility companies in Italy and can provide nearly 305 Megawatts of electric energy, thanks to a diversified mix of plants such as hydro (61,2 MW), thermal (171 MW) wind (12,8MW), solar (1,2 MW). It also features five cogeneration plants situated in various areas of the city, with an overall installed power of 60 MW that enables the simultaneous production of electric (280 gigawatts per hour/year) and thermal (265 gigawatts per hour/year) power.

The thermal power is distributed through 240 km of thermally insulated pipelines reaching about 1,300 buildings and serving nearly 10% of the total population of the city.

The district heating therefore allows a more efficient exploitation of the energy source and consequently lower greenhouse gas emissions compared to traditional energy generation systems.

### Site Visit

Efficient Energy Generation: Distributed Energy Generation and District Heating

### Objectives

To present an example of efficient energy generation and a reduction of GHGs emissions.

### Reference Address

Via Lungadige Galtarossa 8, 37133 Verona  
www.agsm.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市校园里的都灵大学农业创新中心是植物病理学家创建的都灵大学权限中心。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取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, 这些都是都灵大学农业环境创新中心所特有的。目前, 中心的大多数职员在意大利工作, 其余在国外。除了在Grugliasco校园之外, 中心还在罗马的环境、领土与海洋部进行业务。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。

### 专业领域

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。

### 联系地址

Leonardo da Vinci大道44号,  
10095 Grugliasco (都灵省)  
www.agroinnova.org

### 机构/公司

Agsm Verona S.p.A. 维罗纳市综合服务 股份公司

### 机构/公司简介

Agsm Verona 股份公司 (维罗纳市综合服务股份公司) 是一家综合性事业, 主要在维罗纳市供电供煤供暖。公司还管理公共照明、提供建筑物的能源管理服务以及光缆电信网络的管理。

Agsm Verona是意大利十家最大事业之一, 每年发电功率为305兆瓦, 括水能 (61,2兆瓦)、热能 (171兆瓦)、风能 (12,8兆瓦) 和太阳能 (1,2兆瓦)。公司还经营5家热电联合发电厂, 装机总功率为60兆瓦, 同时发电 (每年280百万瓦小时) 发热 (每年265百万瓦小时)。热能是通过240公里的绝热管道分配到1300多所建筑物, 即城市总人口的10%。与传统发电系统比较, 分区供暖的能源利用效率更高, 因此降低温室气体排放量。

### 参观内容

高效发电: 分散式发电与分区供暖

### 实地参观目标

介绍一种高效低排放的发电方式

### 联系地址

Lungadige Galtarossa沿河路8号,  
37133 维罗纳市  
www.agsm.it (意大利语)

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

**Institution/Company Profile**

AlbaPower S.p.A. was founded in April 2005 by Ferrero S.p.A. and Egea S.p.A. Ferrero S.p.A., is a leading Italian multinational, manufacturing chocolate and other confectionery products.

Egea S.p.A. is the company in charge of energy and environmental services in Alba and nearby municipalities (in Province of Cuneo, Piedmont Region).

AlbaPower owns and manages the cogeneration plant in Alba, which provides electric and thermal energy for Ferrero's production site and for the district heating of Alba Municipality.

**Site Visit**

Industrial Energy Efficiency

**Objectives**

The main objective of the visit was to show an example of how an efficient use of energy in industry can be achieved by combining heat and electricity production for the needs of an industrial site as well as the surrounding urban area.

**Reference Address**

C.so Piera Cillario 2/1, 12051 Alba (Cuneo)  
www.albapower.it

**Institution/Company**  
Albea Tubes Italy S.p.A.

**Institution/Company Profile**

Albea Tubes Italy S.p.A. is an Italian company within the Albéa Group, which is one of the world's leading packaging companies providing a wide range of solutions for the make-up, fragrance, skincare, personal and oral care markets. At their site, located in Tortona, they produce plastic tubes for cosmetic and pharmaceutical markets.

Working closely with their customers, they have been offering added value products and services for many years thanks to:

- \_ solid industrial know-how;
- \_ passion for innovation;
- \_ global dimension;
- \_ talented staff.

**Site Visit**

Energy Efficient Technologies and Environmentally Friendly Production

**Objectives**

To present a company investing in and researching technologies to reduce the impact of production on the environment in order to promote sustainability and be environmentally friendly.

**Reference Address**

S.S. per Alessandria 9/a, 15057 Tortona (Alessandria)  
www.albea-group.com

**机构/公司**

AlbaPower S.p.A. Alba 电力股份公司

**机构/公司简介**

Alba电力股份公司是于2005年4月份由Ferrero（弗列罗）股份公司和Egea股份公司成立的。

弗列罗股份公司是巧克力及类似产品的一家意大利全球著名的跨国公司。

Egea股份公司在Alba镇及附近城镇（意大利西北的皮埃蒙特大区，库内奥省）供电并提供其它环境方面的服务。

Alba电力股份公司持有并经营Alba镇里的电热联合发电厂，以分区供暖方式供电供热给弗列罗工厂及Alba辖区。

**参观内容**

工业能效

**实地参观目标**

参观的目标为展示高效能源利用的例子，即给工业产地又给周围城区住宅供电供热，工业及市民的电热需求同时满足。

**联系地址**

Piera Cillario 大道 2/1号，12051 Alba (库内奥省)  
www.albapower.it

**机构/公司**

Albea Tubes Italy S.p.A. 意大利阿贝尔化妆品罐股份公司

**机构/公司简介**

阿贝尔化妆品罐是属于阿贝尔集团的意大利分公司。阿贝尔是化妆包装领域的全球领先公司，为化妆品、香水、护肤品、保健品、口腔护理品等美容品提供广泛包装解决方案。意大利西北的Tortona工厂所生产的是的美容品和药品的塑料包装管。鉴于长期的经验及一流的服务，目前公司提供高增值的产品和服务，主要凭着下列优势：

- \_ 健全稳固的专有技术；
- \_ 不断寻找创新；
- \_ 全球市场战略；
- \_ 高素质人才。

**参观内容**

能效技术和环保型生产

**实地参观目标**

介绍一家环保型公司，技术研发上投入了大量投资，以便降低环境影响并提高其可持续性。

**联系地址**

往 Alessandria公路 9/a号，  
15057 Tortona (亚历山德里亚省)  
www.albea-group.com

### Institution/Company

Angelantoni Industrie S.p.A.

### Institution/Company Profile

Today the Angelantoni Group, established in 1932, is made up of three sub-holding companies: Angelantoni Test Technologies (ATT), Angelantoni Life Science (ALS), Angelantoni Clean Tech (ACT) and one subsidiary Archimede Solar Energy (ASE), with eight production facilities in Italy, Germany, France, India, and China.

Angelantoni Test Technologies (ATT) is the only company capable of offering a wide range of solutions for testing in numerous sectors, thanks to the experience and technical know-how of a team of international-level experts.

Angelantoni Life Science (ALS) is a leader in the manufacture of biomedical equipment for healthcare, the pharmaceutical industry, and life science research institutes. ALS produces a complete range of extremely low-temperature freezers, refrigerated blood banks, rapid plasma freezers, climatic chambers, biological safety hoods, isolators and cleanrooms, offering laboratories, universities, hospitals, and pharmaceutical industries all over the world the best solutions for the biomedical sector.

Angelantoni CleanTech (ACT) is a group of eight companies operating in the field of renewable energies and energy efficiency, producing such products as photovoltaic solar plants, concentrated photovoltaic (CPV) plants, concentrated solar thermal power (CSP) plants with Fresnel reflectors, molten salt, oil, and DSG receiver tubes, photovoltaic solar panels, solar inverters, and thin-film coating systems for components in the solar sector.

Archimede Solar Energy (ASE) is a world leader in the production of solar receiver tubes for thermodynamic power plants with parabolic trough collectors. The receivers, developed and produced with the contribution of ENEA, are designed to operate at high temperatures (up to 550° C) with all types of heat transfer fluid used in current CSP (Concentrated Solar Power) power plants.

### Site Visit

Solar Technologies

### Objectives

To present innovative technologies developed in the field of solar thermal power, with the aim of maximising the energy production and efficiency.

### Reference Address

Località Villa San Faustino,  
06056 Massa Martana (PG)  
www.angelantoni.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 ARPAV in the field of air quality monitoring, both in urban and industrial areas. Air pollution monitoring and emergency response to accidents in the industrial area were presented by describing the structure and the aims of the SIMAGE project. In addition, an urban background monitoring station belonging to the provincial environmental monitoring network was visited in order to describe the main equipment installed and the parameters examined to control air pollution in the city.

### Site Visit

Control Bodies at Local Level

### Objectives

To present the activities carried out by the Provincial Departments of ARPAV in the field of environmental control. To illustrate some practical examples regarding the control activities, which local environmental agencies are in charge of.

### Site Visit

Environmental Emergency Response in Practice

### 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 in the industrial area is presented by describing the structure and the aims of the SIMAGE project.

### Reference Address

Contact person: Luisa Vianello,  
Via Lissa 6, 30171 Mestre (Venice)  
www.arpa.veneto.it (only in Italian)

### 机构/公司

Angelantoni Industrie S.p.A. 安吉拉通力机械股份公司

### 机构/公司简介

安吉拉通力机械集团早于1932年成立的,而目前由三家全资子公司组成的,即安吉拉通力试验技术(ATT)、安吉拉通力生命科技(ALS)和安吉拉通力清洁技术(ACT),再加上阿基米德能源(ASE)分公司,并在意大利、德国、法国、印度和中国拥有8个生产设施。

安吉拉通力试验技术公司(ATT)的技术人员均为长期经验并丰富技能的国际级专家,因此公司给客户能够提供不同领域的广泛试验解决方案。

安吉拉通力生命科技(ALS)是主要用于医疗保健业、药品业及在生命科学研究院里的生物医学仪器仪表的世界主要制造商。所生产的产品包括极端低温冷却器、低温冷却血库、血浆速冻冰箱、空调室、生物安全柜、隔音装置、绝对无尘室;公司给全球的实验式、大学、医院及药品业提供生物医疗领域的最佳解决方案。

安吉拉通力清洁技术(ACT)是由8家公司组成的集团公司,从事可再生能源及能效领域的业务;所生产的产品包括太阳能发电厂、聚光光伏发电厂(CPV)、具备菲涅尔耳反射装置、熔盐和直接蒸汽发生(DSG)吸热管的聚光太阳能热发电厂(CSP)、太阳能板、光伏逆变器以及薄膜包衣。

阿基米德太阳能公司(ASE)是太阳能领域的一家领先公司,所生产的是用于聚光太阳能热电站槽形抛物聚光器的吸热管。该吸热管是与意大利新技术、能源与可持续发展委员会(ENEA)的合作之下研发制造的,并可以应用于何种CSP发电厂,无论所采用的热传导液范畴。

### 参观内容

太阳能技术

### 实地参观目标

介绍太阳能热电领域所开发的创新技术,以最大化电能产量及效率。

### 联系地址

Villa San Faustino 镇, 06056 Massa Martana (佩鲁贾省)  
www.angelantoni.it

**Institution/Company**

Brovedani Group S.p.A.

**Institution/Company Profile**

The Brovedani Group consists of three companies and six production plants. It manufactures mechanical components with high standards and technological specialization using raw materials and natural resources efficiently.

The company, within the framework of a production process that reduces its environmental impact to a minimum, decided that its products and manufacturing processes use the lowest possible energy and non-renewable resources. The Environmental Management System Certification obtained in July 2008 has allowed the Brovedani Group to implement a constant and continuous improvement of the environmental performances by means of strong points such as selective waste collection, water, soil and air resources protection.

**Site Visit**

Environmentally Friendly Industry

**Objectives**

To present an example of an environmentally friendly industry through the application of technologies to reduce the impact on the environment such as grinding mud filtration and wastewater depuration equipment.

**Reference Address**

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

**Institution/Company**

CHOSE - Center for Hybrid and Organic Solar Energy

**Institution/Company Profile**

The Center for Hybrid and Organic Solar Energy (CHOSE) at Rome University, or “Tor Vergata”, was created on December 2006 from a collaboration between the Lazio region of Italy and the University of Rome “Tor Vergata” sharing the considerable intention to realize a Centre of Excellence for the research and development of new generation solar cells based on organic and organic-inorganic hybrid technologies. This is part of a larger strategy within the Lazio region of Italy in which other centers (on sustainable mobility and on hydrogen) have been funded to promote research and development into applied research and technology with industrial potential in the green energy sector. CHOSE involves several research groups of Tor Vergata University from Electrical/Industrial Engineering to Chemistry and Physics and has collaboration agreements with several other universities and research centers in Italy, Europe and the rest of the world.

The main objectives of the center are:

- \_ research and development in the field of organic and hybrid photovoltaics (OPV);
- \_ definition of an industrialization process for OPV
- \_ Technology transfer to large and SME;
- \_ reference point at a regional level on photovoltaic technologies;
- \_ participate in the Italian/European networks on photovoltaic technologies.

**Site Visit**

Science Parks and Sustainability

**Objectives**

To present an example of research and development in the field of organic and hybrid photovoltaics, (OPV)

**Reference Address**

Via Ardito Desio 60, 00131 Rome  
www.chose.uniroma2.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号法律各行政大区的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。

**参观内容**

空气质量控制

**实地参观目标**

介绍威尼托大区环保局所进行的城区及工业区内的空气监测业务，包括城区和工业区内。通过介绍SIMAGE项目的结构和目标而描述本局的空气污染监测以及工业区事故的反应方式。另外，还参观郊区里环境监测网络的监测站，以便介绍所安装的主要设备以及空气污染的监测参数。

**参观内容**

本地层级的环保局

**实地参观目标**

介绍威尼托大区环保局在环境控制领域所进行的业务。介绍分局负责进行环境控制工作的一些实例。

**参观内容**

环境应急的实践

**实地参观目标**

介绍发生环境事故时威尼托环保局的职能以及其协调作用。工业区的应急措施是通过SIMAGE项目结构和目标而介绍的。

**联系地址**

联系人Luisa Vianello女士  
Lissa大道6号, 30171 Mestre (威尼斯省)  
www.arpa.veneto.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。

**参观内容**

环保型企业

**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**

Centro Riciclo Vedelago S.r.l.

**Institution/Company Profile**

Since 1999, the Centro Riciclo Vedelago S.r.l. has been managing a stocking plant with a mechanical selection of waste for recycling materials.

The center receives material from municipalities, consortia and manufacturing companies which operate differentiated waste collection. Inputs to the center are only authorized if there is the strong possibility of re-using certain materials (e.g. plastics, metals, glass, paper, wood).

The center selects the materials according to their physical composition, reduces their volume and sends them to secondary plants or specialized companies which can use them in their productive cycles.

The firm has also studied and tested the use of plastics in concretes. The new line produces pellets derived from heterogeneous plastics coming from separate collection (non-recyclable dry waste and/or plastic scraps that cannot be re-used in other productive cycles) to be added to concretes.

Thanks to this process it is possible to completely recycle plastic waste which could not otherwise be used. The final product can be utilized instead of sand for concrete, to lighten concrete mortar and to bind minor concrete constructions.

**Site Visit**

Waste Recycling

**Objectives**

To analyze the EU and Italian regulatory framework of separate waste collection and treatment.

To present a firm directly involved in the recycling process, in order to focus on the problems and the opportunities related to waste recycling.

**Reference Address**

Via Molino 17, 31050 Vedelago (Treviso)  
www.centroriciclo.com (only Italian)

**Institution/Company**

Depuracque Servizi S.r.l.

**Institution/Company Profile**

Depuracque is an industrial group established in the early 1970s to carry out the design and building of industrial wastewater treatment plants.

Today it operates in the field of environmental protection and reclamation.

The main activities of Depuracque Servizi S.r.l. are the treatment, recovery and disposal of special, toxic/noxious, hazardous and non-hazardous waste on behalf of third parties, and the implementation of safety measures, monitoring, design and reclamation of contaminated sites with stationary and mobile equipment.

Depuracque s.r.l. carries out the design and construction of waste disposal, recovery and management plants, and water treatment and purification.

**Site Visit**

Sludge and Leachate Treatment

**Objectives**

To help understand the main steps of ground-contaminated water and wastewater disposal, through chemical, physical, biological and vacuum evaporation treatments.

**Reference Address**

Via Roma 145, 30030 Salzano (Venice)  
www.depuracque.it

**机构/公司**

CHOSE - 混合有机太阳能研究中心

**机构/公司简介**

罗马第二大学的混合有机太阳能研究中心是于2006年12月份由罗马第二大学和拉齐奥大区政府的合作之下成立的，目标为建立一所优秀研发中心以开发基于有机和有机非有机混合技术的新一代太阳能电池。该研究中心的设立属于拉齐奥大区政府推进清洁能源的更广泛政策；为了促进清洁能源的高科技含量、高产品化潜能产品的研发，大区政府还参股设立了另两所研究中心，焦点分别为可持续交通和氢能。混合有机太阳能研究中心的研究组包括罗马第二大学的电子工程系、工业工程系、化学系及物理学系的研究员及教授，并与意大利的和欧洲的大学和研究中心达成了合作协议。

中心的主要目标如下列：

- \_ 有机和混合太阳能（OPV）领域的研究开发；
- \_ OPV 工业化过程；
- \_ 对大型企业的技术转让；
- \_ 作为太阳能技术的大区级焦点；
- \_ 参与意大利和欧盟的太阳能技术网络。

**参观内容**

科学园区的可持续性

**实地参观目标**

介绍有机和混合太阳能技术研发的成绩

**联系地址**

Ardito Desio 街 60, 00131 Rome 罗马市  
www.chose.uniroma2.it

**机构/公司**

Centro Riciclo Vedelago S.r.l. - Vedelago 废物回收中心有限公司

**机构/公司简介**

1999年起，Vedelago废物回收中心有限责任公司一直经营了一家具备机械挑选器的可用作原料材废物贮存处理厂。该中心所处理的废物来自进行废物分类收集的周围城市联营公司及制造厂。只有肯定能用作原料的固体废物类型（塑料、金属、玻璃、纸张、木头）才准予进厂处理。

中心把材料按照其物理成分而分类，压缩其立体之后就送到次级工厂或能用作原料的工厂。

另外，公司还研究了并测验了用于水泥中的塑料，开动了一条专门生产将搅浑水泥的衍生小球，即分类垃圾收集所含有异质塑料的衍生物如小片塑料及不可回收干塑料。

这样可以回收通过其它处理法无法回收的塑料。最终产品能用于减轻水泥土灰浆、建设小规模水泥建筑或生产代替水泥中的砂。

**参观内容**

废物再循环

**实地参观目标**

分析欧盟及意大利有关废物分类收集及处理的法律法规。

介绍从事废物再循环过程的一家公司，以便强调废物回收的相关问题及机遇。

**联系地址**

Molino街17, 31050 Vedelago (特雷维佐省)  
www.centroriciclo.com (意大利语)

### Institution/Company

Dolomiti Bellunesi National Park

### Institution/Company Profile

The Dolomiti Bellunesi National Park was created on April 20, 1990, while the Park Authority, which manages the protected area, was established in July 1993.

The park comprises over 15 municipalities and is characterized by medium and high-mountain environments. The territory contains over 1,400 species of vascular plants, including several rare entities of great biogeographical interest. The park is situated at the edge of the southeastern alps in the central-southern section of Belluno Province (Veneto Region), and covers about 32,000 hectares; 16,000 of which were already protected by eight natural reserves belonging to the biogenetic reserve network of the Council of Europe. Nearby there are other protected areas (already established or yet to be established) contributing to the creation of a network of great biogeographical importance.

All the main alpine animal species are well represented (ungulates, birds of prey, tetraonids), together with interesting invertebrate fauna with a presence of endemic species. Moreover, the spontaneous return of certain types of lynx and bears has been observed.

The aims of the park are the safeguard of a complex of naturalistic, historical, landscape, and environmental values and the preservation of the biogenetic values of flora and fauna; the promotion of scientific research and environmental education; the creation of development opportunities through a careful policy capable of safeguarding the naturalistic values of the territory - its greatest resource.

### Site Visit

Italian National Parks

### Objectives

To present one of the Italian protected areas of national importance and to discuss the role natural parks play in biodiversity protection.

### Reference Address

Piazzale Zancanaro 1, 32032 Feltre (Belluno)  
www.dolomitipark.it

### 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, valorization and disposal cycle of the waste produced in the province of Venice, with the aim of guaranteeing the self-sufficiency of the territory served. Since its beginning, Ecoprogetto Venezia has shown great interest in the protection of the environment through the planning of a plant that is able to produce high quality and high calorific value RDF (refuse derived fuel) to be used without altering the very delicate equilibrium of the Venice area. For this reason, a system employing the existing thermal cycle and energy recovery from waste collected by Veritas (produced by around 860,000 citizens in 75% of the Province of Venice and more than 40 million tourists) was studied. This solution was also aimed at reducing the quantity of waste going into landfill.

This project led to the formation of a cooperation 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 institutions in charge of the task, and after obtaining the 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. During the years, the quantity of RDF used allowed the reduction of non-renewable natural fossil resources (coal) and waste - which would have been otherwise 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).

Considering 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);
- \_ a three-year contract (2013-2015) that could be extended by another year (at the parties' discretion);

### 机构/公司

Depuracque Servizi S.r.l. - 水净化服务有限责任公司

### 机构/公司简介

水净化公司是在70年代初成立的一家工业集团，目标为设计并建设一家工业污水处理厂。目前，集团公司从事环保和开垦领域的业务。

水净化公司的主要业务包括为第三方处理、回收和处置特殊、有毒、有害废物及无毒废物、实施安全措施以及通过固定的和移动设备监测并恢复污染地点。另外，该公司还进行废物回收利用处理厂的设计和建设，并进行污水处理和净化服务。

### 参观内容

污泥及渗漏处理（污水处理厂）

### 实地参观目标

使实习生理解到污染地下水及污水处理的主要过程，即化学、物理、生理以及真空蒸发的处理法。

### 联系地址

Roma路145号, 30030 Salzano (威尼斯省)  
www.depuracque.it

### 机构/公司

Dolomiti Bellunesi National Park 贝卢诺多洛米蒂山脉国家级自然保护区

### 机构/公司简介

贝卢诺多洛米蒂山脉国家级自然保护区是在1990年4月20日设立的，保护区管理局是1993年7月份设立的。

保护区位于威尼托大区贝卢诺省内阿尔卑斯山的东南山脉，覆盖15个城镇辖区的面积。中山及高山地区的自然环境都有，其生物多样性特别丰富，仅仅维管束植物超过1400种，包括不少珍稀物种。总面积为3,2万公顷，其中1,6公顷已经受欧盟理事会生物遗产留库的保护并属于8个专项的保护区。与附近的其它保护区（已成立的或将成立的）已造成了一个非常重要的生物地理高的网络。

山区动物种类也相当丰富（包括有蹄类、鸟类和松鸡科）并包括本地物种的无脊椎动物。最近，在保护区内个别山猫和熊被看到的，标志着他们正在自愿地回到保护区。

保护山地特有的地理资源、自然资源，尤其是生物遗传价值，以及其历史文化是保护区管理局的第一目标，但相当重要的是推动该领域的科学研究及生态教育并促进一种可持续性的发展方式，及高度重视环保事业的同时认识到自然环境是本地最宝贵的资源。

### 参观内容

意大利自然保护区

### 实地参观目标

介绍意大利国家级保护区之一，并介绍保护区在生物多样性的重要性。

### 联系地址

Zancanaro广场 1号, 32032 Feltre (贝卢诺省)  
www.dolomitipark.it

- \_ 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 old one, in order to better harmonize the operational activities;
- \_ environmental monitoring continuity.

The contract renewal also ensures the development of proper instruments of communication regarding the ecological footprint of RDF valorization. Thanks to the agreement with ENEL and the recovery of separated waste (among other reasons) only 6% of waste goes to landfill, a performance equal with Sweden. Ecoprogetto Venezia manages the air, water and operational by-products control systems, guaranteeing the analysis required by the integrated environmental authorization, as well as the technical activities to improve 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 that integrates different systems.

#### Reference Address

Integrated Waste Treatment Plant  
Via della Geologia 31, 30030 Fusina (Venice)  
[www.ecoprogettovenetia.it](http://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 studies, institutional capacity building and knowledge dissemination. The foundation's main aim is to contribute to the growth of knowledge in the field of energy, socio-economics, sustainable development and innovation issues 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, 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 Roma  
[www.enelfoundation.org](http://www.enelfoundation.org)

## 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;

\_ 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。

#### 参观内容

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](http://www.ecoprogettovenetia.it) (意大利语)



**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, photovoltaic and other renewables plants. 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 to 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, High-Efficiency Coal Conversion

**Objectives**

To introduce a converted high-technology power plant aimed at reducing electricity production costs, increasing reliability of provisions, moderating environmental impacts on the territory, contributing to reach Kyoto Protocol goals and, finally, reusing the site of an existing industrial area, reducing global impacts on the territory.

**Reference Address**

Torrevaldaliga Nord Power Plant  
Via Aurelia Nord 32, 00053 Civitavecchia (Rome)  
www.enel.com

**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****专业领域**

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 罗马市  
www.enelfoundation.org

**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 万千瓦，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73 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

**Institution/Company**

Environment Park S.p.A.

**Institution/Company Profile**

Environment Park was founded in 1996 through an 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 organisation of thematic events.

**Site Visit**

The Turin Smart City Initiative towards the 2020 Emissions Reduction Goals: the Environment Park's Role.

**Objectives**

During the visit the delegation was given an insight into the commitment of the Environment Park and some of the enterprises it supports towards the 2020 Emissions Reduction Goals.

**Site Visit**

High-Technology and Science Parks

**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**

Fondazione Distretto Green and High Tech Monza Brianza

**Institution/Company Profile**

The Green and High Tech Cluster of the Monza Brianza Foundation was established on the 18th June 2008 by four different entities: the Province of Milan (which passed its competencies on to the Province of Monza Brianza on June 2009), the Association of Municipalities for the High Tech Cluster Monza Brianza, Confindustria Monza Brianza and Chamber of Commerce, Industry, Artisans and Agriculture of Monza Brianza. The direct involvement of the founding members on the Board of Directors inspires the guidelines for the cluster's activities, focusing on industrial sectors involving companies that represent the history of the territory, paving the way for "aggregation" and hence "act as clusters". The guiding principle of the foundation is to help revitalize the competitiveness of the territory by widely spreading and sharing the excellence available on the territory and creating the conditions to attract new companies or to generate new "technology-based" firms as well as prominent personalities. The reference sectors of activities are:  
\_ energy, from reduction in consumption to the promotion of energy saving, from the development and use of renewable energy to the production of components and instruments for the generation of energy coming from non-fossil sources;  
\_ ICT (Information and Communication Technology), in the areas of R&D, implementation and manufacturing of products ranging from micro-electronic devices, systems and services dedicated to telecommunications and information management. To achieve this strategic objective, the foundation operates by identifying and promoting synergies among the high tech companies based in the territory and working to build the network and aggregate companies on:  
\_ research and development;  
\_ production chain;  
\_ company network and territory promotion.

**Site Visit**

High-Technology and Science Parks

**Objectives**

To present the role of industrial clusters in promoting green innovation, with a focus on new energy sources and ICT (Information and Communication Technology) as driving forces to sustain companies' competitiveness.

**Reference Address**

Via Lecco 61, 20871 Vimercate (Monza e Brianza)  
www.distrettohmb.it

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。

**参观内容**

清洁煤炭技术、高效率煤转换技术

**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。

**联系地址**

Torrevaldaliga Nord 发电厂  
Aurelia Nord 公路32号,  
00053 Civitavecchia (罗马省)  
www.enel.com

**机构/公司**

Environment Park 环境园股份公司

**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。

**参观内容**

走向2020年减排目标的都灵市智慧城市计划：环境园的作用。

**实地参观目标**

参观当中，代表团有机会了解环境园以及其成员企业在2020年减排目标的框架之下所做出的贡献。

**参观内容**

高技术科技园

**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

### Institution/Company

Friuli Innovazione, Udine - Science and Technology Park “Luigi Danieli”

### 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. Later on, other local partners granted 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 - the ideal space for turning ideas into projects and research into products.

Set within the center of Europe, in the heart of a region with a vocation for innovation and integration - in the ZIU (Zona Industriale Udinese) industrial area 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;

\_ **enterprise funding:** to inform, educate and support enterprises and researchers to identify the most appropriate finance instruments and key operating stages, search for partners and verify the eligibility for European or Italian funds;

\_ **enterprise development:** 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

High-Technology and Science Parks

### Objectives

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

### Reference Address

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

### Institution/Company

HERAmbiente S.p.A.

### Institution/Company Profile

Herambiente is Italy's largest company in the waste treatment sector. The company is 75% owned by the Hera Group, which is one of Italy's biggest multi-utility companies and provides environmental, water and energy services, with Ambiente Arancione Cooperatief U.A. (a subsidiary of the UK fund Eiser and the Dutch fund Apg) holding the remaining 25%.

With 81 certified plants, more than 700 specialised operators and a dedicated sales team, HERAmbiente operates on both the domestic and international markets and is an industry benchmark across Europe. Using an integrated management system that covers the entire treatment chain, HERAmbiente carries out the complete range of operational and commercial activities relating to waste disposal, treatment and material and energy recovery, providing its customers with safe, certified, efficient and environmentally friendly solutions.

The waste handled amounts to about 5 million tons per year, three of which is special waste. The electricity generated is 700 GWh and the thermal energy is 200GWh.

### Site Visit

Hazardous Waste Management

### Objectives

To provide an overview of different aspects linked to waste management and treatment through the presentation of HERAmbiente experiences in this field.

### Reference Address

Thermal Waste Treatment Plant  
Via Baiona 182, 48123 Ravenna  
ha.gruppohera.it

### 机构/公司

Fondazione Distretto Green and High Tech Monza Brianza 蒙扎布里安扎环保型高科技企业群基金会

### 机构/公司简介

蒙扎布里安扎环保型高科技企业群基金会是于2008年6月18日由下列单位成立的: 米兰省政府 (2009年6月份把其职权转给蒙扎布里安扎省政府)、蒙扎布里安扎高科技企业群城镇协会、本地工业联合会及商会。

创立者均为董事会成员并指定企业群的方针, 即发挥本地工业历史性产业的优势, 目标为团结协作, 在合作中共生共同发展。

通过普及并共享本地工业的优势, 基金会旨在崛起本地的经济发展, 提高本地企业的竞争力并以吸引新企业及高级人才而造成良好条件, 以便促进高新技术工业企业的创业。

企业群的主要产业如下列:

\_ 能源, 包括节能、能效、可再生能源、非矿物燃料发电的部件和设备;

\_ 信息通信技术 (ICT), 研发方面和产品的设计和制造, 包括微型电子装置、通信产业及信息管理产业的系统和装置;

为了达到上述策略性目标, 基金会推动高新技术企业之间的互动, 建成网络并鼓励下列方面的企业联营方式:

\_ 研究开发;

\_ 生产链;

\_ 企业网络及本地产业的推动。

### 参观内容

高新技术科技园

### 实地参观目标

介绍企业群在推进清洁创新技术所发挥的作用, 作为提高企业竞争力的驱动, 焦点为能源及信息通信技术。

### 联系地址

Lecco 街61号, 20871 Vimercate  
(蒙扎和布里安扎省)  
www.distrettohmb.it

### 机构/公司

Friuli Innovazione, Udine - Science and Technology Park “Luigi Danieli” 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“技术种子孵卵器”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。

### 参观内容

高新技术园区

### 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.friulininnovazione.it

### 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 both 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 Kazakstan (Almaty). With continuous attention to the environment, 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.

The offer includes:

- \_ 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 energy efficiency of the system.

### Reference Address

Via G. Pascoli 38,  
37059 Zevio Fraz. Campagnola (Verona)  
www.icicaldaie.com

### Institution/Company

ISE - Istituto per lo Studio degli Ecosistemi

### Institution/Company Profile

The Institute of Ecosystem Study (ISE) was created in 2002, merging different research institutions, among them the Italian Institute of Hydrobiology, created in 1938.

In the Verbania headquarters, the main research fields are lake ecosystems and their management, monitoring and recovery.

### Site Visit

Environmental Monitoring

### Objectives

Lake Maggiore is one of the largest lakes in Italy and it is affected by different kinds of pollutants, due to its exploitation as a tourist destination and to the intensive agriculture around it. The ISE Centre manages the study of the lake ecosystem and its monitoring tools. The lectures focused on the ISE organization and on the activities carried out in order to monitor the water quality in the lake and the soil pollutants in the surrounding area.

### Reference Address

Largo Tonolli 50, 28922  
Verbania Pallanza (Verbano-Cusio-Ossola)  
www.iii.to.cnr.it

### 机构/公司

HERAmbiente S.p.A. 赫拉环境股份公司

### 机构/公司简介

赫拉环境是废物处理方面的最大意大利公司。公司的75%股份由赫拉集团持有的，剩下的25%股份由Ambiente Arancione（桔色环境）合作社（英国Eiser基金和荷兰Apg基金的子公司）。赫拉集团是意大利最大多公用事业公司之一，提供环境、水利以及能源方面的服务。

赫拉环境公司已有81家获得认证的处理厂，职员总数为700多人，并设立了专门从事销售的工作团。公司在国内外市场都有相当可观的市场份额，是整个欧洲最大事业之一。赫拉环境采取覆盖整个处理链的综合性管理系统，因此直接从事所有的操作性和商务性业务，包括废物处理处置以及材料和能源回收并给其客户提供安全、被认证的、高效率的并环保型方案。每年处理的废物总量为500万吨，其中300万吨是特殊废物。发电功率为70万千瓦，热能为20万千瓦。

### 参观内容

风险废物管理

### 实地参观目标

通过赫拉公司在该领域的经验，提供对风险废物管理和处理的不同方面的简介。

### 联系地址

热能废物处理厂

Baiona 街182号, 48100 拉文纳市  
ha.gruppohera.it

### 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。

### 参观内容

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.icicaldaie.com

### Institution/Company

ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale

### Institution/Company Profile

ISPRA (Institute for Environment Protection and Research) carries out scientific and technical activities at a national level, providing protection, enhancement and improvement for the environment, water resources and soil.

The Department for the State of the Environment and Environmental Metrology develops and coordinates data-gathering and processing of the Italian Environmental Agencies, develops and harmonizes environmental indicators and assures comparability of environmental data at national level.

The Environmental Metrology Unit's mission is to assure the quality of analytical data in support of environmental policies in compliance with national environmental legislation and EU directives concerning environmental monitoring activities. The activities carried out include: production and characterization of matrix reference materials, organization of intercomparison exercises (with regular frequency), development and validation of analytical methods, coordination of a network of reference laboratories, collaboration with the National Institute of Metrology (INRIM), collaboration with national (UNI) and European (CEN) standardization bodies for the development of new standards for environmental monitoring, scientific co-operation and collaboration with international institutes and organizations e.g. Joint Research Centres IES and IRMM of EU, IAEA, IUPAC.

### Site Visit

Environmental Protection and Research

### Objectives

Presenting environmental monitoring standard systems, in particular, methods for the creation of a strategy at a national level for the definition of homogenous and harmonized sampling and measurement standards and protocols for all environmental laboratories.

### Reference Address

Environmental Metrology Service  
Via di Castel Romano 100/102, 00128 Rome  
www.isprambiente.it

### Institution/Company

Italcementi Group

### Institution/Company Profile

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 that binds 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, labor, environment and ethics.

### Site Visit

Low Carbon Industry (Calusco d'Adda Plant)

### Objectives

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

### Site Visit

Eco-building in Practice  
(i.lab Research and Innovation Center)

### Objectives

To present the use of new materials and renewable energy in order to achieve a high energy efficiency rate in buildings.

### Reference Address

Via Camozzi 124, 24121 Bergamo  
www.italcementigroup.com

### 机构/公司

ISE, 生态系统研究所

### 机构/公司简介

生态系统研究所于2002年成立，是几所研究机构，包括早于1938年成立的水文生物学研究所，合并而成。在Verbania市的总部所从事的主要研究领域为湖泊生态系统以及相关管理、监测及恢复。

### 参观内容

环境监测

### 实地参观目标

马焦雷湖是意大利最大湖泊之一，但由于旅游以及湖边的集约农业水里存有几种污染物。

研究所学习研究湖泊的生态系统以及监测工具。相关讲座将集中于研究所的组织机构以及所进行的业务，即湖水质的监测以及周围地区的土壤污染物。

### 联系地址

Tonolli广场50号, 28922 Verbania - Pallanza  
(韦尔巴诺-库西奥-奥索拉省)  
www.iii.to.cnr.it

### 机构/公司

ISPRA - 意大利环境保护与研究院，环境计量部门

### 机构/公司简介

意大利环境保护与研究院进行国家级的科学和技术业务并提供环保、水源及土壤方面的保护服务。

环境状态及环境计量学部门指导并协调本地环保分局的数据收集及处理，发展并规范环境指标并保证全国环境数据的可比性。

环境计量学单位的任务为保证分析数据的质量，依照国家环境法律及欧盟环境监测指令的规定。

所进行的业务包括：参考材料矩阵的生产并特征化、举行实验室之间的定期比较练习、研发并认证分析法、协调参考实验室网络、与国家计量学院（INRIM）合作、与国家及欧盟标准化机构的合作之下研发环境监测的新标准、与国际学院、组织和联合研究中心（欧盟的IES和IRMM、IAEA、IUPAC）进行科学方面的合作。

### 参观内容

环境保护与研究

### 实地参观目标

介绍环境监测系统的标准，包括环境质量标准、污染物排放标准、监测方法及质量评价标准并意大利的环境监测实验室和质量管理（新技术及环境监测方法、质量管理技术及环境监测实验室内所应用的方法）。

### 联系地址

di Castel Romano 大道100/102号, 00128 罗马市  
www.isprambiente.it

### Institution/Company

Kilometro Rosso Science and Technology Park

### Institution/Company Profile

Kilometro Rosso Science Park hosts a wealth of companies, research centers, laboratories, high-tech manufacturing facilities and innovation providers. The park is a multi-disciplinary campus that leverages the diversity of its occupants in order to promote dialogue between the worlds of academia, enterprise and science. Kilometro Rosso also taps the potential of complementary operations and specialisation, implementing an inter-disciplinary approach with a view to reaching new frontiers in science and technology. The park's mission is to promote the development of a hub of knowledge, innovation and high technology by creating a rendezvous point for innovation-driven companies and for scientific and R&D centres focusing on advanced technologies. Kilometro Rosso is a "node of an international network of relationships and connections" that boosts the share of skills, knowledge, information and know-how not only among its partners but also with the outside world. Running a business at Kilometro Rosso means operating within an architecturally and environmentally prestigious site in direct contact with leading institutes and industrial manufacturers in one of the so-called "Four Engines of Europe" (Lombardy). In order to favour innovation and cross-fertilization, that is the exchange of ideas, resources and skills of different groups, the park attracts businesses that operate within a wide spectrum of fields: from biotech to ICT, from design to mechatronics, from advanced materials to engineering, from textiles to prototyping, etc. Kilometro Rosso can count on the presence of about 1,500 R&D specialists and 40 different companies. Kilometro Rosso is fast becoming one of the most successful science parks of its kind and its expansion plans are highly ambitious: the park will play host to at least 3,000 employees within 5-6 years (researchers and other highly qualified personnel). Recently Kilometro Rosso was named by CENSIS (Report 2009) one of the top 10 excellent places for innovation in Italy.

### Site Visit

High-technology and Science Parks

### Objectives

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

### Reference Address

Via Stezzano 87, 24126 Bergamo  
www.kilometrorosso.com

### Institution/Company

LABOR S.r.l

### Institution/Company Profile

LABOR is a private laboratory that provides services aiming to develop new products or innovative services tailored to the customer's needs. The marketing, research and development teams jointly analyse the innovation technology requests from customers, focusing on the entrepreneur's point of view, with the awareness that when delivering a winning product to the market it is necessary to wisely blend both consolidated and cutting edge technologies. The long lasting cooperation with European universities and research centers allows us to scout the technologies ready to be turned into industrial applications; besides this, also taking care of the technical coordination of all the experimental and engineering activities, thus ensuring the high quality of the final product. The skills are multidisciplinary, from electronics to automation and control to mechanical design and chemical processes. These competencies are mainly applied to sectors of bio-medical, energetic systems, bioengineering and environmental technologies. LABOR is a technological partner for both big and small-sized companies, driving the whole development process through each phase, from the marketing concept to the product industrialisation. Our research and design competencies are integrated with consolidated capacities in project financing and project management, which allows us to put the customer in terms of exploiting the available funding opportunities at the regional, national and especially European level. The laboratories are situated in Rome, at the "Tecnopolo Tiburtino". LABOR carries out its activities in accordance with ISO 9001-2008 certified Quality System procedures, it is also accredited to the MIUR in the register of qualified laboratories for the research and experimental development in the fields of natural science and engineering.

### Site Visit

Science Parks and Sustainability

### Objectives

To see in practice an example of a private laboratory that develops new products and innovative services tailored to the customer's needs.

### Reference Address

Via Giacomo Peroni, 386 00131 Rome  
www.labor-eu.net

### 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的一个战略性行动倡议。

### 参观内容

低碳企业（Calusco D'Adda水泥厂）

### 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。

### 参观内容

生态建筑的实践（研究实验室与创新中心）

### 实地参观目标

介绍新材料以及可再生能源的应用以便达到建筑物的高能效。

### 联系地址

Camozzi街124号，24121 贝尔加莫市  
www.italcementigroup.com

### 构/公司

Kilometro Rosso 《红公里技术园》

### 机构/公司简介

《红公里技术园》组成成员包括公司、研究中心、实验室、高技术制造厂以及提供创新性服务公司。该跨行业的技术园发挥其成员的多样性以便促进学术界、商业界以及科学界之间的对话。《红公里技术园》高度重视互补专业的潜在性，因此采用一种多科性方式达到科技方面的新成绩。技术园的目标是作为知识、创新以及新技术的综合性中心，即以创新为驱动力变成公司和先进技术的研发机构的交点。作为“国际关系网的网节的《红公里技术园》鼓励其成员之间以及成员和外部世界之间的技巧、知识、信息和技术知识的共享。《红公里技术园》在所谓的“欧洲四台马达之一”（伦巴迪亚大区）。经营位于《红公里技术园》内的业务意味着位于一种高声望环境之内，直接接触主导机构以及制作企业。为了促进开放性创新及不同行业之间的意见交流、资源和技能的杂交，技术园吸引广泛经营范围的公司，包括生物技术、信息技术、设计和工程、机械-机电一体化、高级材料、纺织品、样机研究等。技术园的1500个研究开发专家在40家公司工作。《红公里技术园》的快速发展取得了可观的成绩，因此有计划扩大其工作人员人数，即五六年之内达到3000人（研究员及高素质技术人）。意大利公司投资研究院的2009年报告中，《红公里技术园》被列为第10位全国创新优秀地点。

### 参观内容

高技术科技园

### 实地参观目标

强调支持企业开业并促进环保型技术创新方面科技所起的重要作用。

### 联系地址

Stezzano 街87号，24126 贝尔加莫市  
www.kilometrorosso.com

**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 historical center 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 deepen the knowledge of 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**

Innovation Center  
Strada Settimo 410, 10156 Turin  
www.lavazza.com

**Institution/Company**

Marelli Motori S.p.A.

**Institution/Company Profile**

Marelli Motori S.p.A. has a tradition dating back to 1891 when Ercole Marelli founded the company. With over 100 years of manufacturing excellence and experience, Marelli Motori is recognized as a leading supplier to the power generation, industrial, petrochemical and marine market sectors, offering a complete range of Generators and Electric Motors in low and high voltage. These quality products are backed up by an organization of skilled people providing sales, service and technical support to the high standards demanded by their customers.

Marelli Motori designs, manufactures and sells:

- \_ synchronous generators in low and high voltage;
- \_ asynchronous generators in low and high voltage;
- \_ generators for Hydropower, UPS, Cogeneration, Industrial applications;
- \_ asynchronous Motors in Low and High Voltage;
- \_ hazardous Area Motors (IP55, IP56, IP65) in Low and Medium Voltage.

Each of these products is available in different types and power ranges:

- \_ generators from 15 to 9,000 kVA;
- \_ motors from 0.12 to 4,000 kW.

Marelli Motori offers a complete range of Generators and Electric Motors to a vast array of customers all over the world through their headquarters in Italy and the overseas companies located in UK, Germany, Malaysia, South Africa and USA.

**Site Visit**

Environmentally Friendly Industrial Production and Management

**Objectives**

To present a company which, by integrating quality and environmental management systems, was able to reduce the impact on the environment producing less waste and using less power for the manufacturing process.

**Reference Address**

Via Sabbionara 1, 36071 Arzignano (Vicenza)  
www.marellimotori.com

**机构/公司**

LABOR S.r.l LABOR 有限公司

**机构/公司简介**

LABOR有限公司是一家私营实验式公司，所提供的服务旨在开发特制的新产品或创新型服务。市场调查与研究开发组分析客户所需的技术创新，在尽量了解企业家的角度的同时研发出受市场欢迎的产品，即调节适当的成熟技术和尖端技术。与欧洲大学和研究中心的长期合作经验使公司搜索能够转为工业应用的创新技术；另外，公司还负责协调实验环节和工程环节的业务，因此保证最终产品的高质量。公司的技能是多科学的，包括自动化控制工程、机械设计和化学过程，主要应用于生物医疗、能源系统、生物工程及环保技术。LABOR作为大规模企业及中小企业的技术伙伴，并指导全部开发过程，从市场营销观念直到产品工业化。除了研发技术及产品设计之外，公司还提供项目筹资及项目管理方面的咨询，允许客户享用大区级的、国家级的以及欧盟专项基金的融资机会。实验式位于罗马的蒂泊蒂诺科技园区内。LABOR公司的业务是根据ISO质量体系认证的标准进行的，并是意大利教育与研究部的认可实验室，自然科学及工程学试验研发范畴。

**参观内容**

科技园与可持续性

**实地参观目标**

参观一家开发特制新产品及创新服务的私营实验式。

**联系地址**

Giacomo Peroni大道 386号，00131 罗马  
www.labor-eu.net

**机构/公司**

L. Lavazza S.p.A. 乐维萨股份公司

**机构/公司简介**

乐维萨公司是在于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，乐维萨公司是世界上最有名的意大利公司之一。

**参观内容**

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

**Institution/Company**

Martini & Rossi S.p.A. - Bacardi-Martini Group

**Institution/Company Profile**

Martini & Rossi is a leading company in the wine business.

It is part of the Bacardi-Martini group, third group in the global alcoholic beverages market.

The production plant in Pessione (province of Turin, Piedmont Region) is the cradle of Martini & Rossi: it produced 11,9 million cases bottling in 2013 of Martini, sparkling wines, spirits and liqueurs, serving around 120 countries.

**Site Visit**

Industrial Energy Efficiency

**Objectives**

The main objective of the visit was to show an example of efficient use of energy in industrial lighting, with the recent introduction of advanced LED technology lighting in Pessione Plant.

**Reference Address**

Piazza Luigi Rossi 2, 10023 Pessione - Chieri (Turin)  
www.martinierossi.it (only in Italian)

**Institution/Company**

Proambiente S.c.r.l.

**Institution/Company Profile**

Proambiente is a CNR (National Research Council) spin-off and operates as an R&D division in outsourcing, dealing with environmental themes. Proambiente mostly works for companies that need non-standard and innovative solutions for:

- \_ environmental impact reduction and increase in productivity;
- \_ environmental monitoring in air, water using advanced and innovative techniques;
- \_ new instruments and sensors development for environmental monitoring and contaminants reduction.

Proambiente gathers the experience of many decades of research activities, considering the participation of renowned researchers and the availability of labs, instruments and know-how of the CNR personnel.

Proambiente gathers the experience of many decades of research activities, considering the participation of renowned researchers and the availability of labs, instruments and know-how of the CNR personnel.

**Site Visit**

Environmental Monitoring Instruments

**Objectives**

To illustrate practical examples of environmental monitoring instruments in the field of air and water.

**Reference Address**

via Gobetti 101, 40129 Bologna  
www.consorzioproambiente.it (only in Italian)

**机构/公司**

Marelli Motori S.p.A. 意大利马拉利股份公司

**机构/公司简介**

早于1891年由Ercole Marelli 先生建立的意大利马拉利股份公司，是一家有百多年历史专业制造电机产品的世界公认的领先制造商，其产品被广泛应用于工业、电厂、石化、船舶等行业，为全世界的客户提供完整系列的高压和低压电机和发电机。公司坚持“一流产品、一流管理、一流服务”的精神，拥有一批高素质的管理人员和技术人员负责销售部、客户服务部及售后部门为全球客户提供最佳服务。

马拉利公司设计、制造并销售下列产品：

- \_ 低压及高压同步电机；
- \_ 低压及高压异步电机；
- \_ 水能电机、UPS电机、热电联合电机、工业电机；
- \_ 低压及高压的异步发电机；
- \_ 低压及高压的危险区域发电机（IP55, IP56, IP65）。

上述产品有不同类型和功率：

- \_ 15至 9,000 千伏特安培电机；
- \_ 0.12 至 4,000 千瓦发电机。

公司最强的长处之一是能够满足多种客户需要的应用，所生产的电机和发电机系列完整，产品销售遍及全球。

公司的总部在意大利，在意大利和马来西亚拥有生产厂，并在德国、英国、西班牙、美国和南非设有销售、服务及分销办事处

**参观内容**

环保型的工业生产及管理

**实地参观目标**

介绍一家高度重视环保事业的公司，通过质量体系和环保管理体系的一体化减少了对环境的影响，即减少了生产过程的废物量及能耗量。

**联系地址**

Sabbionara 大道1号， 36071 Arzignano (维琴察省)  
www.marellimotori.com

**机构/公司**

Martini & Rossi S.p.A. - Bacardi-Martini Group  
马天尼罗西股份公司 - 百加地马天尼集团

**机构/公司简介**

马天尼罗西是味美思酒世界最大生产厂家，属于百加地马天尼酿酒集团，全球酒类产品市场的第三大公司。

酿酒产地在Pessione（皮埃蒙特大区，都灵省），马天尼罗西的摇篮；2013年马天尼酒、起泡酒、白酒，烈酒等酒类产品的的产量为119万瓶，营销在全世界的120个国家。

**参观内容**

工业能效

**实地参观目标**

参观的主要目标为介绍工业照明的节能系统，因为在Pessione酿酒厂最近安装了先进的LED帝光技术照明。

**联系地址**

Luigi Rossi 广场2号， 10023 Pessione,  
Chieri (都灵省)  
www.martinierossi.it (意大利语)



**Institution/Company**

Siena Province

**Institution/Company Profile**

Siena Province is 3,820 square kilometers, the population is about 272,600 inhabitants and there are 36 municipalities.

Siena Province was the first province in Italy to earn the Environmental Certification ISO 14001, the ISO 14064/1 Certification for the GHG Emission Balance and it was one of the first to obtain EMAS Registration.

In the big project Siena Carbon Free 2015, Siena Province collectively applies all actions to reset CO<sub>2</sub> in order to improve the environment and combat climate change.

The project started with the realization of the GHG Emissions Balances at the provincial level according to the international IPCC methodology and ISO 14064/1 certification. This study was realized in collaboration with Siena University.

Many projects were realized to improve the sustainability of the province and the impact of the population on their environment. Among them were: CO<sub>2</sub> emission reduction, energy saving, energy efficiency, waste management and the public participations of citizens.

The achieved results met and even surpassed the EU standards on CO<sub>2</sub> emission reduction, and since 2013 Siena Province has been certified as a Carbon Free Province.

**Site Visit**

Eco-City in Practice

**Objectives**

To see an example of a city that is implementing the Eco-City principles as part of the Province Policies archiving high results in term of Sustainability.

**Reference Address**

Piazza Duomo 9, 53100 Siena  
www.provincia.siena.it (only in Italian)

**Institution/Company**

SMAT - Società Metropolitana Acque Torino S.p.A.

**Institution/Company Profile**

SMAT S.p.A., a publicly owned joint stock company, is one of Italy's leaders in the field of integrated water services, including mains supply, sewage and treatment. It boasts one of the world's most up-to-date and advanced production and management systems. SMAT manages some of the largest and most advanced water mains, drinking water and wastewater treatment plants in Europe. It was the first utility company to use surface water for the production of drinking water in Italy. SMAT offers reliable turnkey engineering solutions and has extensive experience in planning and overseeing construction, quality control and final inspection of water plants and networks. SMAT is the official supplier of flight water for the ISS - International Space Station; a load of space water produced by SMAT Water Preparation Facility has recently been delivered to the station by an Ariane 5 vector, launched from the Kourou base in Guyane.

**Site Visit**

Drinking Water Treatment Plant

**Objectives**

To illustrate the characteristics of the firm, the water network management and the control processes of public water distribution.

**Site Visit**

Wastewater Treatment Plant

**Objectives**

To illustrate the characteristics of one of the largest wastewater treatment plants in Europe

**Reference Address**

C.so XI Febbraio 14, 10152 Turin  
www.smatorino.it

**机构/公司**

Proambiente S.c.r.l. Proambiente合营有限公司

**机构/公司简介**

Proambiente是意大利国家研究委员会的衍生单位，作为环保事业的研发外包单位。

Proambiente的对象为要求非标准化的、创新的解决方案公司，主要在下列领域：

\_降低环境影响并提高生产率

\_采用先进的创新技术的空气监测及水质监测

\_用于环境监测及缓解污染的新仪器仪表及感测器

Proambiente有几十年的研究经验，工作人员包括著名的专家及研究员，并能够使用意大利研究委员会的实验式及设备。

**参观内容**

环境监测设备

**实地参观目标**

介绍空气质量及水质监测的实践

**联系地址**

Gobetti 街 101号, 40129 波洛尼亚市  
www.consorzioproambiente.it (意大利语)

**机构/公司**

Siena Province 锡耶纳省政府

**机构/公司简介**

锡耶纳省政府辖区面积为3820 平方公里，人口为27,26 万人，省内设有36 所城镇。

锡耶纳省是意大利首次省份获得ISO 14001族环境认证、ISO14064/1族温室气体排放平衡认证，并最早获得EMAS（欧盟管理与审计体制）认证的省份之一。

锡耶纳省政府提出了“2015年锡耶纳零碳”项目，旨在采取以削减二氧化碳排放量的一系列措施，为了改善环境质量并应对气候变化现象。

项目的第一步为制定全省辖区的温室气体平衡，依照IPCC（政府间气候变化专门委员会）指定的测量方法及ISO认证的标准。该项目的研究是与锡耶纳大学的合作之下进行的。

为了改善锡耶纳省的可持续性并减少人为业务对环境的影响，省政府采取了不少措施，包括但不限于：二氧化碳减排项目、节能项目、能效项目、废物管理、居民参与环保政策。

所达到的成绩超过了欧盟所指定的二氧化碳减排目标，因此自从2013年起，锡耶纳省获得了零碳身份的认证。

**参观内容**

生态城市的实践

**实地参观目标**

参观一所正在实施生态原则的城市，在省政府更广泛的可持续发展政策的框架之下。

**联系地址**

Duomo 广场9号, 53100 锡耶纳市  
www.provincia.siena.it (意大利语)

### 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 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 actions designed to promote, improve and stimulate the development of high-tech industry through the 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. Since the beginning, the real estate development was conceived whilst taking into account planning parameters based on functionality and utilization. The park system is structured according to 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.

### Site Visit

High Technology and Science Parks

### 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 6, 00131 Rome  
www.tecnopolo.it

### 机构/公司

SMAT S.p.A. 都灵市政水务公司股份公司

### 机构/公司简介

希玛特股份公司，即都灵市政水务公司，是一家国有股份公司并是意大利水综合服务领域的主导企业。其业务包括总水管供应、下水道和水处理。公司的生产及经营系统是全世界最先进的、最高级之一。希玛特公司经营着若干欧洲最大并最先进的水总管、饮用水和废水处理厂。在意大利，该公司率先使用地表水生产饮用水。希玛特公司提供可靠的全承包工程解决方案，并在水厂和水网的计划和建设监督、质量控制和终期检查上有着广泛的经验。另外，希玛特公司是国际空间站的水供应商。最近公司水处理厂所生产的一批空间水通过在欧洲的发射场—法属圭亚那的Kourou 发射的Ariane-5型火箭送到了国际空间站。

### 参观内容

饮用水处理法（饮用水处理厂）

### 实地参观目标

介绍该公司的特点、其水网管理和水量分布的控制过程。

### 参观内容

污水处理（污水处理厂）

### 实地参观目标

介绍欧洲最大污水处理厂之一的特点。

### 联系地址

XI Febbraio 大道14号, 10152 T都灵市  
www.smatorino.it

### 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。

**Institution/Company**

Thetis S.p.A.

**Institution/Company Profile**

Thetis S.p.A. is a highly innovative engineering and environmental services company. Thetis S.p.A. is active in the development and management of projects and innovative technological applications in the following fields: environment and territory; civil engineering, energy and plants; ITS and integrated systems; modelling and forecast systems, construction management. Thetis S.p.A. provides services to a wide range of local, national and international clients in different European countries. It operates from the Venice "Arsenale" and it deals with restructuring and economic regeneration; the company has built up its skills in over a decade of work safeguarding the delicate Venetian lagoon ecosystem. Established in 1993, it has a capital of 11 million euros and counts both private and public companies amongst its members. Thetis has a turnover of an average of 30 million euros and employs a highly qualified staff of 119 units. Each year, 60% of the staff is involved in training.

**Site Visit**

Water Pollution Prevention in Practice

**Objectives**

To present practical experiences of system studies on sustainable development within the territory, remediation of polluted industrial areas, environmental monitoring systems and services linked to water management.

**Site Visit**

Safeguard of Venice

**Objectives**

To provide the opportunity to observe interventions, both realized and in progress, for the defence and safeguard of the precious lagoon ecosystem.

**Reference Address**

Castello 2737/f, 30122 Venice  
www.thetis.it

**Institution/Company**

TiFS Ingegneria S.r.l.

**Institution/Company Profile**

TiFS is an engineering company set up in 2001 that operates in the plant engineering sector with a high level of specialization and specific expertise in HVAC, public health, fire protection, electricity, communication, safety, security, lighting systems, etc.

The common aspect of TiFS' projects is the constant search for innovative, environmentally friendly solutions that also respect the global economy and security criteria.

**Site Visit**

Eco-Building in Practice

**Objectives**

To present an example of eco-building - how it is built and how it functions - in order to underline the importance of and opportunities for energy efficiency in buildings.

**Reference Address**

C.so Stati Uniti 56, 35127 Padova  
www.tifs.it

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。

**参观内容**

高新技术园区

**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 6号，00131 罗马市  
www.tecnopolo.it

**机构/公司**

Thetis S.p.A. 西特斯股份公司

**机构/公司简介**

西特斯股份公司是一家高度创新性的工程及环保公司。

公司从事下列领域工程的开发和管理以及相关的创新技术应用：环保和地区工程学；市政工程、能源和发电厂；智能交通系统和综合性系统；模拟和预测系统；建设管理以及研发。

公司的客户群极为广大的，包括本地公司、全国和不同欧洲国家的公司。其总部位于威尼斯历史性的军械库内，经过本公司自身负责建筑物的装修及经济复兴化。公司在错综复杂并极为脆弱的生态系统——威尼斯泻湖，进行了十几年的保护工作而获得了其丰富经验。

公司是在1993年成立的，其资金为110万欧元，主要股东为私有和国有企业。营业额为300万欧元，工作人员为119人，均具有高学位。

每年其的工作人员60%都参加培训。

**参观内容**

水污染防治的实践

**实地参观问目标**

介绍本地可持续发展、污染工业区域的修复、环境监测系统以及水管理有关服务等方面的有系统性研究的实践和经验。

**参观内容**

威尼斯保护

**实地参观问目标**

给实习生提供观测以保护宝贵泻湖生态系统而所采取措施的机会，包括已完成和正在进行的措施。

**联系地址**

Castello 2737/f号，30122 威尼斯市  
www.thetis.it

#### Institution/Company

Treviso Municipality

#### Institution/Company Profile

The municipality of Treviso has a population of about 80,000 inhabitants. The wastewater produced in its territory is treated in two plants. The main plant, with an overall capacity of 70,000 PE, receives both civil wastewater and organic waste derived from Treviso's municipality. In order to promote continuous innovation in this field, the municipality's treatment plant area hosts a research group from the University of Venice's Environmental Science Department, as well as the University of Verona and other linked universities.

#### Site Visit

Integrated Water Management

#### Objectives

To present an innovative treatment plant that integrates the water cycle and the organic fraction of urban solid waste, combining high levels of depuration performance with energy recovery.

#### Reference Address

Integrated Water Management Plant  
Via Cesare Pavese 18, 31100 Treviso  
www.comune.treviso.it (only Italian)  
www.masteringegneriaambienteenergia.com (only Italian)  
www.incaweb.org

#### 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 is specialised 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. 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.elt.unisi.it

#### 机构/公司

TiFS Ingegneria S.r.l.蒂弗斯工程有限公司

#### 机构/公司简介

2001年设立的TiFS公司是一家在工厂工程领域经营业务的高度专业性工程公司，尤其在供暖、通风和空调系统以及公共卫生、消防、电力、通讯、安全设施、保安设施、照明系统等方面具备专门技术。TiFS公司所进行的项目均有个共同特点，即在遵守经济和安全全球化规则的同时不断地寻找环境友好的创新方案。

#### 参观内容

生态建筑的实践

#### 实地参观目标

介绍一座生态建筑的实例并展示建筑的建设方式和功能，以便强调建筑能效的重要性及商机。

#### 联系地址

Stati Uniti大道56号，35127帕多瓦市  
www.tifs.it

#### 机构/公司

Treviso Municipality, 特雷维佐市政

#### 机构/公司简介

人口为大约8万居民的特雷维佐市及周围区域所产生的废水由几家废水处理厂负责处理。规模最大的一家的处理总量为7万居民当量，并接收处理来自特雷维佐的城市废水和有机废物。为了促进该领域的不断创新，在处理厂区内创办了一个研究所，由威尼斯大学环境科学系、维罗纳大学以及其他大学的专家组成的。

#### 参观内容

废水综合管理（废水综合处理厂）

#### 实地参观目标

介绍一家新型的废水处理厂，该厂把水循环与城市固体废物的有机馏分综合起来，又把净化的高级性能与能源回收利用结合起来。

#### 联系地址

废水综合处理厂  
Cesare Pavese街18号，31100 特雷维佐市  
www.comune.treviso.it (意大利语)  
www.masteringegneriaambienteenergia.com (意大利语)  
www.incaweb.org

**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 to pay great attention to the environment. The finished items are studied in detail, linking design and eco-compatibility. In fact, the productive process preserves 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**  
VdV S.r.l - Vento di Venezia

**Institution/Company Profile**

VdV S.r.l. was established in 2003 to plan, set up and manage recreational boating facilities and services in the Venice lagoon as well as to use nautical businesses as a tool to help regenerate and revitalise degraded local areas. In 2004 VdV opened a marina on Certosa Island, Polo Nautico Vento di Venezia, a multi purpose center for nautical activities with the aim of revitalizing the abandoned island and make it usable, through the establishment of economic activities and services for residents and tourists. The marina includes a boatyard for the construction and maintenance of traditional Venetian crafts, technical support facilities for all kinds of leisure craft, training and promotional activities for water sports and a nautical school. The island also has a mooring facility for all types of boats and leisure craft, as well as a hotel with a bar and restaurant. In order to pursue its mission of regenerating Certosa Island, VdV S.r.l. completed a study for the renovation of the island's buildings and open spaces, entering a public-private partnership that won the tender to manage the entire area for the next 50 years.

**Site Visit**  
Green Areas in the City

**Objectives**  
To illustrate an example of the successful reuse of a green area within the city and show its integration into city life and policies.

**Reference Address**  
Certosa Island, Venice  
www.ventodivenezia.it (only Italian)

**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2012年为锡耶纳大学的联合研究中心的遗产。

**专业领域**

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

**机构/公司**

Valcucine S.p.A.瓦乐厨房股份公司

**机构/公司简介**

Valcucine公司是在1980年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。

**参观内容**  
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

### Institution/Company

VEGA - Parco Scientifico Tecnologico di Venezia S.c.a.r.l.

### 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 center of Venice, in the industrial area of Porto Marghera.

VEGA offers to the enterprises the opportunity to corroborate on technological content, increasing competitiveness in the global market, producing a new model of culture and management of Enterprise 2.0. VEGAIncube host 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 Pandora, in collaboration with the Boston MIT Media Lab, 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. In fact, 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 remediation of industrial areas.

### Site Visit

High-Technology and Science Parks

### Objectives

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

### Reference Address

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

### Institution/Company

Veritas S.p.A.

### Institution/Company Profile

Veritas S.p.A. is the first 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, and behind companies also operating in energy management yet in more 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, firms and the territory in general. It operates in the integrated water and environmental services cycle, and it sells and distributes energy through its subsidiaries. Furthermore, it provides urban, community, territorial and industrial services and handles cemeteries, wholesale markets and environmental reclamation work.

### Site Visit

Drinking Water Supply (Drinking Water Treatment Plant)

### Objectives

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

### Site Visit

Wastewater Treatment Plant

### Objectives

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

### Reference Address

Santa Croce 489, 30135 Venice  
www.gruppoveritas.it (only Italian)

## 机构/公司

VdV S.r.l - Vento di Venezia 威尼斯风有限公司

### 机构/公司简介

威尼斯风有限公司是于2003年创立的，其经营项目为设计、建成并经营威尼斯泻湖内的游艇设施及相关服务并把航海产业作为崛起本地的落后经济。2004年在Certosa 岛屿“威尼斯风航海俱乐部”开业了，作为航海业务的多元性平台。目标为启动面向本地居民及游客的经济活动和服务而把较为偏僻的岛屿复兴起来。

俱乐部具备一所用于建立并维修威尼斯传统小艇和各种游艇的技术支持设施；还举办水上体育班并经营一所航海学校。岛屿上还有一弯各种游艇能停泊的系泊处和一家带有酒吧餐厅的高级酒店。

为了达到崛起岛屿经济的目标，威尼斯风有限公司进行岛屿总体面积新布置的研究，包括现有建筑物及露天区；设计完成了之后，通过一家与国有单位的合资企业中标了经营全部岛屿区的项目，为期50年。

### 参观内容

城区绿地

### 实地参观目标

介绍城区绿地重新利用的成功项目，使自然环境融入城市的生活及政策

### 联系地址

Certosa 岛屿，威尼斯

www.ventodivenezia.it (意大利语)

## 机构/公司

VEGA - Parco Scientifico Tecnologico di Venezia S.c.a.r.l. 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。威尼斯技术园的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。

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，威尼斯技术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。

### 参观内容

高技术科技园

### 实地参观目标

威尼斯技术园旨在开发“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。

### 联系地址

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

**Institution/Company**

Zanardi Fonderie S.p.A.

**Institution/Company Profile**

Zanardi Fonderie S.p.A. is a family business that produces spheroidal ductile iron castings and austempered ductile iron castings (ADI) with a green moulding process. Production is located in Minerbe (Verona, Italy) with about 220 employees. The production capacity is mostly oriented toward medium sized batches and the full annual capacity is about 22,000 tons, of which 10,000 is ADI, with a unit weight between 0.5 and 120 kg. At Zanardi Fonderie, both production and organization meet international quality standards: the OHSAS 18001 certification guarantees internal security, while the EMAS registration and ISO 14001 certification attests to external environment. The quality offered to the customer is certified by the ISO standard 9001:2000, which includes co-design. Zanardi Fonderie believes that real sustainability comes from an internal process focused on ongoing environmental, economic, social and institutional improvement. All levels and entities must join in on this action to collectively achieve clear objectives.

Focusing on energy efficiency, energy use is in accordance with ISO 50001, “rules for the application of energy” and are made from the consumption of electricity, natural gas or oil. The entities that produce consumption in the counters engines are mainly for electricity, burners, boilers for natural gas and transportation for diesel.

**Site Visit**

Energy Efficiency Management

**Objectives**

To present how an energy intense company controls its energy use and efficiency and the measures adopted and investments made to reach this goal.

**Reference Address**

Via Nazionale 3, 37046 Minerbe (Verona)  
www.zanardifonderie.com

**Institution/Company**

ZIPR - Consorzio per la Zona di Sviluppo Industriale 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’ needs in order to create the required conditions to set up and develop the productive activities in the industrial and small business sector. This would be achieved by managing the infrastructures and services offered to enterprises, valuating and reinforcing the positive environmental outcomes and equally preventing, eliminating or reducing 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:

- \_ acquisition of lands 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 settled enterprises.

**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（大部业务分已获得了相关认证）。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。

**参观内容**

饮用水供给（饮用水处理厂）

**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。

**参观内容**

污水处理厂

**实地参观目标**

介绍回水利用的工业废水处理法的案例。

**联系地址**

Santa Croce 市区489号，编号30135  
www.gruppoveritas.it（意大利语）

**机构/公司**

Zanardi Fonderie S.p.A. Zanardi 铸造厂股份公司

**机构/公司简介**

Zanardi 铸造厂公司是一家家庭企业，采用一种绿色的塑造过程生产球墨铁铸件及（ADI）。产地在Minerbe（维罗纳省），全体工作人员约200人。主要为中型铸铁块的年度生产量为2,2万吨，其中1万是等温淬火球墨铸铁件，单位重量为0.5至120公斤。Zanardi铸铁厂的生产环节及管理环节均获得了国际标准的认可：劳动安全方面获得了OHSAS 18001认证，环保方面获得了EMAS认证以及ISO 14001族认证。而对客户所提供的质量方面，包括协调设计之内，获得了ISO标准 9001:2000族认证。

Zanardi 铸造厂公司立足公司全部环节陪同协调才能实施真正的可持续性，因此环保方面、经济方面、社会方面及管理方面均应当不断地改善升级。

有关能效方面，公司的能耗方式符合涉及到电能消耗、煤气消耗及石油消耗的ISO 50001族的“能源应用规则”。机轴转数表最大开支来自电能、燃烧器、天然气火炉及用于运输的柴油。

**参观内容**

能效管理

**实地参观目标**

介绍怎么一家高能耗公司为达到了节能能效目标所采取的措施并投入的资金。

**联系地址**

Nazionale 大道3号，37046 Minerbe（维罗纳省）  
www.zanardifonderie.com

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.

Before reaching Roja stream, 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 naturally treated thanks to the presence of Phragmites plants.

#### Site Visit

Environmentally Friendly Industry

#### 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](http://www.zipr.it)

## 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。

## 参观内容

环保型企业

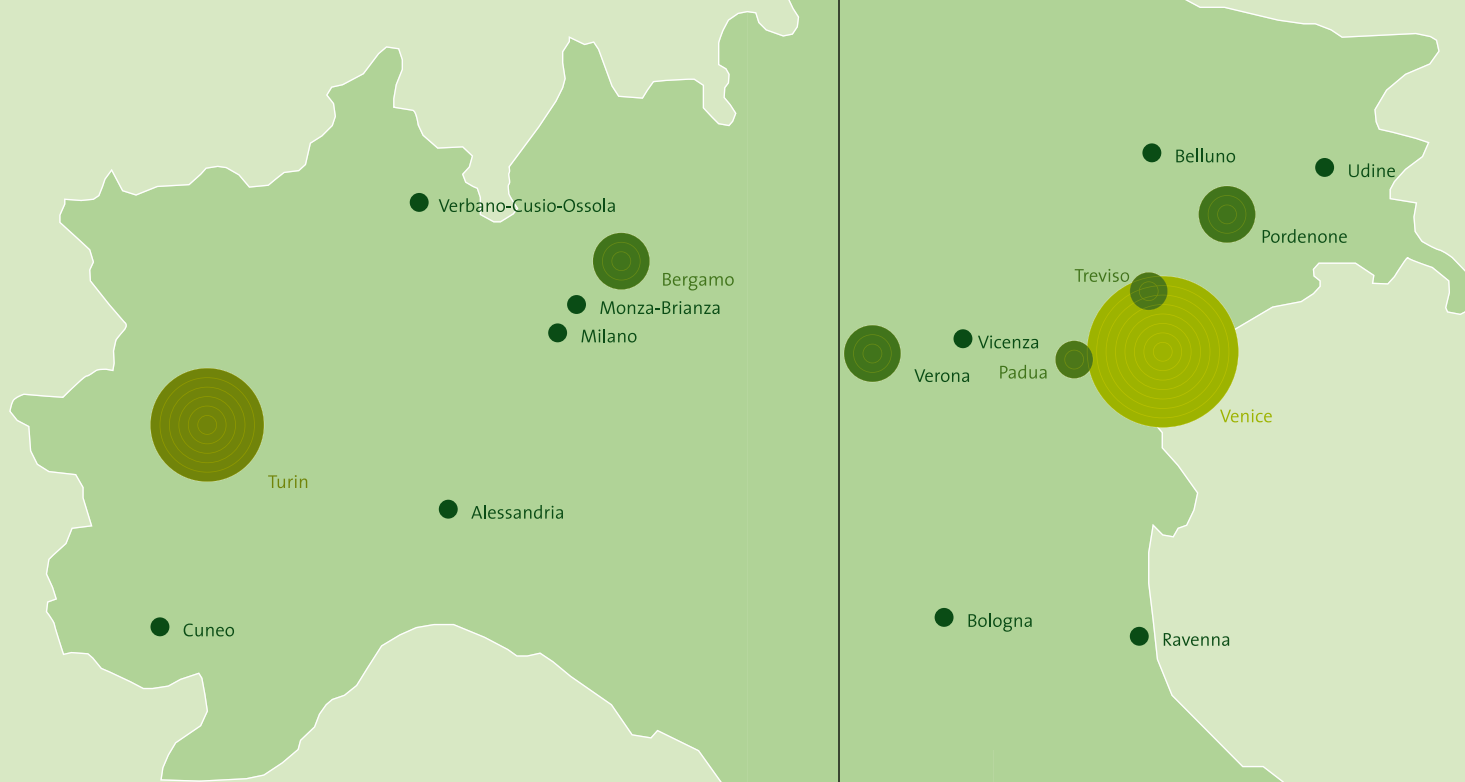
### 实地参观目标

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](http://www.zipr.it)





**Alessandria (1)**

Albea Tubes Italy S.p.A

**Belluno (1)**

Dolomiti Bellunesi National Park

**Bergamo (3)**

Italcementi Group, Calusco D'Adda Plant  
Italcementi Group, i.lab Research and Innovation Center  
Kilometro Rosso

**Bologna (1)**

ProAmbiente S.c.r.l.

**Cuneo (1)**

AlbaPower S.p.A.

**Milan (1)**

ABB S.p.A.

**Monza-Brianza (1)**

Distretto High-Tech Monza Brianza

**Padua (2)**

Acegas Aps S.p.A.  
TiFS Ingegneria S.r.l.

**Perugia (1)**

Angelantoni Industrie S.p.A.

**Pordenone (3)**

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

**Ravenna (1)**

HERAmbiente S.p.A.

**Rome (6)**

Tecnopolo Tiburtino  
LABOR Industrial Research Lab  
CHOSE Lab  
ISPRA  
Enel S.p.A., Torrevaldaliga Nord Power Plant  
ENEL Foundation

**Siena (2)**

University of Siena, Environmental Legal Team  
Siena Province

**Treviso (2)**

Centro Riciclo Vedelago S.r.l.  
Treviso Municipality, Integrated Water Management Plant

**Turin (6)**

AgrinewTech - ANT  
AGROINNOVA - University of Turin  
Environment Park  
L. Lavazza S.p.A.  
Martini & Rossi S.p.A. - Bacardi-Martini Group  
SMAT S.p.A.

**Udine (1)**

Luigi Danieli Science and Technology Park

**Venice (8)**

Acqua Minerale San Benedetto S.p.A.  
ARPAV  
Depuracque Servizi S.r.l.  
Ecoprogetto Venezia S.r.l.  
Thetis S.p.A.  
VdV S.r.l., Certosa Island Park  
VEGA  
Veritas S.p.A.

**Verbano-Cusio-Ossola (1)**

ISE

**Verona (3)**

AgsM Verona S.p.A.  
ICI Caldaie S.p.A.  
Zanardi Fonderie S.p.A.

**Vicenza (1)**

Marelli Motori S.p.A.

**亚历山德里亚 (1)**

Albea Tubes Italy S.p.A 意大利阿贝尔化妆品罐股份公司

**贝卢诺 (1)**

Dolomiti Bellunesi National Park 贝卢诺多洛米蒂山脉国家级自然保护区

**贝尔加莫省(3)**

Italcementi Group意大利水泥集团, Calusco D'Adda水泥厂  
Italcementi Group意大利水泥集团, 研究实验室与创新中心  
Kilometro Rosso 《红公里》技术园

**波洛尼亚省 (1)**

ProAmbiente S.c.r.l.  
ProAmbiente 合营有限公司

**库内奥省 (1)**

AlbaPower S.p.A. Alba 电力股份公司

**米兰省 (1)**

ABB S.p.A. ABB股份公司

**蒙扎-布里恩扎 (1)**

Distretto High-Tech Monza Brianza 蒙扎和布里安扎环保型高科技企业群基金会

**蒙扎-布里恩扎(2)**

Acegas Aps S.p.A. Acegas Aps股份公司  
TiFS Ingegneria S.r.l.蒂弗斯工程有限公司

**佩鲁贾省 (1)**

Angelantoni Industrie S.p.A. 安吉拉通力机械 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

**拉文纳省(1)**

HERAmbiente S.p.A. 赫拉环境股份公司

**罗马省(6)**

Tecnopolo Tiburtino 蒂泊蒂诺科技园  
LABOR Industrial Research Lab LABOR有限公司工业研究实验室  
CHOSE Lab 混合有机太阳能研究中心  
ISPRA 意大利环境保护与研究院  
ENEL S.p.A., 意大利电力集团公司Torrevaldaliga Nord 发电厂  
ENEL Foundation 意大利电力集团公司基金会

**锡耶纳省(2)**

University of Siena 锡耶纳大学, 环境法律研究小组  
Siena Province 锡耶纳省政府

**特雷维佐省(2)**

Centro Riciclo Vedelago S.r.l. 废物回收中心有限公司  
Treviso Municipality特雷维佐市政, 废水综合处理厂

**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  
L. Lavazza S.p.A.乐维萨股份公司

Martini & Rossi S.p.A. - Bacardi-Martini Group马丁尼罗西股份公司 - 百加地马丁尼酿酒集团  
SMAT S.p.A. 都灵市政水务公司股份公司

**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(8)**

Acqua Minerale San Benedetto S.p.A. San Benedetto 矿泉水股份公司  
ARPAV威尼斯托大区环保局  
Depuracque Servizi S.r.l.水净化服务有限责任公司  
Ecoprogetto Venezia S.r.l. 威尼斯生态项目有限公司  
Thetis S.p.A.西特斯股份公司  
VdV S.r.l. - Certosa Island Park 威尼斯风有限公司 - Certosa 岛屿园  
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

**韦尔巴诺-库西奥-奥索拉省(1)**

ISE生态系统研究所

**维罗纳省 (3)**

AgsM Verona S.p.A. 维罗纳城市综合服务 股份公司  
ICI Caldaie S.p.A. ICI 锅炉股份公司  
Zanardi Fonderie S.p.A. 铸造厂股份公司

**维琴察省(1)**

Marelli Motori S.p.A. 意大利马拉利股份公司

Training Profile Data

培训简况及数据



## Training courses

### 2013

Delegation	Course	General Schedule	Participants
CASS	Waste Management	Mar. 3 <sup>rd</sup> – 14 <sup>th</sup> 2013	37
CASS	Water Pollution Prevention and Control	Mar. 17 <sup>th</sup> – 28 <sup>th</sup> 2013	38
MOST	High-Technology and Science Parks for Sustainable Development	May 18 <sup>th</sup> - 30 <sup>th</sup> 2013	26
BMEPB and SEPB	Eco-City	Jun. 2 <sup>nd</sup> – 13 <sup>th</sup> 2013	41
NDRC	Capacity Building on Climate Change	Jun. 16 <sup>th</sup> – 27 <sup>th</sup> 2013	38
MOST	Innovation of Enterprises and Green Technologies	Jun. 29 <sup>th</sup> - July 11 <sup>th</sup> 2013	25
TSTC	Eco-City Building and Innovation Management	Sep. 1 <sup>st</sup> – 12 <sup>th</sup> 2013	39
MEP	Water Pollution Prevention and Control	Sep. 8 <sup>th</sup> – 19 <sup>th</sup> 2013	32
NDRC	Climate Change: Policy, Greenhouse Gas Emission Inventory and Communication	Oct. 13 <sup>th</sup> – 24 <sup>th</sup> 2013	39
MEP	Multilateral Environmental Agreements (MEAs) and Biodiversity Protection	Oct. 20 <sup>th</sup> – 28 <sup>th</sup> 2013	27
CASS – Beijing	Eco-Management: Strategies and Policies	Oct. 21 <sup>st</sup> – 25 <sup>th</sup> 2013	160
MOST - Beijing	Industrial Energy Efficiency	Oct. 21 <sup>st</sup> – 23 <sup>rd</sup> 2013	26
BMEPB - Beijing	Eco-city	Oct. 22 <sup>nd</sup> 2013	60
SEPB - Shanghai	Eco-city	Oct. 25 <sup>th</sup> 2013	60
MIIT - Chengdu	Industrial Energy Efficiency	Oct. 28 <sup>th</sup> 2013	60
MEP	Water Pollution Prevention and Control	Nov. 3 <sup>rd</sup> – 11 <sup>th</sup> 2013	28
CASS	Eco-friendly City	Nov. 10 <sup>th</sup> – 21 <sup>st</sup> 2013	40
MOST	Industrial Energy Efficiency	Nov. 16 <sup>th</sup> – 28 <sup>th</sup> 2013	26
CASS	Clean Energy and Climate Change	Nov. 24 <sup>th</sup> – Dec. 5 <sup>th</sup> 2013	41
BMEPB and SEPB	Pollution Control Strategy and Instruments	Dec. 1 <sup>st</sup> – 12 <sup>th</sup> 2013	41
MIIT	Industrial Energy Efficiency	Dec. 8 <sup>th</sup> – 18 <sup>th</sup> 2013	37

Total courses in Italy 2013: 16

Total courses in China 2013: 5

Total participants 2013: 921

## 培训课程

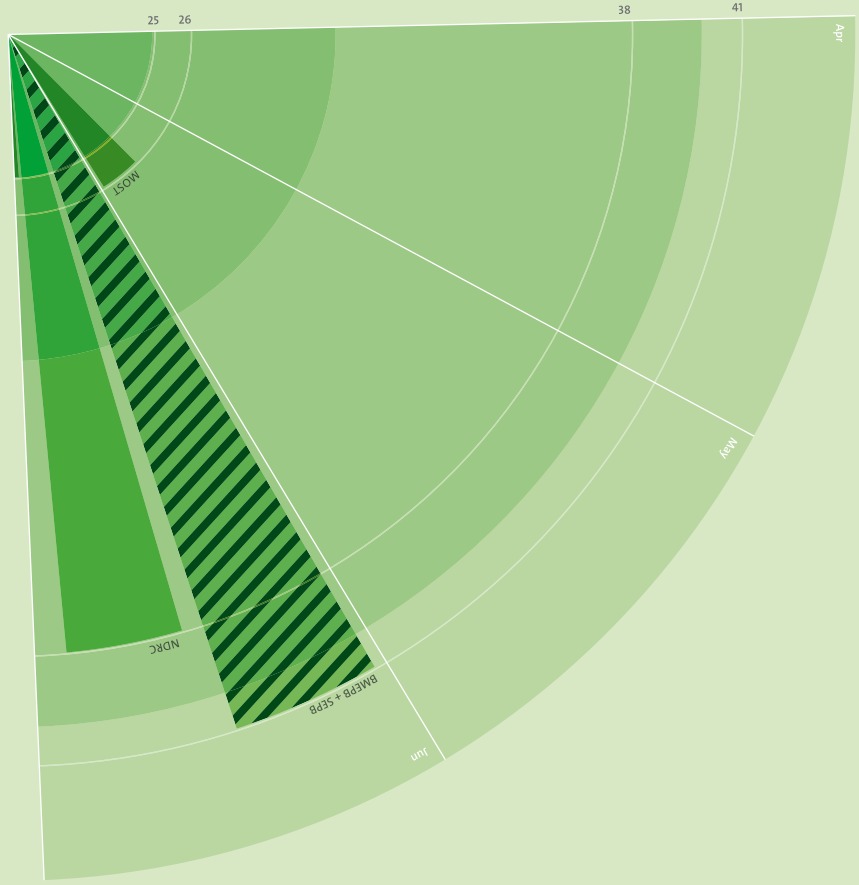
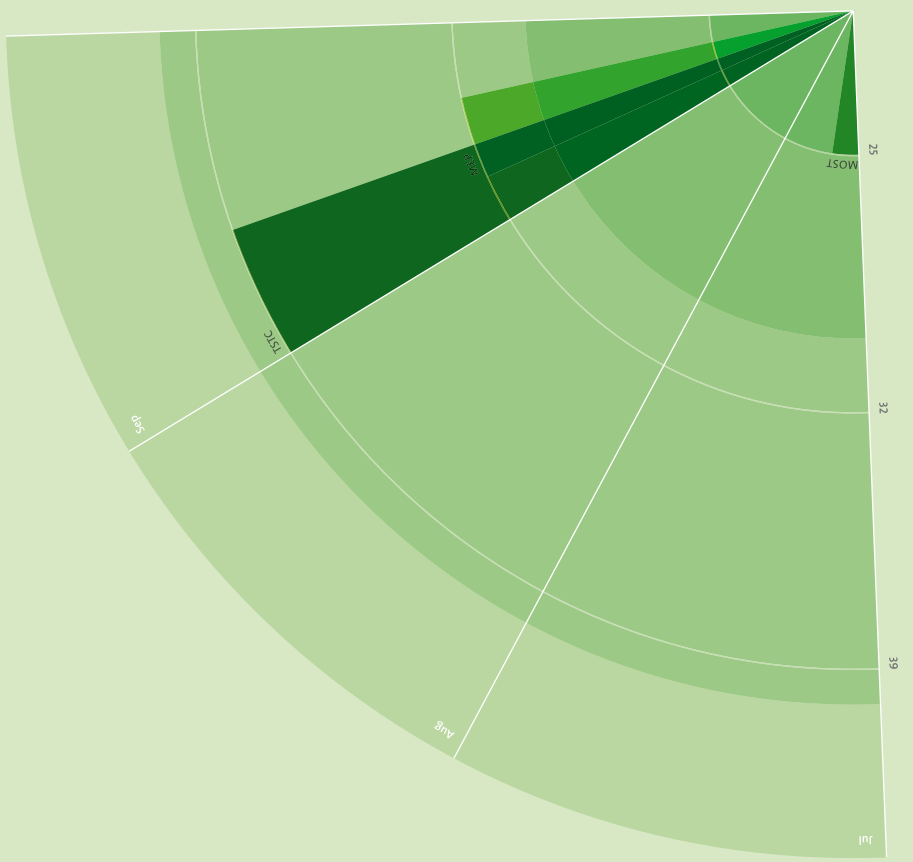
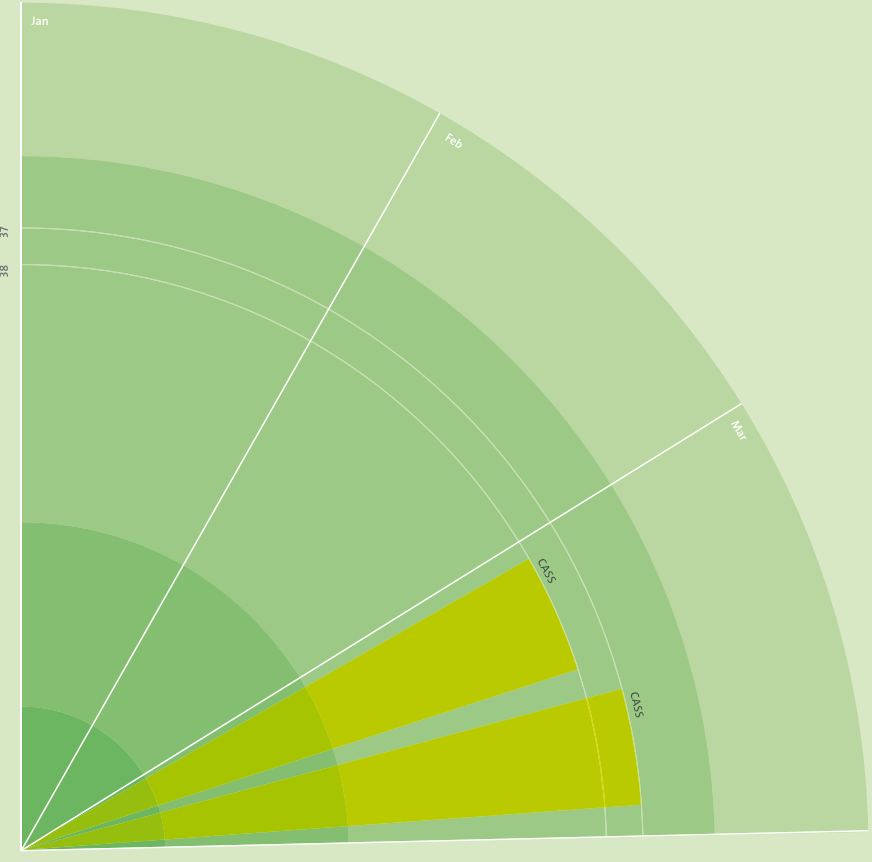
### 2013年

代表团	课程	总日程	人数
中国社会科学院	废弃物管理	2013年3月3日至14日	37
中国社会科学院	水污染防治	2013年3月17日至28日	38
中国科学技术部	可持续发展的高新技术与科技园	2013年5月18日至30日	26
北京市环保局 和 上海市环保局	生态城市	2013年6月2日至13日	41
国家发展和改革委员会	气候变化能力建设	2013年6月16日至27日	38
中国科学技术部	企业创新技术与绿色技术	2013年6月29日至7月11日	25
天津市科学技术委员会	生态城市建设及创新管理	2013年9月1日至12日	39
中国环境保护部	水污染防治	2013年9月8日至19日	32
国家发展和改革委员会	气候变化: 政策、温室气体清单与国家信息通报	2013年10月13日至24日	39
中国环境保护部	多边环境协议以与生物多样性保护	2013年10月20日至28日	27
中国社会科学院 - 北京	生态管理策略	2013年10月21日至25日	160
中国科学技术部 北京	工业能效	2013年10月21日至23日	26
北京市环保局 - 北京	生态城市	2013年10月22	60
上海市环保局 - 上海	生态城市	2013年10月25日	60
工业和信息化部 - 成都	工业能效	2013年10月28日	60
中国环境保护部	水污染防治	2013年11月3日至11日	28
中国社会科学院	环保型城市	2013年11月10日至21日	40
中国科学技术部	工业能效	2013年11月16日至28日	26
中国社会科学院	清洁能源与气候变化	2013年11月24日至12月5日	41
北京市环保局 和 上海市环保局	污染防治的战略与工具	2013年12月1日至12日	41
工业和信息化部	工业能效	2013年12月8日至18日	37

2013年在意大利的课程总数: 16

2013年在中国的课程总数: 5

2013年参加者总人数: 921



### Training lecturers

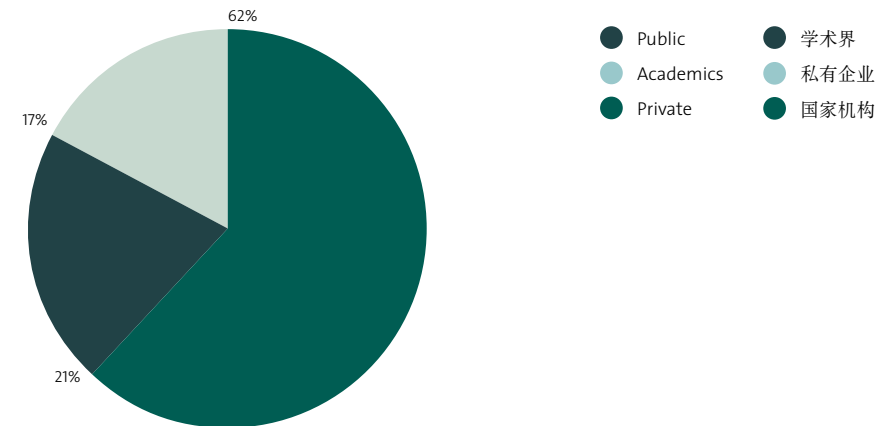
More than 170 lecturers/speakers from academia, the public sector and private companies were invited to cover a wide range of topics, discuss different theoretical and practical aspects of environmental management and sustainable development, present case studies and exchange experiences with the participants.

### 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170多位讲师受到邀请。

Figure 1. Lecturers' affiliation

图1. 讲师来源



### Training participants

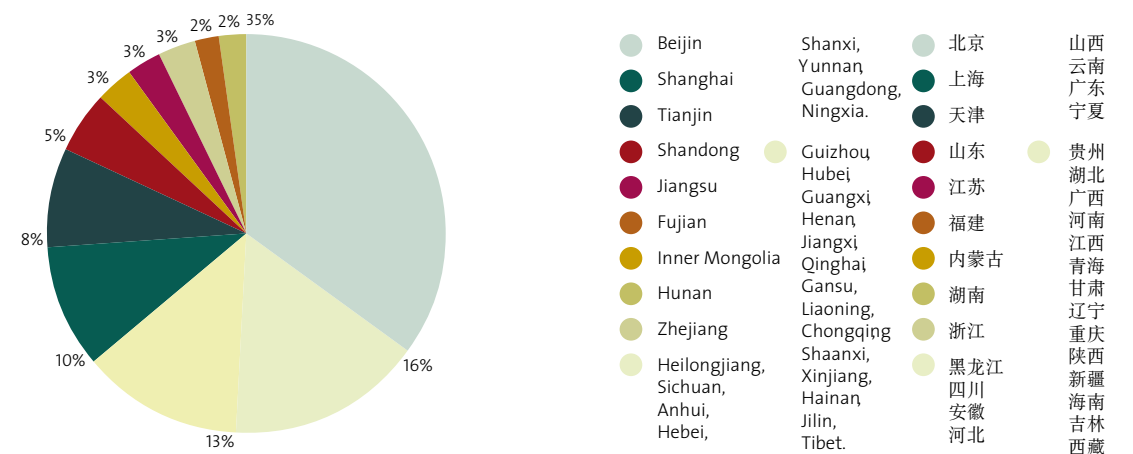
More than 900 participants attended the Advanced Training Program this year. Most of the trainees came from Beijing, and those coming from the other municipalities, provinces and autonomous regions was approximately the same as in previous years. The large number of provinces involved ensured that the 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900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

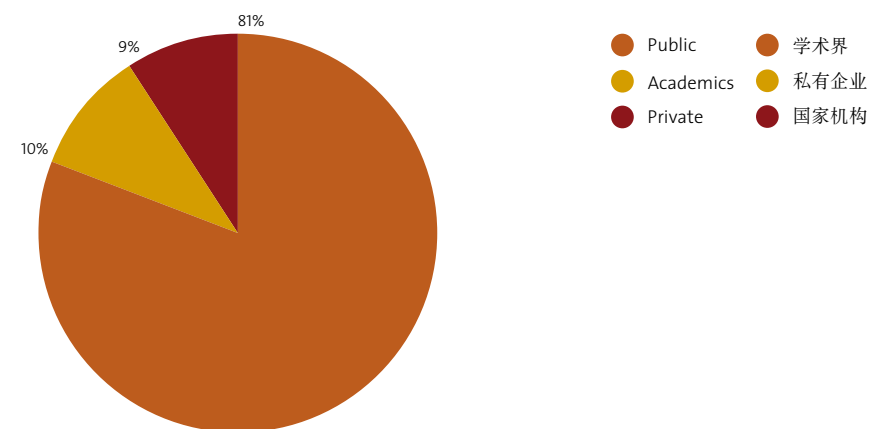


The training addressed Chinese government officials, academics and representatives of the private sector involved in the broad field of environmental management.

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. - Water, Wastewater & Energy Supply Agency of Rome
ACT	Angelantoni CleanTech
ADI	Austempered Ductile Iron
ALS	Angelantoni Life Science
AMA	AMA Roma S.p.A. - Waste Treatment Agency of Rome
ANT	AgriNewTech
ARP	Regional Park Agency of the Lazio Region
ARPAV	Agenzia Regionale per la Prevenzione e Protezione Ambientale del Veneto - Veneto Regional Agency for Environmental Prevention and Protection
ASE	Archimede Solar Energy
ATAC	ATAC S.p.A. - Mobility Agency of Rome
ATT	Angelantoni Test Technologies
BIC	Business Innovation Center
BMEPB	Beijing Municipal Environmental Protection Bureau
CASS	Chinese Academy of Social Sciences
CDM	Clean Development Mechanism
CEEM	Central Environmental and Energy Management
CEMS	Continuous Emissions Monitoring Systems
CEN	European Standardization Bodies
CENSIS	Centro Studi Investimenti Sociali - Social Investments Study Center
CHOSE	Center for Hybrid and Organic Solar Energy
CITTC	China-Italy Technology Transfer Center
CMCC	Centro Euro-Mediterraneo per i Cambiamenti Climatici - Euro-Mediterranean Center for Climate Change
CNR	Consiglio Nazionale delle Ricerche - National Research Council
CO <sub>2</sub>	Carbon Dioxide
CORILA	Consorzio per il Coordinamento delle Ricerche sul Sistema Lagunare di Venezia - Consortium for Coordination of Research Activities concerning the Venice Lagoon System
CRUP	CRUP Fundation - Fondazione Cassa di Risparmio di Udine e Pordenone
CSP	Concentrated Solar thermal Power
De-NO <sub>x</sub>	Denitrification
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
EEA	European Environmental Agency
ELT	Environmental Legal Team
EMAS	Eco-Management and Audit Scheme
EMEP	European Monitoring and Evaluation Programme
EN	European Norm
ENEA	Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile - Italian National Agency for New Technologies, Energy and Sustainable Economic Development

ACEA	罗马市政供电供水股份公司
ACT	安吉拉通力清洁技术
ADI	等温淬火球墨铸铁
ALS	安吉拉通力生命科技
AMA	罗马市政环境股份公司
ANT	农业新技术
ARP	拉齐奥大区 大区级公园管理局
ARPAV	威尼托大区环境预防和保护局
ASE	阿基米德能源公司
ATAC	罗马市政交通股份公司
ATT	安吉拉通力试验技术公司
BIC	大区企业创新中心
BMEPB	北京市环境保护局
CASS	中国社会科学院
CDM	清洁发展机制
CEEM	环境与能源集中管理
CEN	欧洲标准委员会
CENSIS	意大利公司投资研究院
CHOSE	混合有机太阳能研究中心
CITTC	中意国际技术转移中心
CMCC	欧洲地中海气候变化研究中心
CNR	国家研究院
CNR	意大利国家研究委员会
CO <sub>2</sub>	二氧化碳
CORILA	威尼斯泻湖研究活动管理委员会
CRUP	乌迪内和波尔德诺内储蓄银行基金会
CSP	聚光太阳能热发电
De-NO <sub>x</sub>	脱氮
EBITDA	未计利息、税项、折旧及摊销的利润
EEA	欧盟环境局
ELT	环境法律研究小组
EMAS	欧盟管理与审计体制
EMEP	欧盟环境监测和评价计划
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
ETS	排放交易机制

ENEL	Ente Nazionale per l'Energia Elettrica - National Agency for Electric Energy
EPB	Environmental Protection Bureau
ETS	Emissions Trading Scheme
EU	European Union
FIRE	Federazione Italiana per l'Uso Razionale dell'Energia - Italian Federation for Ration Energy Use
GHG	Greenhouse Gas
GMOs	Genetic Modified Organisms
GWh	GigaWatt hour
HERA	Holding Energia Risorse Ambiente - Energy Resources Environment Holding
HEV	Hybrid & Electric Vehicle
HVAC	Heating, Ventilating and Air Conditioning
IAEA	International Atomic Energy Agency
ICT	Information and Communication Technology
IES	Institute for Environment and Sustainability
IMELS	Italian Ministry for the Environment, Land and Sea
INRIM	Istituto Nazionale di Ricerca Metrologica - National Institute of Metrology
IPLA	Istituto per le Piante da Legno e l'Ambiente - Institute for Timber Trees and the Environment
IPCC	Intergovernmental Panel on Climate Change
IRMM	Institute for Reference Materials and Measurements
ISE	Istituto per lo Studio degli Ecosistemi - Institute of Ecosystem Study
ISO	International Organization for Standardization
ISPRA	Istituto Superiore per la Protezione e la Ricerca Ambientale - High Institute for Environmental Protection and Research
ISS	International Space Station
ITS	Information Technology Services
IUPAC	International Union of Pure and Applied Chemistry
JRC	Joint Research Center
kVa	kilo Voltampere
kW	kilo Watt
LCA	Life Cycle Assessment
MEAs	Multilateral Environmental Agreements
MEP	Ministry of Environmental Protection of China
MIT	Massachusetts Institute of Technology
mIn	million
MOST	Ministry of Science and Technology of China
MW	Megawatt
NDRC	National Development and Reform Commission of China
OHSAS	Occupational Health and Safety Assessment Series

EU	欧盟
FIRE	意大利能源联盟
GHG	温室气体
GMOs	转基因生物
GWh	千兆瓦小时
HERA	能源、资源与环境集团公司
HEV	混合与电动机动车
HVAC	供热、通风与空调
IAEA	国际原子能机构
ICT	信息通信技术
IES	环境与可持续发展研究院
IMELS	意大利环境、领土与海洋部
INRIM	国家计量学院
IPLA	意大利林业与环境研究所
IPLA	成林木和环境研究所
IPCC	政府间气候变化专门委员会
IRMM	参考物与测量研究院
ISE	生态系统研究所
ISO	国际标准化组织
ISPRA	意大利环境保护与研究院
ISS	国际空间站
ITS	信息技术服务
IUPAC	国际纯粹与应用化学联合会
JRC	欧盟联合研究中心
kVa	千伏特安培
kW	千瓦
LCA	生命周期评价
MEAs	多方环境协议
MEP	中国环境保护部
MIT	麻省理工大学
mIn	百万
MOST	中国科学技术部
MW	兆瓦
NDRC	中国国家发展和改革委员会
OHSAS	职业健康安全管理体系族
OPV	有机太阳能
ONLUS	非营利公益组织
PE	人口当量



OPV	Organic Photovoltaics
ONLUS	Organizzazione Non Lucrativa di Utilità Sociale - Non-profit Social Welfare Organization
PE	Population Equivalent
PhD	Doctor of Philosophy
PIF	Progetto Integrato Fusina - Fusina Integrated Project
PMO	Project Management Office
R&D	Research and Development
R.E.G.E.S	Riduzione Emissioni Gas Serra - Greenhouse Gas Reduction
REPROS	Interdepartmental Center on Regulation, Environmental Protection and Sustainable Development
RES	Renewable Energy Sources
S.c.a.r.l.	Società Consortile a Responsabilità Limitata - Limited-Liability Consortium Company
S.n.c.	Società in Nome Collettivo - General Partnership
S.p.A.	Società per Azioni - Joint-stock Company
S.r.l.	Società a Responsabilità Limitata - Limited-liability Company
SAM	Sustainable Asset Management
SEPB	Shanghai Municipal Environmental Protection Bureau
SICP	Sino-Italian Cooperation Program
SIMAGE	Sistema Integrato di Monitoraggio Ambientale e Gestione delle Emergenze - Integrated System for Ambient Monitoring and the management of industrial risk and accident
SMAT	Società Metropolitana Acque Torino - Municipal Water Company of Turin
TEN	Thematic Environmental Networks Center
TSTC	Tianjin Science and Technology Committee
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNI	Ente Nazionale Italiano di Unificazione - Italian Organization for Standardization
UNITAR	United Nations Institute for Training and Research
USA	United States of America
VC	Venture Capitalist
VdV	Vento di Venezia s.r.l., Wind of Venice
VEGA	VEnece GAteway for Science and Technology
VERITAS	Veneziana Energia Risorse Idriche Territorio Ambiente Servizi - Venice Energy, Water Resources, Territory, Environment, Services
VIU	Venice International University
WBCSD	World Business Council for Sustainable Development
ZIPR	Zona Industriale Ponte Rosso - Ponte Rosso Industrial Zone
ZIU	Zona Industriale Udinese - Industrial Zone of Udine

PhD	博士
PIF	Fusina 综合项目
PMO	项目管理办公室
R&D	研究开发
R.E.G.E.S.	温室气体减排
REPROS	法规、环保与可持续发展的联合研究中心
RES	可再生能源
S.c.a.r.l.	联营有限责任公司
S.n.c.	合伙公司
S.p.A.	股份公司
S.r.l.	有限责任公司
SAM	可持续资产管理
SEPB	上海市环境保护局
SICP	中意环保合作项目
SIMAGE	威尼斯工业区内工业风险及事故的环境监测与管理结合系统
SMAT	都灵市政水务公司
TEN	环境主题网络中心
TSTC	天津市科学技术委员会
UK	英国
UN	联合国
UNEP	联合国环境规划署
UNFCCC	联合国气候变化框架公约
UNI	意大利国家规范化当局
UNITAR	联合国训练研究所
USA	美国
VC	创业基金投资者
VdV	威尼斯风有限公司
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
ZIPR	红桥工业开发区
ZIU	乌迪内工业区

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在得到森林管理委员会  
国际认证和欧盟生态标记  
认证的纸张上印刷

