



# ANNUAL REPORT 2014







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# MISSION



Environment, Energy and Economy – the 3 Es of the logo - and the deep interconnections among these three fundamental spheres of sustainable development, represent and reflect the identity of FEEM and are at the core of its research activities.

FEEM is indeed a nonprofit, nonpartisan research institution devoted to the study of sustainable development, providing timely and objective analysis on a wide range of environmental, energy and global economic issues.

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FEEM's mission is to improve through research the quality of decision-making in public and private spheres. This goal is achieved by creating an international and multidisciplinary network of researchers working on several innovative projects, by providing and promoting training in specialized areas of research, by disseminating research results through a wide range of outreach activities, and by delivering directly to policy makers via participation in various institutional fora.

FEEM's operations are inspired by some guiding principles. FEEM sets a bold research agenda addressing big questions and emerging issues in the economic and social context. While strictly linked with the academic community, it embraces intellectual curiosity and supports risk-taking in pursuing research. Its agenda emphasizes "real world" issues and the policy relevance of the outputs.

FEEM brings together researchers from various fields at different levels of experience, in order to fertilize ideas and foster the accumulation of human capital inside and outside the organization.

FEEM promotes excellence, boldness of ideas and creativeness, but quality, rigor and impact remain the distinctive features of its activity. Research outputs are theoretically sound, fact-based, and generally validated by the scientific community through peer review processes. FEEM aims at translating analyses into practical ideas, and at presenting them in user-friendly formats to inform and shape the public debate.

While remaining thoroughly Italian in location and perspective, FEEM promotes the international dimension of its activities by selecting topics of global relevance, by creating networks and partnerships in various countries, and by attracting researchers trained and working abroad.

### **Enrico Mattei**

FEEM is entitled to Enrico Mattei, a key character in the history of Italian industry, the founder of Eni and upright leader in the energy industrial system and international relations in the era of the post-World War II economic expansion.

Passion, strategic vision and innovation: Enrico Mattei's legacy has allowed Eni to become the world's sixth largest oil & gas company and to play a leading role in the energy industry. His way of thinking was visionary to the point of transforming a defeated agricultural country into an advanced industrial nation with a profitable state-owned energy sector, mobilizing the political system and involving different actors of the civil society. Mattei was one of the first Italians to develop a frontier business mentality and a genuine respect for other cultures. He also strongly believed that investing in young people was a key element for development, especially focusing on excellence in education, training and research for future solutions.

Mattei's most valuable heritage for FEEM is the ability to imagine the future. Fondazione Eni Enrico Mattei aims at keeping this ability alive to meet today and tomorrow's challenges, renewing on a daily basis its commitment to research, support to policy and to the civil society.

# OUR HISTORY

1989	Official recognition by the President of the Italian Republic
1990	FEEM starts operations in Milan FEEM contributes to the establishment of the European Association of Environmental and Resource Economists (EAERE)
1991	Launch of FEEM "Note di Lavoro" working papers series Support to the EC in developing an integrated economic-energy-environmental model for Europe
1992	Support to the Italian Delegation at the Earth Summit in Rio de Janeiro AntiChernobyl XXI: FEEM joins the winning consortium for the establishment of the Ukrainian ecopolis
1993	FEEM inaugurates the editorial series on "Economics, Energy, Environment" with Kluwer Academic Publishers and "Ambiente e Sviluppo" with il Mulino Launch of computer laboratory for environmental impact assessment (LIVIA project)
1994	Participation in the Delors EC-China Cooperation task force on environmental sustainability FEEM researchers join IPCC as lead authors
1995	Launch of Company Environmental Reporting Forum Support to the Italian delegation at the G7-Environment Meeting, Hamilton, Canada
1996	FEEM moves to permanent headquarters in Milan, at Palazzo delle Stelline FEEM opens offices in Venice, at Fondazione Querini Stampalia FEEM and CEPR(Centre for Economic Policy Research) launch the European Corporate Governance Network (ECGN)
1997	Support to the UN Commission on Sustainable Development FEEM supports the Italian delegation at Kyoto negotiations
1998	FEEM organizes the first World Congress of Environmental and Resource Economists Multimedia libraries open in Turin, Genoa, Milan, and Novy Urengoy, Siberia

The formal date of establishment is June 7, 1989, when the President of the Republic officially recognized FEEM's legal status. However, the project of establishing a research foundation entitled to Enrico Mattei was drafted by a commission of Eni executives and external experts in 1982, and finally endorsed in 1986.

The first board meeting took place in 1987, and set down the landmark principles for future activities. FEEM would have an international profile in terms of researchers involved, topics addressed, quality of output and networks. Furthermore, it would not operate as a grant-making institution, but it would conduct independent research with its own human capital and coordinated programmes. In its long-standing activity FEEM has remained faithful to these principles. The relationship between the economy, energy and the environment has always been the main focus of FEEM research activities. Today, FEEM has grown to become a leading international research center in economics, providing timely and objective analysis on a wide range of environmental, energy and global economic issues.

Sustainable economic development is an area where FEEM has gained a strong reputation in the academic community and policy spheres. In the early 90s FEEM researchers started analyzing the interaction between finance and the environment and the innovative (and now widely used) instruments such as emission permits and catastrophe bonds in the context of international and intergenerational risk-sharing. The international and strategic dimension of environmental issues has also been the focus of extensive investigation. As the story of the Kyoto protocol shows, environmental issues are global and must be addressed at a global level. FEEM researchers had foreshadowed the difficulties of inking international climate agreements, suggesting that issue-linkage, i.e. increasing the items in the negotiations agenda, could lead to more efficient solutions.

FEEM contributes to the editorial project "Mercato Concorrenza Regole" with il Mulino  Support to the Italian Government task force on reconstruction in the Balkans	Launch of the project on "Cultural Diversity and Economic Growth"  FEEM is founding member of the European Climate Forum  FEEM starts a series on "Economics, Environment, and Sustainable Development" with Edward Elgar Publishing  Launch of the project on "Digital Europe: E-commerce and Sustainable Development"	1,000 FEEM working papers "Note di Lavoro" published  European Economic Association recognizes FEEM as the leading Italian research centre based on 1996-2000 research outputs	FEEM joins the Euro-Mediterranean Centre for Climate Change (CMCC)  Start of the Network of Excellence on cultural diversity and sustainable development	IPCC officially acknowledges the contribution of FEEM researchers to the Nobel Peace Prize for 2007  UNESCO officially recognizes Eniscuola as a leading training project on sustainable development
1999  2000	2001  2002	2003  2004	2005  2006	2007  2008
Launch of the Project "Scuola Ambiente Energia", sponsored by Eni  First European Summer School in Resource and Environmental Economics	Organization in Venice of the 17 <sup>th</sup> Annual Congress of the European Economics Association (EEA) and the 57 <sup>th</sup> Econometric Society European Meeting (ESEM)  Launch of the Transatlantic Dialogue on Climate Change with the Centre for European Policy Studies (CEPS) and Georgetown University	Launch of Privatization Barometer with Fondazione IRI  FEEM performance is acknowledged in the EC Report "Mapping of Excellence in Economics"	OECD and the World Bank officially recognize Privatization Barometer as their primary source of privatization data  First edition of the Competition and Regulation European Summer School	FEEM and Fondazione Giorgio Cini sign the agreement for the establishment of the International Center for Climate Governance (ICCG) in Venice  The Scientific Background of the Nobel Prize in Economics to Paul Krugman officially acknowledges the contribution by researchers working at FEEM  Inaugural FEEM lecture by Andrei Shleifer, Harvard University

These initial intuitions prompted new strands of environmental research, ranging from sustainable energy to natural resources management and biodiversity. The expertise gained in this field over the years has led FEEM to contribute to the prestigious and important scientific work carried out by the IPCC (Intergovernmental Panel on Climate Change) and to provide technical support to entities and institutions, such as the Italian national and regional governments, the United Nations, the European Commission and the European Environmental Agency.

FEEM research on economic development has explored other key aspects, such as knowledge and human capital. Over the years research in this area broadened its scope to cover a variety of issues ranging from R&D, education and human capital, knowledge creation and diffusion, to multiculturalism and economic growth, tackling topics such as the emerging global urban system, the new sources of competitiveness in the global economy, and culture and diversity in capitalism.

FEEM has support-to-policy in its DNA. However, useful advice to decision makers is seldom delivered by the research community if incentives and institutional constraints are not taken into account. Embracing a ‘political economy’ approach is essential, and FEEM - during the first two decades of its activity - has promoted studies in this field, addressing issues such as incentives, information and market failures, the role of lobbies and organized interests in collective decision-making, and the mechanics of self-regulation in financial markets, anticipating the critical issues of the financial crisis. Within this strand of research, FEEM has developed a series of cutting-edge projects, which consolidated its scientific reputation in corporate governance, privatization, and regulation. Today, FEEM is considered one of the most authoritative sources on privatization, and sought for advice by international organizations and governments.

Since the early 90s FEEM also started investigating the relationship between the firm and its stakeholders, well before “corporate social responsibility” became one of the buzzwords in the business sphere. In this early stage, FEEM developed path-breaking methodologies to assess the environmental and social impact of activities in the balance sheets, and assisted several companies in drafting innovative reports, including its founder Eni.

<p>On June 7, 2009 FEEM celebrates in Milan its 20<sup>th</sup> anniversary</p> <p>First edition of the FEEM Award in Barcelona, jointly organized with the European Economic Association</p>	<p>On April 15, 2010, FEEM and the Fondazione Giorgio Cini announce the Launch Event of the International Center for Climate Governance (ICCG) and a collaboration with the Climate Policy Initiative (CPI) in Venice. The event also marks the inauguration of FEEM and ICCG new offices on the Island of San Giorgio Maggiore in Venice</p>	<p>FEEM 20<sup>th</sup> Anniversary Prize in Environmental Economics to Professor Martin L. Weitzman and Resources for the Future in Montreal, during the Fourth World Congress of Environmental and Resource Economists</p> <p>The FEEM Award 2010 is bestowed by Prof. Stiglitz at the 25<sup>th</sup> Congress of the European Economic Association at the University of Glasgow</p>	<p>FEEM continues its active contribution to the Intergovernmental Panel on Climate Change (IPCC) with the participation in the 1<sup>st</sup> lead authors meeting for Working Group III of 5<sup>th</sup> Assessment Report (AR5), held in South Korea in July 2011</p> <p>Third edition of the FEEM Award, bestowed by Nobel Laureate Christopher Pissarides at the 26<sup>th</sup> European Economic Association (EEA) Congress at the University of Oslo in Norway, on August 27, 2011</p> <p>On the occasion of the “UNESCO World Science Day for Peace and Development”, FEEM signs the “Joint Venice Statement on Strengthening Scientific Collaboration”, an agreement among 15 research institutes committed to enhancing opportunities for collaboration in scientific research</p>
2009	2010	2011	

Successful research is primarily a cooperative venture, and FEEM has always strived to create strong links with the international scientific community and partnerships with leading institutions. The reader can find a comprehensive list of our main partners in our chronology and social report. Certainly worthy to mention is the institutional partnership, established in 2010, with the Fondazione Giorgio Cini for the creation of the International Center for Climate Governance (ICCG) aimed at fostering links between the scientific community and the policy sphere to improve decision making on climate change.

Starting from 2011 FEEM consolidated its research activities around three research programmes on:

- "Climate Change and Sustainable Development"
- "Energy: Resources and Markets"
- "Economy and Society"

Other research areas historically at the core of FEEM's research activity and carried out – since 2013 - within the "Sustainable Business and Social Change" Initiative include corporate social responsibility, corporate sustainability and sustainable development.

According to the Global Go To Think Tank Rankings and since 2012 FEEM is confirmed among the "Top 150 Think Tanks" worldwide and in 2014 obtains an outstanding 33rd place in the "Top 70 Environment Think Tanks" ranking.

In 2014 FEEM celebrates its 25th anniversary, witnessing a long standing commitment to excellence in scientific research.

<p>The FEEM Award was conferred for the fourth year during the 27<sup>th</sup> European Economic Association (EEA) Congress at the University of Malaga in Spain.</p> <p>FEEM becomes institutional member of the IAERE, and is in charge of its Permanent Secretariat</p> <p>FEEM launches its open-access, online e-journal, the "Review of Environment, Energy and Economics" - Re3</p>	<p>On June 7, 2014, FEEM celebrated its 25th anniversary, witnessing a long standing commitment to excellence in scientific research.</p> <p>FEEM is confirmed among the "Top 150 Think Tanks" worldwide and got a remarkable 33rd place in the "Top 70 Environment Think Tanks" of the 2014 Global Go To Think Tank Rankings.</p> <p>FEEM launches its open-access, digital editorial series, FEEM Press</p>
<p>2012</p>	<p>2013</p>
<p>5<sup>th</sup> Edition of the FEEM Award at the European Economic Association (EEA) Annual Congress at the University of Gothenburg in Sweden, on August 29, 2013</p> <p>FEEM continues its active contribution to the Intergovernmental Panel on Climate Change (IPCC) within the Working Group II and III of 5<sup>th</sup> Assessment Report (AR5)</p>	<p>In late 2013 FEEM launches the Sustainable Business and Social Change Initiative (SBSC-I), a new cross-cutting research working group focused on social innovation and sustainable business themes</p>
<p>2014</p>	

# **1989-2014**

## **25 YEARS**

### **OF LEADING RESEARCH ON CLIMATE CHANGE**

On June 7, 2014, FEEM celebrated its 25th anniversary, witnessing a long standing commitment to scientific research on the environment, energy and the economy, and in particular on the economics and politics of climate change.

While this report is being published, the sustainability debate is gaining momentum all over the world in preparation for the next UN Conference of Parties (COP21) of the UN Framework Convention on Climate Change that Paris will host in December. Responding effectively to climate change will indeed be crucial for sustainable development, as climate change is without doubt one of the major challenges of today and probably one of the defining issues of our time. As recently stated by UN Secretary-General Ban Ki-moon, mitigating climate change and adapting to its effects are necessary to reduce inequality and achieve equitable and sustainable economic development.

If 2014 has been an important year for the economics and politics of climate change with the release of the IPCC's Fifth Assessment Report (AR5), 2015 will be even more so. This year Pope Francis is expected to publish an encyclical on climate change. In July, the United Nations will hold a conference on financing for development in Addis Ababa, Ethiopia. In September, the UN General Assembly will convene in New York to launch the sustainable development goals (SDGs), and in December, world leaders will attend COP21 in Paris to sign an important deal to control greenhouse gas emissions worldwide. On that occasion, governments of all UN member states will have a special responsibility to agree to a bold climate agreement that confines global warming to a limit safe for humanity for a sustainable future for all.

Human-induced climate change is a scientific reality and a real threat to people around the world, especially in developing nations, and its decisive mitigation is an imperative for humanity. For this reason, governments, delegations, institutions, NGOs, companies, universities, think tanks and research institutes are mobilized on the road to Paris. As a groundbreaking actor in the international climate change debate since the early 90s, FEEM will give its contribution to many of these important events and is playing a key role in several national and international preparatory research meetings and projects.

Since 1995, FEEM has indeed been contributing to the United Nations Framework Convention on Climate Change (UNFCCC) negotiation processes. FEEM has also regularly given its scientific contribution to the Intergovernmental Panel on Climate Change (IPCC), in particular to the working group dealing with the possible pathways for mitigation of greenhouse gases and related costs, with an increasing number of FEEM researchers as Lead Authors of the Assessment Reports (ARs) drafted throughout the years. Since 2009, Prof. Carraro, at the time Chair of FEEM Advisory Board and now coordinator of FEEM Climate Change and Sustainable Development program, has been appointed member of the IPCC Bureau and Vice-Chair of IPCC WG III. More recently, in February 2015, FEEM, together with scientists from Harvard and Stanford and other important research organizations who contributed to the IPCC's AR5, representatives from national governments and intergovernmental organizations and other stakeholder groups, gathered together to explore approaches to improving the process by which research on climate change is assessed -- with a focus on the social-sciences (economics, political science, policy studies), and discussed potential reforms in IPCC assessments. Following this important event, FEEM has contributed to the preparation of a memorandum describing specific challenges and opportunities facing the IPCC and providing recommendations for improving the IPCC's process of assessing scientific research on climate change.

Since 2005, FEEM is also among the founding members of the Euro-Mediterranean Center on Climate Change (CMCC). As member of the CMCC, FEEM has continued to support the Italian Ministry of the Environment in official climate negotiations and in responding to formal requests from the European Union (for instance in drafting the National Adaptation Strategy).

Today, after 25 years of top-level research on climate change, FEEM has achieved a leading position within the international research community, and is now a recognized research institute within the European and global context also thanks to the development and application of advanced modelling for the economic analysis of climate policies addressing world-wide vulnerability to changes in climatic conditions, and investigating the economics of mitigation and adaptation to these changes.

In the 1989-2014 period FEEM has been involved in over 90 research projects on the economics of climate change, the majority of which funded by the European Commission, witnessing its continuous support to policy and institutions. In the same period it has organized over 360 international conferences and workshops, including side sessions in several COPs, about 340 seminars and 25 summer schools on climate change and related issues. Finally it has published 276 working papers, 186 amidst reports, in-depth analyses, policy briefs and articles, and 20 books in the field of climate change. Last but not least, FEEM scientific contribution on climate change has also been published in several articles appearing in international top field journals, including *Nature Climate Change* and *Nature*.

To sum up, the dual commitment of FEEM research on climate change is to contribute to science while guiding policies and informing the public debate. Through its research, FEEM is indeed at the same time strongly society and policy oriented, combining the scientific, peer-reviewed academic approach with the diffusion of its main achievements and research results to the civil society and policy-makers, at both local and global level. Environment, energy and sustainability will thus remain at the core of FEEM's future agenda, maintaining a plurality of perspectives and multidisciplinary approaches which have always been a distinct trait of FEEM's activities.

# GOVERNANCE

FEEM is an independent foundation officially recognized by the President of the Italian Republic in 1989. FEEM has been founded by Eni and nine of its subsidiaries with an initial endowment of 13 million Euros.

The governance rules, functions and powers of FEEM bodies are set out by the Bylaws. FEEM is guided by a Board of Directors with complete powers for the ordinary and extraordinary administration. The Board is composed of fourteen members – eight of whom are independent – and it is chaired by Emma Marcegaglia, Chairman of Eni. The Board of Directors is committed to overseeing the main activities of the Foundation, approving the annual budget and related activities.

FEEM bodies also include the Scientific Advisory Board (Comitato Scientifico), made of eight qualified experts from the scientific, academic and cultural communities and appointed by the Board of Directors. The Scientific Advisory Board provides recommendations on research activities and oversees the work in progress.

The Audit Committee (Collegio dei Revisori), in compliance with the Italian legislation, is composed of three qualified and certified accountants and its Chairman is appointed by the Italian Minister for Economic Development.

The Executive Director enacts the decisions of the Board of Directors, managing and coordinating the activities of the Foundation, including its offices and staff.

Since 2007 FEEM has voluntarily adopted an organizational, management and control Model pursuant to Legislative Decree 231/2001 and established a Surveillance Body (Organismo di Vigilanza) for its implementation and subsequent updates.



## Governance

### Board of Directors

Emma Marcegaglia - Chairman  
 Giovanni Bazoli  
 Raffaella Leone  
 Alberto Meomartini  
 Joaquín Navarro-Valls  
 Angelo Maria Petroni  
 Roberto Poli  
 Alberto Quadrio Curzio  
 Giulio Sapelli  
 Salvatore Sardo  
 Paolo Scaroni  
 Domenico Siniscalco  
 Guido Tabellini  
 Daniela Paola Viglione

### Executive Director

Giuseppe Sammarco

### Scientific Advisory Board

Michel Camdessus - Chairman  
 Francesco Casetti  
 Vincenzo De Luca  
 Lord John Leonard Eatwell  
 Eliana La Ferrara  
 Ian Ross Macmillan  
 Lord Peter Mandelson  
 Francesca Romanin Jacur

### Audit Committee

Alessandro Bonura - Chairman  
 Michele Casò  
 Alberto Giussani

### Surveillance Body

Joaquín Navarro-Valls - Chairman  
 Alessandro Bonura  
 Luca Farinola

*As of December 2014*

## RESEARCH

### Overview

FEEM conducts research on a wide range of climate change and sustainability, energy and economic issues. The starting point of FEEM research is the realization of the high level of complexity of the problems emerging in the global economy, and more particularly the need to foster awareness on the interaction among economy, energy and environment.

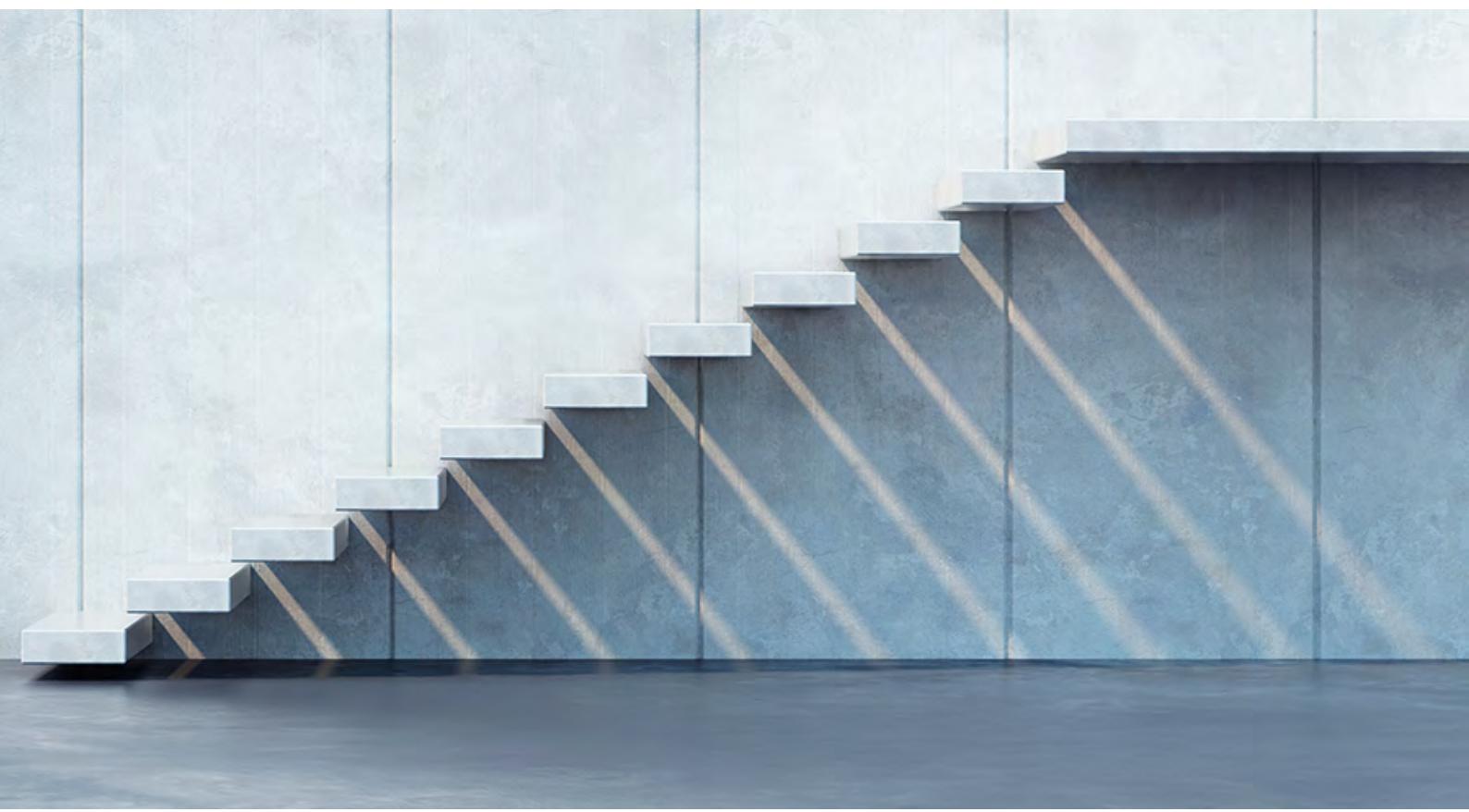
In recent years FEEM has consolidated its research activities around the three research programmes on:

- i) Climate Change and Sustainable Development
- ii) Energy Resources and Markets
- iii) Economy and Society

Other research areas at the core of FEEM's research activity and carried out within the "Sustainable Business and Social Change" Initiative include: sustainable business and support to private and public organizations with a focus on policy and management system development; sustainability strategic planning and reporting processes (integrated thinking and reporting); "shared value" as a key factor for innovative relationships between companies.

Research programmes and related activities follow the strategic guidelines stated in FEEM's mission. Ongoing research is thus rigorous, fact-based, interdisciplinary, and international in terms of the composition of research teams and topics addressed.

FEEM targets the international research community by carrying out research projects, publishing high quality research, organizing scientific events and training initiatives, and managing large international networks.



FEEM's research staff includes experienced international research leaders with key responsibility in the design and implementation of projects, senior and junior residential researchers working in the offices of Milan, Venice, and Viggiano, and research associates, typically affiliated to a university or to other research institutions and involved in specific projects.

In 2014, FEEM carried out 34 research projects, 27 of which financed by the European Commission or third parties. Related activities included the organization of 41 scientific conferences, workshops and lectures, 56 scientific seminars and 3 summer schools. Overall, these events attracted over 7,600 attendees. In 2014, FEEM published 110 working papers in the "Note di Lavoro" series, three thematic issues of the journal on sustainable development "Equilibri", 47 articles in FEEM's e-journal covering the areas of environmental and energy economics and policy, the "Review of Environment, Energy and Economics" - Re3, one volume with Edward Elgar Publishing and three books in the new editorial series, FEEM Press. Finally, in 2014, FEEM research has been published in over 40 articles in top field journals.

# **“CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT” RESEARCH PROGRAMME**

The research programme on “Climate Change and Sustainable Development” (CCSD) addresses the two inter-related issues of climate change and sustainable development and a corollary of key topics in the field of environmental economics.

The programme builds upon over twenty years of successful FEEM research in the field.

In the specific area of climate change, FEEM has achieved a leading position in the international research community, as a result of the in-house development and application of several methodologies for the economic analysis of climate and energy policies.

**Programme Coordinator**

Carlo Carraro

**Programme Deputy Coordinator**

Massimo Tavoni

**People**

Margaretha Breil  
 Elisa Calliari  
 Lorenza Campagnolo  
 Samuel Carrara  
 Lorenzo Carrera  
 Mariaester Cassinelli  
 Cristina Cattaneo  
 Jacopo Crimi  
 Sergio Currarini  
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 Shouro Dasgupta  
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 Sabrina Dekker  
 Valentina Dell'Aquila  
 Elisa Delpiazzo  
 Roberta Distante  
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 Martina Gambaro  
 Claire Gavard  
 Valentina Giannini  
 Silvio Giove  
 Carlo Giupponi  
 Melanie Heugues  
 Lili Ilieva  
 Katie Johnson  
 Marina Khoroshilteva  
 Elisa Lanzi  
 James Lennox  
 Phoebe Lewis  
 Fanny Liotto  
 Thomas Longden  
 Michele Maurizio Malpede  
 Debora Mameli  
 Giacomo Marangoni  
 Carmen Marchiori  
 Martina Marian

Paola Marson  
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 Alessandra Mazzai  
 Malcolm Mistry  
 Jaroslav Mysiak  
 Carlo Orecchia  
 Sonia Oreffice  
 Vladimir Otrachshenko  
 Ramiro Parrado  
 Carlos Disionisio Perez Blanco  
 Francesca Pongiglione  
 Klarizze Puzon  
 Silvia Santato  
 Alessandro Silvestri  
 Muhamma Ayaz Siddiqui  
 Gabriele Standardi  
 Alessandro Tavoni  
 Elena Verdolini  
 Jan Witajewski  
 Paolo Zeppini  
 Jacopo Zotti

**Programme Officer**  
Monica Eberle

*As of December 2014*

In particular, FEEM developed two successful integrated assessment models:

- i) The WITCH (World Induced Technical Change Hybrid) model is designed to assist in the study of the socio-economic dimension of climate change. The model has been developed with the aim of studying mitigation and adaptation policies for climate change control.
- ii) The ICES (Intertemporal Computable Equilibrium System) model is a recursive dynamic general equilibrium model developed with the main (but not exclusive) purpose to assess the final welfare implication of climate change impacts on world economies.

FEEM models address world-wide vulnerability to changes in climatic conditions, and investigate the economics of mitigation and adaptation to these changes. In the specific area of sustainable development, FEEM research covers a variety of issues: sustainable management of natural resources, the economics of natural hazards and extreme events, and the use of indicators to measure sustainability and growth beyond GDP. FEEM can also rely on a strong research team of applied economists who investigate the economic performance of various environmental and climate policy instruments.

In 2014, CCSD researchers were involved in 22 research projects, 20 of which funded by the European Commission and 7 with coordination role.

The Programme's research excellence is confirmed by the assignment of 2 ERC grants to 2 top researchers in the CCSD Programme, 5 Marie Curie Fellowships hosted by FEEM, fellowships of CCSD researchers at Stanford University, Princeton University and Harvard University, CCSD visiting scholars at Berkeley University, Maryland University, the World Bank and the Australian National University, and over 40 publications in top field journals (including Nature and Nature Climate Change).

The twofold goal of the Climate Change and Sustainable Development research programme is to contribute to science while guiding policies and informing the public debate. It develops high level academic research and policy support on issues where FEEM has acquired comparative advantage, thus improving and extending its research activities to keep up with the international research community.

Significant CCSD dissemination initiatives were developed by the International Center for Climate Governance (ICCG), a joint initiative of FEEM and Fondazione Giorgio Cini. ICCG works with economics and political science researchers who explore the interdependencies among the economic, social, cultural, ethical and political aspects of climate governance. ICCG's mission is to disseminate science-based and socio-economic research in the field of climate change mitigation and adaptation to policymakers and the general public. It seeks to achieve this objective at the local, national and international level through interdisciplinary activities as well as climate and energy policy analyses and the definition of optimal governance models to manage climate change.

ICCG organizes scientific events of international relevance, lectures, seminars and workshops, it develops interdisciplinary observatories on specific aspects of climate governance, and promotes training activities targeted to researchers, policymakers and the general public. Several other activities, such as art exhibitions, contests, cultural debates, and film festivals, are created specifically to involve various actors and to inform the public at large. Furthermore, ICCG publishes a wide collection of e-publications to support e-learning and research.

## CCSD Main Research Areas

### Climate Change Integrated Assessment Modelling

Research on the economics of climate change at FEEM addresses both mitigation and adaptation issues, building upon consolidated modelling tools for climate policy analysis developed over more than twenty years of work. On the mitigation and adaptation side, FEEM is positioned at the forefront of international research through the use of the energy-economy-climate WITCH model, specifically designed to assist in the study of the socio-economic dimensions of climate change. This innovative hybrid top-down bottom-up model helps policy makers understand the economic consequences of interaction across mitigation and adaptation policies. On the impact side, FEEM investigates climate change consequences on the world economy through the use of ICES, a recursive-dynamic computable general equilibrium model enriched with realistic representation of land, forestry and water uses dynamics. The model is designed to assess the final welfare implication of climate change impacts, capturing the production and consumption substitution processes at play in the social-economic system as a response to climate shocks. Through modelling and policy analysis, this research area investigates the economic dimension of existing and new mitigation instruments and technologies for climate stabilization. It assesses the full costs of climate change impacts and adaptation and provides a comprehensive and integrated background to support climate change policy and governance analyses. Currently, specific attention is being paid to the role of uncertainty in the mutual responses of climate and socio-economic systems.

### Climate Change Policy and Governance

The climate change policy research area investigates alternative options for future international climate agreements, with the goal of advancing knowledge in the area of coalition and network formation and of applying it to the analysis of the process of international climate negotiations. In order to better understand the mechanisms at work when social dilemmas, as the provision of global climate quality, are present, FEEM is also working with laboratory experiments on individual interactions. In particular this research area intends to improve the economic analysis of climate policy and governance, assessing the effectiveness of current governments' pledges in reaching the accepted stabilization targets and providing an overall economic valuation of possible international climate strategies. FEEM performs economic assessment of compliance with domestic or international mitigation targets through alternative policy schemes, including international emissions trading and REDD+. This area of research also focuses on climate finance, investigating the nature and amount of financial efforts needed to support the technological transformation towards a low-carbon economy and to adapt to the impacts of climate change, already tangible in many of the most vulnerable regions of the world.

### Climate-related Innovation and Technological Change

Research on new energy technologies, innovation, and the drivers of technological change is one of FEEM's leading research areas. Although crucial in the design of future scenarios, the dynamics of innovation, adoption and diffusion of energy technologies are yet to be fully understood. In particular, the lessons learned from the rich innovation literature, ranging from economics to engineering and history, need to be extended and confirmed with respect to technologies that can help ease the energy security issue, climate change and other environmental challenges. FEEM research in this field aims to improve the dynamics of technological change embedded in FEEM Integrated Assessment Models, through the estimation of parameters that are crucial to the diffusion of different technologies, together with a better understanding of the role of institutional factors, such as IPR protection, in hindering or promoting different technologies. Modelling improvements in this field are supported by empirical work on patents and diffusion models, aiming to provide the data needed to address novel research questions on the peculiarities of innovation and diffusion dynamics in climate-related technologies. In addition, to elicit the future probabilistic cost of future technologies and their potentials for penetration, we employ expert elicitation techniques. Through the latter, judgments and information obtained from the experts allow the assessment of subjective probabilities of specific outcomes, such as the potential breakthrough on innovative technologies as a response to R&D programs.

### **Natural Hazards and Extreme Climate-related Events**

FEEM conducts research on economic and social impacts of natural hazards, disaster risk analysis and governance, economic and financial policies for risk mitigation and sharing, and adaptation to climate change-amplified extreme events. Working closely with and on behalf of a wide range of authorities, international and civil society organizations, FEEM has contributed to advancing the evidence-based disaster risk reduction culture in Europe and elsewhere. FEEM's research outputs are informing the implementation of disaster risk reduction policies, and the development of comprehensive disaster risk and climate adaptation strategies in low income and small island developing states. Next to the initial emphasis on improving the assessment of welfare losses and vulnerability to single and multiple (concomitant and consecutive) hazard events, FEEM's research has increasingly focused on financing disaster risk reduction and climate adaptation. Our expertise and long-term experience in both fields have made it possible to help bridge the risk and climate change communities, thus advancing the science-policy debate.

### **Management of Natural Resources**

Within the field of natural resource management, FEEM conducts research related to water, food and energy security, regulatory policy analysis and governance, and adaptation to human-induced climate change. FEEM has a long-standing experience in analysing performance and advising implementation of economic or market-based policy instruments (such as incentive pricing, taxes, payments for ecosystem services, risk transfer schemes, and public private partnerships). As a result of a long-standing commitment to policy-relevant research, FEEM has developed several decision support systems, freely available and used by academics and experts. Policy analysis and a modular framework for decision support built on participatory processes are applied in a wide range of policy domains including integrated water resources management and climate change adaptation in specific contexts of coastal, mountainous and rural areas.

### **Sustainability and Growth beyond GDP**

This research area aims to analyse the main challenges and risks posed by pursuing unconditional economic growth at global level, thus contributing to increase the knowledge for detecting and possibly reducing the trade-offs between economic growth and environmental preservation. The focus is primarily on the decoupling between materials required to produce commodities for final consumption (or polluting emissions from energy production) and economic growth. Part of our analyses also relies upon an increased knowledge of technological aspects via extended accountability incorporating by-products and energy/material flows into production processes. Besides and more broadly, FEEM pursues an integrated approach for the analysis of sustainable development and green economy issues exploiting the multidisciplinary research skills and analytical instruments developed over more than twenty years of work. With the development of the FEEM Sustainability Index, those issues are analysed not only from the socio-economic and environmental perspectives, but also from a cultural and sociological perspective. In fact, FEEM SI is a composite index which, through a complex procedure of computation and aggregation of a number of indicators for a range of scenarios, gives a comprehensive measure of current and projected sustainability for the world's countries, thus suggesting effective measures to improve future sustainability through policy making.

## Main International Events organized by CCSD in 2014

- International workshop on “Public-Private Partnerships: a focus on energy infrastructures and sustainable growth”, Venice, May 9th
- Expert workshop in “Uncertainty in Climate Change Modelling and Policy” (ADVANCE project), Milan, May 13th - 14th
- International workshop on “Climate Change and Public Goods”, Venice, June 9th - 10th
- International conference on “Impact quantification of Global Changes” (GLOBAL IQ project), Brussels, June 17th
- Policy session on “Climate and Energy Policies in the Mediterranean Basins”, 5th World Congress of Environmental and Resource Economists, Istanbul June 28th – July 2nd
- International conference on “Low climate impact scenario and the implications of required tight emission control strategies” (LIMITS project), Brussels, September 25th
- 4th edition of the “Think Forward Film Festival on Climate Change and Renewable Energy”, Venice, December 12th and 13th

## Main Training Activities organized by CCSD in 2014

- EAERE-FEEM-VIU European Summer School in resource and environmental economics, on “The Economics of Adaptation to Climate Change”, Venice, July 6th-12th
- CMCC-ICCG Summer School on “Adaptation Policies and Practices in the Mediterranean Basin (MedAdapt)”, Venice, May 19th - 23rd
- Teaching activities in PhD and Master Programmes
- Video lectures

## Main International CCSD Networks active in 2014

- Association of Environmental and Resource Economists – AERE
- Biodiversity and Economics for Conservation – BIOECON
- Coalition Theory Network – CTN
- Euro Mediterranean Centre for Climate Change – CMCC
- European Association of Environmental and Resource Economists - EAERE
- Harvard Environmental Economics Programme – HEEP
- Integrated Assessment Modelling Consortium – IAMC
- International Energy Workshop – IEW
- Italian Association of Environmental and Resource Economists – IAERE
- Italian Society for Climate Sciences – SISC
- Mercator Research Institute on Global Commons and Climate Change – MCC
- Sustainable Development Solutions Network – SDSN

# ‘ENERGY: RESOURCES AND MARKETS’ RESEARCH PROGRAMME

The Research Programme on “Energy: Resources and Markets” (ERM) carries out socio-economic analysis in a vital area which will become even more strategic in the coming decades.

Energy supply is adjusting to the globally rising population and standards of living. It must ensure development where it is most needed, while pursuing the transition to a low-carbon inclusive growth. Current resources suffice to meet demand but research must look ahead.

Where and how will the transition to a low-carbon economy occur? How can it be made safe, affordable, and sustainable?

The deployment of efficient and clean technologies to produce sustainable energy for all must be supported by adequate institutional and market structures. Key issues to be considered for balanced energy policies are access to sustainable energy, energy security and the implementation of a global green growth policy.

FEEM aims at generating high-quality research on the economics of energy, taking the long-term perspective which characterizes public policy making and environmental management. It must also provide insight into the short-term perspective typical of markets and investors.

The core activities of the “Energy: Resources and Markets” research programme focus on issues that are peculiar to the energy sector alone. Research has been organized into three areas that investigate energy resources, demand and supply from an economic, environmental, and policy and governance perspective.

Specific topics include the drivers of changes in demand and supply, the role of globally integrated markets in ensuring efficiency and stability, the interrelationship between energy and economic development, the energy poverty problem, and the role of governance and institutions of energy policy. At the same time, there is strong interaction between the research activities in this programme and in the “Climate Change and Sustainable Development” field.

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## ERM Main Research Areas

### Energy and the Economy

Energy is crucial to feed the rapid economic growth of emerging and developing economies and to maintain the high consumption standards in the developed world, while undergoing the technological ‘revolution’ needed to meet the climate challenge. In particular, reducing energy poverty and promoting energy access in the developing world is a necessary condition to promote its economic and social development. Moreover, since different patterns of consumption and growth in emerging economies are likely to have important repercussions on the international energy markets and technology development, a better understanding of the drivers of energy demand at the global and regional levels is needed, and is one key focus of FEEM research in this area.

Through policy analysis and quantitative instruments, FEEM research analyses the most important socio-economic determinants of energy consumption. While on the supply side, FEEM investigates the main effects of the increasing integration of global energy markets, in terms of market efficiency, security of supply and decision-making processes. In this regard, a key issue of this area is energy price, in particular the oil price. Whatever the future energy scenario, the oil price will play a central role, because it heavily affects environmental and energy policies and consumption patterns, especially in the oil price decline context which characterized the second half of 2014. This is why FEEM addresses some specific issues such as the dynamics of oil and commodity prices, the determinants of the oil price, the concept of financial speculation and its role in the derivatives market (volatility and price). In addition, FEEM have recently started to analyse the effects of relatively low oil prices on the economic and political stability of the oil-exporting countries and the sustainability of alternative forms of energy production.

### Energy Policy and Governance

The globalization of energy markets, the urgency of global environmental problems such as climate and land use change, and the need to ensure the affordability and security of energy supply require an increased level of cooperation between strategic players on the global scene. A successful and effective governance of energy policies is crucial to address these global challenges.

FEEM research in this field is developed both at the international and at the European and country level. At the international level, research focuses on the scope for building institutions to manage more effectively the global energy challenges, helping to make progress also in international climate policy. The design of institutions for energy governance at the international level is obviously influenced by geopolitics - strongly driven by world countries' endowments in energy sources, that may vary with the development of more widely distributed sources such as non-conventional fossil fuels – and by the country level of economic development and associated democratization. Also the inclusion of the issue of security of energy supply is central to research in this field given the high interdependence between energy policies and energy markets.

### Energy and the Environment

Climate change is certainly one of the most studied environmental impacts of energy production and consumption, due to the fundamental role played by energy in generating greenhouse gas emissions. However, besides contributing to global warming, energy production and consumption impact on many other environmental factors such as local air pollution, land use and water utilization, enhancing environmental and socio-economic vulnerability particularly in the developing and fast-growing world. FEEM research in this area thus aims at providing an integrated assessment of the interaction between the energy system, the environment and the economy. It focuses on the environmental impacts of energy consumption on CO<sub>2</sub> emissions, soot, food and water quality, and the opportunities for effective mitigation strategies.

Overall, this research stream at FEEM helps to inform decision makers on the full costs and potential trade-offs of different technology options and aims at improving the energy-environment-economy modelling by better representing the full costs of energy sources.

## Main International Events organized by ERM in 2014

- International workshop “Oil and Commodity Price Dynamics”, Milan, June 5th and 6th
- International workshop “Energy Poverty and Energy Access: Global Challenges and Goals”, in collaboration with Fondazione Feltrinelli within the LabExpo Project, and Eni, Milan, July 10th
- International (closed-doors) brainstorming workshop FEEM Gas Talks 2014: “New Challenges and Opportunities for European Gas Markets”, Milan, November 20th - 21st

## Main Training Activities organized by ERM in 2014

- Educational EU Project NECST: “A New Energy Culture: Sustainability and Territories”, aimed at developing an alternative educational offer, which is innovative, inclusive, focused on the energy-environment issues and based on the potential offered by the ICTs. The project represents a cross-sectoral strategic partnership involving research organizations, universities, enterprises and public bodies with a specific expertise in energy and environmental topics. The main result of the project will be the cross-media platform “Connecting Energy” and the digital contents produced within the project (videos, interviews, reportages, surveys, etc.).

## Main International ERM Networks active in 2014

- Oxford Institute for Energy Studies – OIES
- Brookings Energy Security and Climate Initiative – ESCI
- Bruegel
- Center for Social and Economic Research - CASE
- Center for European Policy Studies – CEPS
- Clingendael International Energy Programme
- International Renewable Energy Agency – IRENA
- International Energy Agency – IEA
- Istanbul Policy Center – IPC
- Stiftung fuer Wissenschaft und Politik – SWP

# “ECONOMY AND SOCIETY” RESEARCH PROGRAMME

The research programme on “Economy and Society” (ES) promotes a multidisciplinary approach to scientific research on the geostrategic, cultural and economic challenges in today’s globalized society.

The on-going shift in geopolitical paradigms and the subsequent disruption of consolidated transnational relations are paving the way to new world governance. The interconnection between the social, economic, geopolitical and technological dimensions that underlie this process requires an interdisciplinary approach that includes a sociologic, economic and anthropological perspective.

Broadening the research focus to social and humanistic topics in order to study not only the processes as such but also their human dimension, the research programme aims to stand out as a catalyst of ideas, debates and new studies that involve internationally renowned experts and opinion leaders on geostrategic topics.

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A dedicated dissemination strategy is envisaged to circulate the research output widely to the research community, decision-makers and civil society, thus fuelling the debate with the latest theoretical insights in view of a new planetary governance.

In 2014 the ES Programme implemented a wide set of networking, dissemination and training activities on the on-going geopolitical and economic shifts and strengthened the network on geostrategic topics to favour the exchange of ideas, to nurture the international scientific debate and to explore possible collaborations and partnerships on topics of mutual interest. The network currently covers over 1600 experts from the main institutions, research centres and think tanks operating in the field of geostrategic issues in Italy and abroad.

In particular, in 2014 the ES research programme engaged in an intensive information and dissemination activity by organising a series of Lectures on Geostrategic Challenges targeted to the research community, decision-makers and civil society. Internationally acclaimed experts and opinion leaders were invited throughout the year to present the latest theoretical insights on current socio-political processes and future governance scenarios, thus fuelling the debate in view of a new planetary governance. In this framework, the ES Research Programme published three booklets on cultural, economic and geostrategic challenges capitalising on the first three international lectures held during the year, thus launching the “Economy and Society” Series in FEEM Press, the new open-access FEEM editorial initiative.

On 24th-25th November 2014 the ES programme participated as an observer in the Policy Dialogue 2014 “Democracy and Human Rights in Decline. A Call to Action” organised by the Club de Madrid in collaboration with the Robert F. Kennedy Center for Justice and Human Rights. The event gathered over 120 participants, including former Heads of State and Government, representatives of multilaterals, civil society and business from around the globe to assess the quality of democracy, prevent its deterioration and advance it worldwide.

In 2014 the research Programme has also continued exploring Euro-Med energy issues from a socio-economic perspective. In particular, the research project “The Rise of Turkey and the New Mediterranean: Challenge and Opportunities for Energy Cooperation in the Region” has addressed the increasingly strategic issue of EU-Turkey energy relations with the aim to better understand if and how energy can represent a tool to enhance the cooperation between the two players, with a particular focus on the network forms of energy: natural gas and renewables.

## ES Main Research Areas

### The South-Eastern bank of the Mediterranean region

This research area focuses on the dynamics informing the new geopolitical order in the Southern-Eastern bank of the Mediterranean region. Particular attention is given to the role played by the cultural, social, religious and political processes taking place in the area.

### Privatizations and Institutions

The ES Research Programme also contributes to the leading European observatory on privatizations, the Privatization Barometer (PB). Privatization is the transfer of ownership rights from the public to the private sector. FEEM has gained a strong reputation in this topic by publishing a series of studies and books on the determinants, the methods, and the consequences of privatization at the global level, with a special focus on the institutional dimension and political economy issues.

## Main International Events organized by ES in 2014

- FEEM Lecture by John M. Deutch, MIT: "The Global Revolution of Unconventional Oil: New Markets, New Governances, New Policies", Milan, March 11th
- FEEM Lecture by Tarek Heggy, Gatestone Institute: "Islamism and Modernity: an Unconventional Perspective", Milan, April 2nd
- FEEM Lecture by Anatol Lieven, King's College London: "The Ukraine Debacle", Milan, May 14th
- FEEM Lecture by Jean-Christophe Iseux von Pfetten, Royal Institute of East-West Strategic Studies and People's University of China: "Insights from China: Leadership, Policies, New World Balance", Milan, June 10th
- Workshop of the GLOBAL LINKAGES Project "Europe's Global Linkages and the Impact of the Financial Crisis: Policies for Sustainable Trade, Capital Flows, and Migration", Milan, June 16th-18th
- FEEM Lecture by Francisco H. G. Ferreira, World Bank: "Growth and Poverty Reduction in Africa", Milan, September 24th

## Main Training Activities organized by ES in 2014

- Summer School on “Cultural Variables, Nation-building and Transition Processes in the South-Eastern Bank of the Mediterranean”, Butera - Sicily, July 1st - 4th.

The Summer School focused on the role that Islam plays in the cultural, social and political processes that are currently taking place in the Mediterranean and it provided top-level training mainly to students in the first years of their career path.

## Main International ES Networks active in 2014

- Austrian Institute of Economic Research – AIER
- Centro de Investigaciones y Estudios Superiores en Antropologias Social – CIESAS
- Club de Madrid
- European University Institute – EUI
- Gatestone Institute
- İstanbul Bilgi Üniversitesi
- Johns Hopkins University
- King's College London – KCL
- Massachusetts Institute of Technology – MIT
- Oxford Brookes University
- People's University of China – RUC
- Robert F. Kennedy Center for Justice and Human Rights
- Royal Institute of East-West Strategic Studies
- The World Bank – WB

# “SUSTAINABLE BUSINESS AND SOCIAL CHANGE” INITIATIVE



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Sustainable business and social change are two key aspects that need to be taken into account when designing the path to sustainable development. This is an area where FEEM has gained a strong reputation over the years through its research activities and by improving the quality of decision making in public and private spheres, which is the core of FEEM's mission.

With this objective in mind, in late 2013 FEEM launched the "Sustainable Business and Social Change" Initiative (SBSC), a new cross-cutting research working group focused on social innovation and sustainable business themes.

FEEM SBSC is both a collector of experiences and an incubator for new projects and research topics on corporate social responsibility, corporate sustainability and sustainable development, historically at the core of FEEM's research activity.

The goal of the Initiative is to identify and understand social change - becoming an observatory on the most relevant issues linked to sustainability, able to track and map the international and national best practices – and to support companies by offering them innovative insights, effective and differentiated solutions.

With junior and senior researchers, coming from different professional fields, education backgrounds, and active involvement in national and international networks, the team is able to offer a variegated view on sustainability topics. This multidisciplinary approach, linked to a deep understanding of complexity, is the driver that allows the FEEM SBSC Initiative to transform an innovative intuition into real action.

## SBSC Main Research Areas and Activities in 2014

SBSC activities include research, applied research and networking.

Research is conducted on sustainable business, with a focus on:

- policy and management system development;
- materiality analysis, sustainability strategic planning and reporting processes;
- research, communication and disclosure about social implications of access to energy;
- "shared value" as a key factor for innovative relationships between companies, organizations and citizens and as a driver of socio-economic innovation;
- gender equality and empowerment; integrated thinking and reporting.

Support to private and public organizations is given by the study and planning of internal and external sustainability communication strategies, with a focus on digital media, stakeholder mapping and engagement; corporate cause identification. Workshops and seminars are regularly organized on emerging sustainability topics.

- On July 10 and 11, SBSC, with FEEM's research programme "Energy: Resources and Markets", along with Giangiacomo Feltrinelli Foundation, and in collaboration with Eni and Expo 2015, organized the workshop "Energy Poverty and Energy Access: Global Challenges and Goals" aiming at investigating in depth and understanding the impact of access to modern energy services on development and identifying the best ways to implement effective policies and interventions, find best practices and possible strategies of cooperation among different actors in improving energy access. The output of the event was the publication "Global challenges, integrated solutions: a cooperation matrix against energy poverty" that contains the main achievement of the workshop and aims to be a recommendation report addressed to institutions and policy makers.
- In 2014 SBSC carried on its research activities dedicated to the study and the application of the sharing economy as a concrete approach to shared value creation. In collaboration with the Catholic University of Milan, Collaboriamo and Secolo Urbano ([www.sharexpo.it](http://www.sharexpo.it)), SBSC has launched Sharexpo, an experimental pathway to sharing economy during Expo 2015 that aims to make Milan a Shareable City model worldwide. After a consultation workshop, on July 2nd, the official Document of Sharexpo was presented. The Document included guidelines targeted to build an adequate legal and regulatory framework for the concrete application of the sharing economy and collaborative services for Expo Milano 2015. The main result is a Municipal Resolution on sharing economy, approved by Milan's City Council to experiment new collaborative solutions in the urban context.
- Concerning integrated thinking and reporting, SBSC edited the first 2014 issue of "Equilibri" – the sustainable development journal published by FEEM with "il Mulino" – featuring articles from FEEM researchers and academicians who debated the theme from various perspectives. On June 19th SBSC organized the Workshop "Practicing Integrated Thinking & Reporting - How Business and Societies search for competitiveness and sustainable growth" aiming at showing the synergies between sustainable development and competitiveness of business, through the discussion of a high level panel involving personalities from academia, international institutions and companies. This event was anticipated by a preparatory workshop held on June 18th for the IR pilot companies in order to present and share their own experiences with some IIRC (International Integrated Reporting Council) representatives, while addressing under a technical perspective some of the most significant aspects related to the application of the IIRC guidelines.

## Main International Events organized by SBSC in 2014

- International workshop “Energy Poverty and Energy Access: Global Challenges and Goals”, in collaboration with ERM research programme at FEEM, Fondazione Feltrinelli within the LabExpo Project, and Eni, Milan, July 10th
- International Workshop “Practicing Integrated Thinking & Reporting - How Business and Societies search for Competitiveness and Sustainable Growth”, Milan, June 19th

## SBSC Networking in 2014

The FEEM SBSC Initiative promotes local and international partnerships within organizations, associations and NGOs and participates in institutional initiatives and networks on sustainable development themes. In particular:

- SBSC supports the strategic planning and activities of the Global Compact Italian Network, of which FEEM is one of the Headquarters.
- It is part of the WAME2015 project on Access to Energy ([www.wame2015.org](http://www.wame2015.org)).
- It works within the 'Valore D' network on women's empowerment and leadership.
- It cooperates with Ca' Foscari University of Venice and the University of Siena on integrated thinking and reporting.
- It works with Sodalitas on CSR and social innovation.

# FEEM IN BASILICATA

## FEEM in Basilicata

FEEM's activities in the Basilicata region date back to 2008, when new offices were opened in Viggiano, a small town located in the province of Potenza in the heart of Val d'Agri, as part of an agreement signed by Eni for the extraction of gas and oil in that area. FEEM's mission in Basilicata is to contribute to the economic and social development of the region and to support Eni in developing local resources and human capital.

FEEM in Basilicata is now operational with resident researchers and collaborators of varied backgrounds and skills to handle multidisciplinary projects.

Activities are carried out in close cooperation with private and public local institutions, and involve research and support to policy for the development of the region's territory.

FEEM's research efforts are focused on energy and the environment, economy and society, sustainable tourism as an opportunity for local development, and the voluntary sector as a driver for establishing innovative services to integrate both public and private sectors.

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*As of December 2014*

## Main Activities carried out by FEEM in Basilicata

### **Energy and the Environment**

The energy and environment studies focus on complex issues to support local institutions in the dissemination of scientific knowledge. The studies performed in this area in 2014 include: assessment of the ecologic status and environmental pressure on the Pertusillo Lake, geological study of the lake's sediment cores, hydrocarbons speciation in collaboration with ARPAB (Environmental Protection Agency of the Basilicata region), study of Val d'Agri seismicity, historical analysis of natural outcropping in Tramutola, research on the environmental adaptation of plant species to hydrocarbons, history of the Val d'Agri oilfields as part of the Geological and Environmental Val d'Agri project.

### **Economy and Society**

Economic and society studies are characterized by interdisciplinarity and are aimed at supporting the public and private sectors in local economic, social and cultural development issues. Research in this area in 2014 includes: a study on the trend of the Lucania economy, investigation of Eni impact on the region's GNP growth, research on the population employed by Eni Distretto Meridionale (DIME), study on DIME-induced spinoff, study on the spinoff generated by business trips, analysis of Chamber of Commerce data on the trade and industrial activities of Alta Val d'Agri.

### **Sustainable Tourism**

The third strain of research, sustainable tourism, includes, but is not limited to, nature tourism, eco-tourism, archeological tourism, educational and energy tourism, etc. In 2014 research in this area extended to business tourism in Val d'Agri, events and wine & food tourism in the Basilicata region and in the area of Parco Nazionale dell'Appennino Lucano Val d'Agri Lagonegrese

### Training Activities

Activities carried out by FEEM in Basilicata involve all the stakeholders that might benefit from their early planning stages and are conceived as a leverage for the social and economic change of the region. In this manner, training and fostering the public understanding of science are considered relevant and essential for progress, wellbeing, and social cohesion. With these goals in mind FEEM regularly organises summer schools and learning weeks on energy, sustainability, sustainable tourism, film tourism, innovation and start-ups. Training and dissemination activities include seminars, educational and science laboratories to spread the knowledge of science and energy. An example is the autumn school “Fare Impresa: Scuola per aspiranti startuppi”, launched with the aim of providing would-be entrepreneurs of the Basilicata region with the tools required to transform an entrepreneurial idea into a business activity.

### Support to Institutions

Finally, support to institutions is provided through activities involving various social actors working toward the shared goal of local sustainable development. In 2014 these activities have continued with the aim to support the Environmental Department of the Basilicata Region, offer technical and organizational support for tender planning to the Viggiano municipality, technical scientific support to the Fondazione Lucana Film Commission for studies and events aimed at valorising the territory with audio-visual tools, and continued cooperation with the Agency for the Promotion of the Territory for shared analyses and studies.

# FEEM ACTIVITIES IN OTHER LOCAL CONTEXTS

## FEEM Activities in Ravenna

FEEM carries out activities in Ravenna since 2012, year in which, under the VI Framework Agreement, Eni and Ravenna started collaborating with local institutions with the aim of enhancing the local resources that contribute to sustainable development. In accordance with the development strategies of the Councillor for Productive Activities of the City of Ravenna, attention was given to the development of job opportunities for the young people of the area, to the promotion of technical and scientific culture and to innovation capacity and local business.

In 2014, with the aim to facilitate the matching between job demand and supply, FEEM has supported the promotion and implementation of internships and job placement for a period of 6 months. By partnering with the University of Bologna - Campus of Ravenna, Flaminia Foundation, employment centers of the Province of Ravenna and Associations, a group of 33 local businesses interested in welcoming one or more trainees was built. Again in 2014 under the "Jobs looking at universities" local businesses involved 34 paid trainees with a monthly allowance. FEEM has developed training and vocational guidance addressed to trainees and hosting companies, with the aim to enhance some cross-disciplinary skills.

FEEM has also supported the City of Ravenna for participation in a regional call to stimulate local innovation and competitiveness through the design of the initiative "CoLaboRA - Working together in Ravenna", which aims to foster the development of an innovative socio-economic system suited to the urban context of Ravenna, hence creating a center for knowledge sharing and skills to train the professionals and develop the business ideas required by the area.

The place where the project will be developed is an industrial building located in the area of the dock of Ravenna, which will be requalified and will become an incubator for startups and a space of coworking. The Region has approved the project which will start in 2015.

Finally, with regard to training and scientific dissemination within the local schools, for the school year 2013/2014, FEEM has organised 187 courses and workshops at 21 schools in the area with the involvement of 7 elementary schools, 9 middle schools and 5 high schools.

## FEEM Activities in Sicily

FEEM has launched activities in Sicily in 2009, in the provinces of Caltanissetta, Ragusa, Enna, Siracusa and Agrigento, with the aim to create and disseminate the culture of energy and sustainability, and promote innovation and local development.

FEEM activities in Sicily are carried out in collaboration with Enimed and are focused on higher education, science and education for schools. All activities are run in close collaboration with the local public and private institutions in order to support development-oriented policies. Indeed, FEEM works as facilitator and mediator among the institutions, the universities and the third sector, supporting them in activities aimed at promoting local resources.

The Summer School promotes activities of higher education, organized as weeks of study and training, which over the years have addressed several topics including energy, sustainable development, science, innovation and start-ups. These training courses are intended for graduates, teachers and professionals and provide useful knowledge aimed at enhancing personal and professional skills with a view to continued education.

The 6th edition of the Summer School entitled “From the idea to implementation of an entrepreneurial start-up” was organized in 2014 and attended by 32 professionals coming from various fields. The Summer School prompted the idea of Shiplab, an incubator and accelerator for start-ups in Sicily, which was set up and developed by a group of 14 young professionals.

The activities of popular science for schools are intended to promote energy saving, and are aimed at creating awareness of energy and sustainability issues. In 2014, the course “At school with energy” and the science theatre show “Earth: instructions for use”, involved seven municipalities (Bronte, Butera, Cerami, Gagliano Castelferrato, Gela and Ragusa), 31 schools, 261 classes, for a total of 7,500 students.

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*As of December 2014*

# FEEM SUPPORT TO ENI AWARD

## Eni Award Scientific Secretariat

Since 2003, FEEM has been supporting Eni in organizing the Scientific Secretariat of the prestigious Eni Award. The prize was officially launched in July 2007 to replace and extend the former Eni-Italgas Prize, which in 2006 had reached its XIX edition.



The award is promoted by Eni in order to encourage basic and applied scientific research within the national and international scientific community, to provide incentives for technological development and innovation, to promote a better use of energy sources and help new generations of researchers to emerge.

Over the years the Award has gained a solid reputation as one of the most important scientific prizes in the fields of energy and environment and today it is considered the “Nobel Prize for Energy” by the international scientific community for several reasons: the increasing number of projects submitted by researchers all over the world, the worldwide network of universities and research centres as well as the prestige of the Scientific Commission that includes renowned international scientists and two Nobel Prize Laureates.

In 2014, the Scientific Secretariat prepared the Eni Award 2015 Edition, the second of the 2014-2016 triennial cycle. This Edition saw the introduction of relevant modifications to the Official Announcement and regulations: among them, a new and rigorous Resubmission policy, specifically aimed to underline the selectivity of this Prize by limiting the available number of applications submitted by the same Candidate, as well as a double deadline, in order to provide a better and more dedicated assistance to the Candidates, during the last part of the Call for Proposal.

Following these and other improvements, at the end of the Call, the Prize registered a decrease in the total amount of submissions, which were 851; the Debut in Research Prize continued its positive trend, increasing its participants from 152 to 193, thanks both to an accurate diffusion of the Official Announcement and to a detailed, academy-focused research performed by the Scientific Secretariat. During the same year, various high-level representatives of the international academic and industrial community joined the Scientific Commission, which increased to 27 Members from the 23 of Eni Award 2014. Moreover, 8 newly appointed Members were Enrique Iglesia (University of California, Berkeley; Eni Award 2012 former winner), Avelino Corma (Polytechnical University of Valencia; Eni Award 2010 former winner), Paul Frankl (International Energy Agency), James Clark (University of York), Roberto Danovaro (Università Politecnica delle Marche; Eni Award 2013 former winner), Giovanni Azzone (Politecnico di Milano), Piero Salatino (Università degli Studi di Napoli “Federico II”), Fabio Beltram (Scuola Normale Superiore).

*More information on the Eni Award is available at <http://www.eni.com/eni-award/ita/home.shtml>*

**Project Manager**  
Filippo Tessari

**People**  
Simona D'Angelo  
Lorenzo Messaggi  
Marco Soggetto  
Marco Suanno

*As of December 2014*

# FEEM SUPPORT TO ENI SCHOOL PROJECTS

FEEM supports Eni in carrying out educational projects such as Eniscuola, Lab4Energy and Schoolnet.

The projects aim at providing pupils and teachers of lower-middle and high schools with advanced teaching support on the subject of energy, sustainability and environment and at increasing the use of the Internet as a fundamental tool for learning and acquiring information. The three projects are web-based and use multimedia technology for dissemination. A broad range of learning support systems are provided and they can all be downloaded by the pupils and students.



## Eniscuola

Eniscuola's main tool is the eniscuola.net website. The website has over 3,000 pages with documents, pictures, graphs, charts, experiments, games, eBooks and interviews with national and international scientists including Nobel Prize Laureates, Eni Award winners; scientists from the most important universities like University of California (Berkeley) or Massachusetts Institute of Technology. A memorandum of understanding signed with the Ministry of Education, University and Research in July 2010 ratified Eni's commitment to develop multimedia material on scientific issues and learning of English.

## Lab4energy

Lab4energy ([lab4energy.net](http://lab4energy.net)) is an educational project promoted by Eni and FEEM, that was launched in 2013 targeting the best Italian high school students to make them aware of energy related topics and to prepare them to potential employment in the field. Given the huge success of the project, in 2014 it has been extended to a selected group of students from the following Countries where Eni operates: China, Croatia, Ghana, Italy, Mozambique, Norway, Pakistan, Russia, Tunisia, Turkey, United Kingdom and United States. The students attended again via web a series of lessons and lectures, carried out by MIT professors, on energy related topics such as demand, supply, transformation, costs and process, resources and reserves, petrochemical, growth and development, impact and scenarios.

## Schoolnet

The Schoolnet project ([www.schoolnet.eni.it](http://www.schoolnet.eni.it)) aims at providing pupils and teachers of lower-middle schools with advanced teaching support on the subject of energy, sustainability and environment and at increasing the use of the Internet as a fundamental tool for learning and acquiring information. The main purpose of the project is to encourage the exchange of ideas and information among some of the schools of the areas where Eni operates, in Algeria, Angola, Australia, Congo, Ghana, Indonesia, Kazakhstan, Mozambique, Norway, Pakistan, Timor Leste, Ukraine, Venezuela and US-Alaska. Through the participation of their schools, students from each class in these countries are invited to create a storyboard for an animated cartoon. In 2014, the project "Welcome to our country" was conceived in an attempt to try to answer these questions in a funny and exciting way, and to stimulate knowledge of far-away countries, their traditions and their identity. In 2014 the Schoolnet project contacted overall 67 schools, with the involvement of more than 83 teachers and the participation of over 1,400 students.

### People

Andrea Bellati  
Tiziana Bosco  
Emanuele Ferrari  
Davide Gorla  
Nadia Mirabella  
Elisabetta Monistier  
Benedetta Palazzo  
Chiara Reglieri

*As of December 2014*

## INTRODUCTION

In this section we present a fully-fledged social report, providing not only qualitative and descriptive information, but also indicators and statistics about the results from the operations carried out by FEEM.

The figures provided represent the impact of activities and an overall evaluation of the inputs that contribute to our productivity. Among them, human capital is obviously fundamental.

This social report aims at showing how - during the 2012-2014 period - FEEM has operated towards all its major stakeholders: (i) our people; (ii) the research community; (iii) the policy sphere; (iv) young generations; and (v) the general public.



## i) Our people

Human capital, mainly composed of researchers, is the most important input for FEEM's institutional activities. Research staff includes experienced international research leaders with key responsibility in the design and implementation of projects, senior and junior residential researchers working in the offices of Milan, Venice, and Viggiano, and research associates, typically affiliated to a university or to other research institutions and involved in specific projects. Administrative staff includes full-time employees and non-permanent staff involved in support activities for specific projects.

FEEM's operations include a much larger number of collaborators than full time employees. This organizational mode is typical in the non-profit sector and in research institutions, as it allows flexibility and reflects the high turnover rate of young researchers, typically moving to other institutions after a successful training period in FEEM. In recent years, staff activities have been streamlined and reorganized with the creation of the FEEM staff register in 2008. In 2014, the 28 full-time employees provide efficient secretarial and administrative support, and communication services for the organization of events, publications and web.

The gender audit yields a balanced mix in the organization, with a prevalence of women. Interestingly, this pattern is observed across categories, confirming the same balance by gender among researchers, non-permanent staff and employees. In 2014 we can observe a slight increase in the international dimension and overall the average age is 35 years.

<b>FEEM People</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Total headcount	193	186	179
<b>By categories:</b>			
Researchers	120	100	85
<i>Junior Researchers</i>	62 (52%)	53 (53%)	42 (49%)
<i>Senior Researchers</i>	27 (22%)	24 (24%)	20 (24%)
<i>Research Associates</i>	31 (26%)	23 (23%)	23 (27%)
Other Collaborators	45	57	66
<i>Applied Researchers *</i>	25 (56%)	39 (68%)	44 (67%)
<i>Support Activities</i>	20 (44%)	18 (32%)	22 (33%)
Full-time employees	28	29	28
<b>By sex:</b>			
Male	86 (45%)	81 (44%)	80 (45%)
Female	107 (55%)	105 (56%)	99 (55%)
<b>By nationality:</b>			
Italian	155 (80%)	156 (84%)	149 (83%)
Non-Italian	38 (20%)	30 (16%)	30 (17%)
Average age (years)	35	33	35

\* FEEM in Basilicata, FEEM activities in other local contexts and FEEM support to Eni Award and Eni School projects.

The educational profile of FEEM's people is overall high: in 2014, 89% have a graduate degree, and 56% also hold a post-graduate diploma. Among researchers, 86% hold a post-graduate degree. In particular, 58% of our researchers holds a Ph.D. which was obtained abroad in 57% of cases.

<b>FEEM Researchers</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
	120, of which	100, of which	85, of which
<i>Post-graduates</i>	108 (90%)	82 (82%)	73 (86%)
Master	90	70	67
<i>of which obtained abroad</i>	48 (53%)	45 (64%)	43 (64%)
Ph.D.	71	54	49
<i>of which obtained abroad</i>	40 (56%)	29 (54%)	28 (57%)

## ii) Research community

The research community is a primary stakeholder, which FEEM targets by carrying out research projects, by publishing high quality research, by organising scientific events and training initiatives, and by managing large international networks.

### Research

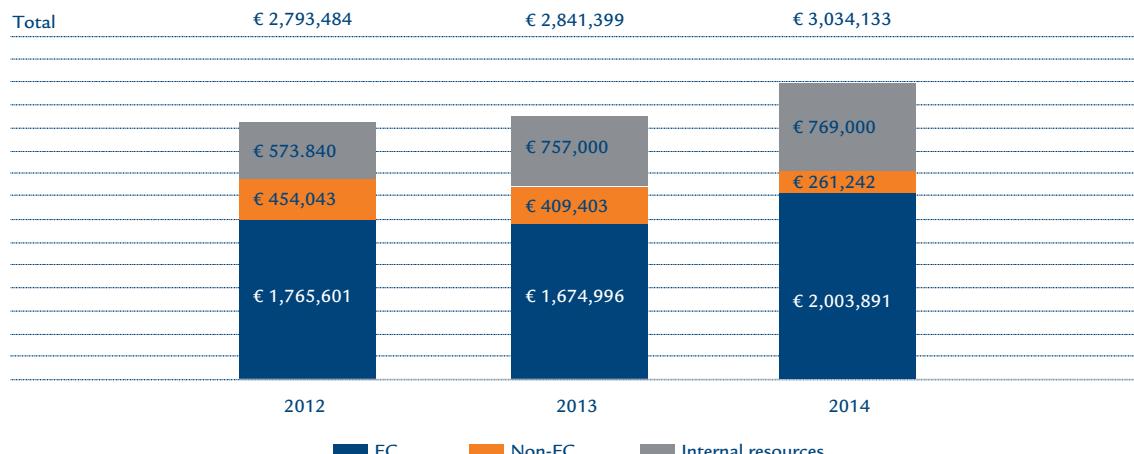
In 2014, FEEM has been actively working on 34 projects, 27 of which financed by third parties, and mainly by the European Commission.

Research projects	2012	2013	2014	2012-2014
Total research projects	42	38	34	113
of which				
funded by the EC	27 (64%)	26 (68%)	23 (68%)	76 (67%)
funded by others	7 (17%)	6 (16%)	4 (12%)	17 (15%)
funded with own resources	8 (19%)	6 (16%)	7 (21%)	20 (18%)
Average project duration (in years)	3.2	3.2	3.6	3.3

Over the years FEEM has achieved a high success rate in research funding under the European Commission, in particular under the EC 7th Framework Programme on Environment (EC FP7 - Environment, including climate change), ranking among the top-10 Italian research institutions, including University departments (Source: IRM Science on the net report, based on Cordis dataset, as of September 2013).

“Internal resources” fund own research projects and other research activities including seminars, conferences and lectures. 2012-2014 “Non-EC” funders include the Ager Foundation, Ispra, KPMG, the Volkswagen Foundation. The significant EC funding in 2014 is due to the conclusion of the final projects funded under the 7th Framework Programme and to the absorption of the relevant overheads. The transition to the new EC programme Horizon 2020 is expected to determine a reduction in the overall funding in 2015.

Research funding by source



## Scientific publications

Publications are one of the most important outlets for the dissemination and certification of the scientific quality of FEEM's research output.

FEEM circulates a series of working papers in English (FEEM "Note di Lavoro") targeted to the international research and academic community. FEEM has published a total of 2,503 "Note di Lavoro" since the publication of its first working paper in 1993. FEEM "Note di Lavoro" are downloadable from FEEM's website since 1998, and have been gradually included in other platforms such as AgEcon, the Social Science Research Network (SSRN), RePEc, Berkeley University Press, ZBW and EconLit.

Since 2008 the "Note di Lavoro" are distributed only electronically, with substantial cost savings and unscathed impact and visibility. In 2014 the downloads from the Social Sciences Research Network SSRN, BePress, RePEc and AgEcon and ZBW have hit another record of 153,371.

Working papers	2012	2013	2014	2012-2014
FEEM working paper series "Note di Lavoro"	100	110	110	320
of which				
with at least one FEEM author	39%	42%	40%	40%
N. of downloads from other websites (*)	78,535	112,955	153,371	344,861
of which				
Social Science Research Network SSRN	26,660	26,642	15,919	69,221
Berkeley University Press	4,956	4,637	8,198	17,791
RePEc	9,976	8,094	21,040	39,110
AgEcon	31,501	53,028	79,833	164,362
ZBW	5,442	20,554	28,381	54,377

(\*) FEEM Note di Lavoro are included in the Economics Research Institutes Paper Series of Social Science Research Network SSRN, AgEcon, RePEc, Berkeley University Press, ZBW and EconLit. This table reports statistics from SSRN, AgEcon, RePEc, BePress and ZBW.

The percentage of Note di Lavoro authored by FEEM researchers in 2012, 2013 and 2014 republished in peer-reviewed journals is equal to 29%.

In 2014 FEEM research has been published in *Nature*, the world's most prestigious and most highly cited interdisciplinary science journal, confirming FEEM's role as one of the premier European institutions in the field of environmental and resource economics. Herebelow is a list of the journals that featured FEEM research in 2014 ordered by their impact factor drawn from the 2014 InCites Journal Citation Report, which uses citation data from approximately 12,000 scholarly and technical journals and conference proceedings from more than 3,300 publishers in over 80 countries.

- *Nature*
- *Nature Climate Change*
- *Climatic Change Ecological Indicators*
- *Earth System Dynamics Energy Policy*
- *Energy Economics*
- *Water Resources Management*
- *Technological Forecasting and Social Change*
- *Regional Studies*
- *Environmental Modeling and Assessment*
- *Landscape Research Economic Modelling Economics Letters*
- *Water*

FEEM research findings have also appeared in the following leading field journals (alphabetical order): *Climate Change Economics; Drinking Water Engineering and Science; Economics and Policy of Energy and the Environment; Environmental and Resource Economics; Environmental Modelling and Software; Journal of Socio-Economics; Journal of the Association of Environmental and Resource Economists; Metallurgical Research & Technology*.

### Other publications

FEEM also has two editorial series with Edward Elgar and il Mulino for books published in English and in Italian, respectively. In 2014 the Fondazione launched an open-access, digital editorial series, FEEM Press, which serves as an outlet for FEEM research, providing an authoritative source of information in the areas of climate change and sustainable development, energy and economics, with an emphasis on the geopolitical dimension. All the volumes published in FEEM Press are made freely and permanently available on FEEM's website immediately upon publication. Publishing with FEEM Press enables authors to widen their readership, comply with open access mandates and benefit from the advantages inherent in FEEM's worldwide network.

Since 2012 FEEM publishes the open-access e-journal "Review of Environment, Energy and Economics"

- Re3, a tool for the dissemination of the work and research-based policy analysis of FEEM researchers and leading international scholars, covering the areas of the environment, energy and economics. New contributions, mainly articles or interviews with videos, are published weekly, and an electronic bulletin "Re3News", with the latest contributions published in the e-journal, is distributed monthly. (All the titles published by FEEM in 2014 are listed in the Appendices).

### Conferences and seminars

The organization of events is a fundamental activity for FEEM, since it allows the creation and maintenance of relationships with the scientific community at the national and international level. It also generates important spillovers in terms of research opportunities that can subsequently yield outputs in the form of projects, publications and networks.

Conferences are usually large-scale events on the topics of FEEM's research agenda, while workshops are typically used for the discussion of "work in progress" and brainstorming sessions. Lectures, provided by some of the greatest thinkers and scholars of our time guide the audience, providing new ideas, and challenging conventional wisdom, and are catalysts for discovery in areas engaging the biggest questions in the social, economic, and political spheres. Seminars are primarily given by residential researchers and aimed at cross-fertilization between the different research areas and programmes. Seminars are also open to visiting scholars and to the local research community, and widely publicized through the web.

Over the 2012-2014 period, FEEM has organized a total of 279 scientific events for the research community, attracting over 20,000 participants.

Conferences and seminars	2012	2013	2014	2012-2014
Events for the research community	83	99	97	279
of which:				
Conferences, workshops and lectures	26 (31%)	43 (43%)	41 (42%)	110 (39%)
Seminars	57 (69%)	56 (57%)	56 (58%)	169 (61%)
Total events attendance	5,336	7,391	7,684	20,411
of which:				
Conferences and workshops attendance	3,041 (57%)	5,079 (69%)	5,166 (67%)	13,286 (65%)
Seminars attendance	2,295 (43%)	2,312 (31%)	2,518 (33%)	7,125 (35%)

In 2014, FEEM organized 97 events (33 main conferences and workshops, 8 lectures, and 56 seminars) of which 11 through the ICCG (2 main conferences and workshops, 3 lectures and 6 seminars) attracting an overall attendance of about 7,600 participants.

### Post-graduate training

Young researchers are very important stakeholders for FEEM and providing advanced training is thus one of the principal institutional activities. In this direction, FEEM organizes Marie Curie individual fellowships (sponsored by the EC), summer schools, and internships.

In 2014 FEEM co-organized 3 summer schools, and supported 5 Individual Marie Curie Fellowships, and 12 internships.

Post graduate-training	2012	2013	2014	2012-2014
<b>Summer Schools</b>				
Number of Summer Schools organized	2	2	3	7
Students	60	60	65	185
<b>Graduate researchers trained at the Fondazione</b>				
Internships	10	12	12	34
Marie Curie Individual Fellowships	4	5	5	14

### Summer Schools 2014

- CMCC-ICCG Summer School on "Adaptation Policies and Practices in the Mediterranean Basin (MedAdapt)" - *Venice, 19-23 May 2014*
- FEEM Summer School on "Cultural variables, Nation-building and Transition Processes in the South-Eastern Bank of the Mediterranean / Variabili culturali, nation-building e processi di transizione nella sponda sud-orientale del Mediterraneo" – Economy and Society Research Programme - *Butera, 1-4 July 2014*
- EAERE-FEEM-VIU European Summer School on "The Economics of Adaptation to Climate Change" - *Venice, 6-12 July 2014*

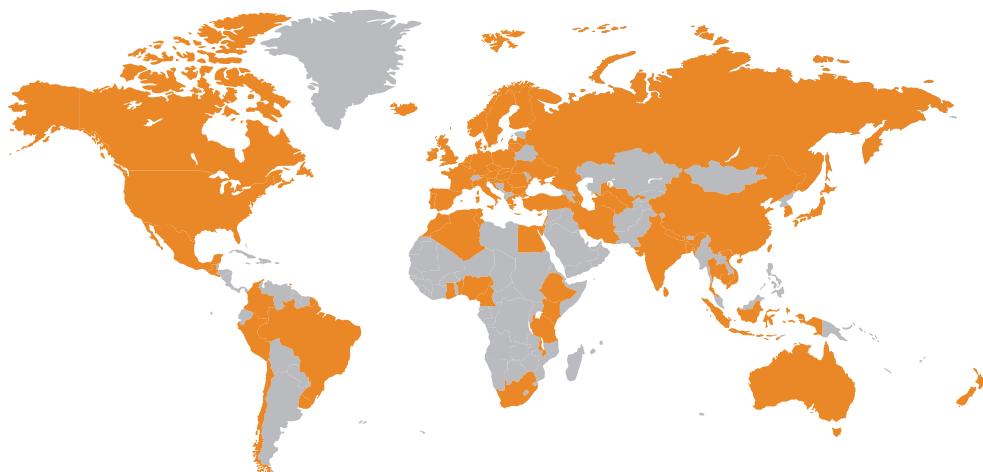
Fostering the investment in human capital in order to advance the frontiers of knowledge is FEEM's ultimate objective. For this reason, since 2009 (and until 2015) FEEM bestows a prize for the most innovative ideas by young economists. The prize (FEEM Award) is organized jointly with the European Economic Association (EEA) and yields a double dividend: rewarding scientific discovery and promising young scholars. The sixth edition of the FEEM Award was presented on August 28, 2014 during the European Economic Association (EEA) Annual Congress at the Toulouse School of Economics (TSE) in France, at the presence of TSE President and Nobel Laureate, Prof. Jean Tirole.

## Networks

The international research network is certainly one of FEEM's most valuable intangible assets. Built up over the years by involving the best researchers and top research institutions on various projects, FEEM's international research network allows the Fondazione to remain acquainted with the state-of-the-art of scientific knowledge, to spread its results more widely and expose its human capital to international interaction.

Over the years, FEEM has contributed to the creation of a number of thematic networks and associations, such as the Coalition Theory Network (CTN), the European Association of Environmental and Resource Economists (EAERE), the Italian Association of Environmental and Resource Economists (IAERE), and the Biodiversity and Economics for Conservation Economists network (BIOECON). FEEM is also institutional member of the European Economic Association (EEA), of the European Association of Environmental and Resource Economists (EAERE), of the Association of Environmental and Resource Economists (AERE), and of the Italian Association of Environmental and Resource Economists (IAERE). FEEM is entrusted with the management of the Permanent Secretariat of EAERE, IAERE, and International Energy Workshop (IEW). In recent years FEEM has also built new important partnerships with the Euro Mediterranean Centre for Climate Change (CMCC), the Fondazione Giorgio Cini for the creation of the International Center for Climate Governance (ICCG) in Venice, the Climate Policy Initiative (CPI), and Economics for Energy. FEEM is also involved in the International Energy Workshop network (IEW), the Integrated Assessment Modeling Consortium (IAMC), the Energy Modelling Forum (EMF), the Regional Modelling Exercise (RME) network, the Global Climate Forum (GCF), the Distretto Veneziano della Ricerca (DVR), and the non-profit international student organisation CliMates. Finally, since 2013, FEEM hosts the Italian Global Compact Foundation (IGCF), aimed at promoting the function of the Global Compact Network Italy (GCNI), a national platform that carries out activities to promote and spread the Pact of the UN Global Compact in the Italian context.

## FEEM's global footprint



- FEEM is linked via joint projects, partnerships or associations with over 600 research institutions operating in 90 countries around the world.

### iii) Policy sphere

One of the characteristics of FEEM has always been the provision of technical assistance to national and international institutions. The past twenty five years have seen a strengthening of FEEM's role as a provider of technical assistance to national and international institutions and policy makers. Indeed, through the rigor of its research, FEEM aims at improving the credibility and quality of decision-making in public and private spheres. This goal is achieved by creating an international and multidisciplinary network of researchers working on several innovative projects, by promoting training in specialized areas of research, by disseminating research results through a wide range of outreach activities, and by delivering directly to policy makers via participation in various institutional fora. In 2014 the most significant and systematic collaborations have been, at the international level, with:

- United Nations:
  - › UN Framework Convention on Climate Change (UNFCCC)
  - › UN International Panel on Climate Change (IPCC)
  - › UN International Strategy for Disaster Reduction (UNISDR)
  - › UN Educational, Scientific and Cultural Organization (UNESCO)
  - › UN Environment Programme (UNEP)
  - › Food and Agriculture Organisation of the United Nations (FAO)
  - › Sustainable Development Solutions Network (SDSN)
- European Union:
  - › European Commission  
DG Climate Action (CLIMA); DG Energy (ENER); DG Enterprise and Industry; DG Environment (ENV); DG Europe Aid; DG Research and Innovation (RTD), Cooperation Programme, People Programme, and Ideas Programme (European Research Council – ERC); Joint Research Council
  - › European Environmental Agency (EEA)
  - › European Investment Bank (EIB)
  - › European Parliament
  - › France Embassy and France General Commissariat at EXPO Milano 2015
  - › Privatization Agencies and Ministries of the main European Countries
- Academy of Sciences for the Developing World (TWAS)
- Asian Development Bank (ADB)
- Green Growth Knowledge Platform (GGKP)
- International Energy Agency (IEA)
- International Fund for Agricultural Development (IFAD)
- International Human Dimensions Programme (IHDP)
- Istanbul Policy Centre (IPC)
- International Renewable Energy Agency (IRENA)
- Mercator Research Institute on Global Commons and Climate Change (MCC)
- Ministerie Van Infrastructuur En Milieu – PBL (The Netherlands)
- Organization for Economic Co-operation and Development (OECD)
- The World Bank (WB)
- Volkswagen Foundation

At the national level, with:

- Bank of Italy
- EXPO Milano 2015
- Fondazione Accenture; Fondazione AEM; Fondazione Giangiacomo Feltrinelli; Fondazione IBM; Fondazione Mondadori; Fondazione Olivetti; Fondazione Sodalitas
- Global Compact Network Italia (GCNI)
- Italian Institute for Environmental Protection and Research (ISPRA) and local public authorities for sustainable development matters (Lombardy Region; Lombardy Foundation for the Environment, FLA; Basilicata Region; Po River Basin Authority; City of Ferrara; City of Parma; Emilia Romagna Region; Emilia Romagna Agency for the Protection of the Environment)
- Italian Ministry for the Environment, Land and Sea; Italian Ministry of Economy and Finance; Italian Ministry of Education, University and Research; Italian Ministry for Foreign Affairs
- Italian National Institute of Statistics (ISTAT)
- Local public authorities for matters concerning privatizations and liberalizations

#### **iv) Young generations**

FEEM supports Eni in the organization of educational projects for schools, Eniscuola, Lab4Energy and Schoolnet, and carries out local educational activities in Sicily and in Ravenna. All the projects are based on the Internet and multimedia technology. Learning support systems are wide-ranging (texts, images, graphs and charts, lessons, exercises, data bases, film clips, games, and links to other sites) and can all be downloaded by students. The projects are also actively involved in the organization of numerous scientific and educational events, regularly organising teaching activities, seminars, laboratories and scientific theatre events in schools all over Italy (see dedicated section “FEEM Support to Eni School projects” of the Annual Report).

FEEM Educational activities for Eniscuola, Lab4Energy and Schoolnet

<b>Numbers involved at middle schools</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2012-2014</b>
N. of schools contacted	578	110	172	860
N. of educational seminars and laboratories	182	520	447	1,149
N. of students who attended direct teaching activities	11,920	19,750	14,337	46,007
N. of teachers involved in teaching activities	1,624	1,230	729	3,583

#### **v) General public**

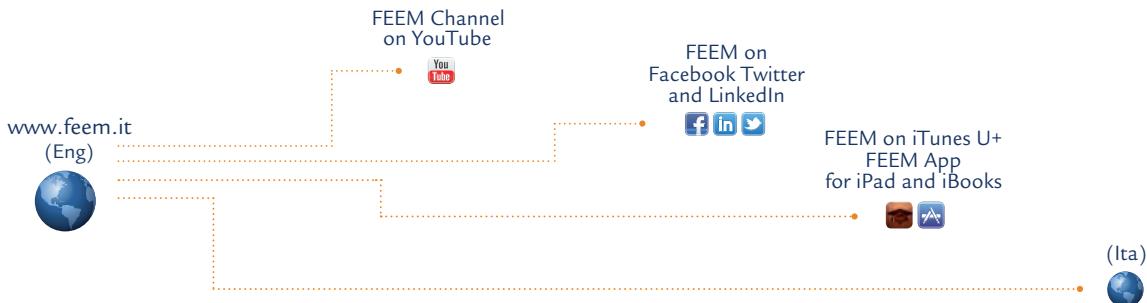
Finally, FEEM aims at fostering and encouraging a broader awareness and understanding of economic, energy and environmental issues, also within the civil society. This objective is pursued by using a variety of communication tools and outlets, ranging from the web to non-technical publications, the organization of public conferences and roundtables, and the free access to FEEM facilities such as the Library, with a view to reinforcing the commitment towards the economic and social development of the country.

##### **FEEM on the internet, 1994-2014**

FEEM's presence on the internet started in the early 90s and the web is still today one of the main tools for FEEM to showcase its institutional activities to the general public. For this reason, FEEM's website ([www.feem.it](http://www.feem.it)) - launched in 1994 - is constantly subject to updates and improvements in order to be always user-friendly, making information accessible and clear, and ensuring efficiency through a high-speed internet connection and dedicated line on the network of the Ministry for Higher Education and Scientific Research. In this manner, and in order to keep the public regularly updated, FEEM also publishes a digital bi-monthly newsletter, FEEM News, mailed to over 7,000 stakeholders and subscribers, and a dedicated section of the website allows visitors to subscribe to the newsletter or to regular updates on FEEM research and related initiatives. In 2014 FEEM launched the Italian version of feem.it and over 70,000 single users visited FEEM's website and Google assigned to feem.it a PageRank of 7 (PageRank is an algorithm – on a scale from 1 to 10 – that Google uses to determine the importance of a web page).

In addition to the institutional website, FEEM shares the contents of its activities and research through satellite websites dedicated to specific research projects, summer schools, events or publications, and manages video sharing and social networking sites, such as a [FEEM Channel on You Tube](#), and institutional pages on [Facebook](#), [Twitter](#) and [LinkedIn](#). Videos and interviews posted on FEEM's multimedia Channel on You Tube registered more than 70,900 views, and as of 2014 almost 4,500 followers joined FEEM on the web social networking communities (Facebook, Twitter and Linked-in).

The most important digital innovation carried out by FEEM in recent years, however, is represented by FEEM's new institutional website on [iTunes U](#), the Apple portal devoted to the world of research and education. Traditionally at the forefront in the field of new technologies, FEEM has been the first non-academic research Foundation in Italy to join iTunes U, currently the most important and globally recognized platform for sharing and providing free of charge multimedia educational content from leading educational institutions. Since its launch on iTunes U, FEEM recorded over 20,000 visitors and 4,000 registered users with over 21,000 downloads, and is now able to promote its activities to an even broader audience all over the world. FEEM channel on iTunes U is available at: <https://itunes.apple.com/it/institution/fondazione-eni-enrico-mattei/id499827802>.



#### Publications for the general public

FEEM also uses traditional communication tools aimed at reaching the general public. Since 1997 FEEM regularly publishes the journal for sustainable development "Equilibri" with il Mulino. The journal is targeted to a broad audience of readers, and over the years it has contributed to the understanding of sustainable development, emphasizing its complex economic, social and political implications. Today, new trends are reshaping the world's economic and political balances. In the quest for new paradigms, Equilibri aims at dealing with these issues, keeping a constant eye on energy, the environment and future global challenges. The three issues published in 2014 debated key topics that have emerged on today's global stage: new reporting systems, and Integrated Reporting in particular, to assess the performance of firms; new forms of welfare in South America; the latest insights into climate change from an economic development perspective.

#### Events for the general public

Besides events targeted to the scientific community, FEEM also organizes roundtables, book presentations, conferences and lectures usually open to the general public on various issues broadly related to sustainable development.

Finally, FEEM also offers free access to its facilities and in particular to its [Library in Milan](#). FEEM Library was opened to the public in 1997. Originally established for the needs of FEEM researchers, it has been enlarged over the years and now offers a collection of relevant interest for students and scholars. In the fields of natural resource economics, the holdings of the library are among the most updated in Italy, containing a great selection of books (5,045), scientific journals (2,350), electronic databases (4) and statistical yearbooks (6).

The general public is also usually reached by media operators. In 2014 FEEM activities have had a significant coverage in the traditional media, totalling 525 articles and open-editorials, 226 announcements and press releases, and 153 citations published in national and local newspapers, covering studies, research projects, publications and events. The press review is downloadable from a dedicated section of the website dedicated to the media.

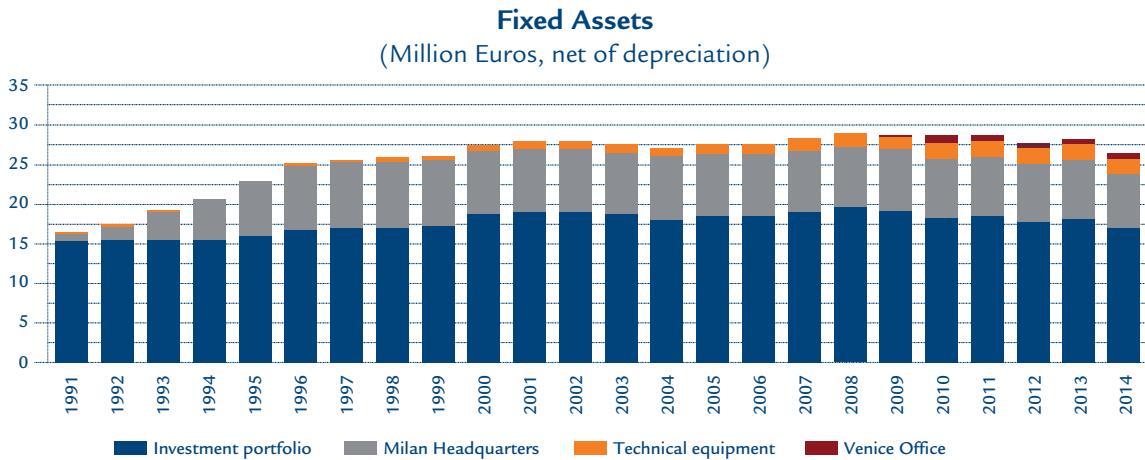
# FINANCIAL REPORT

## Endowment and asset growth

A key objective for the financial sustainability of FEEM activities is the conservation of its endowment and assets over time. Over the past twenty years, the assets of FEEM have grown from the initial endowment of 13.3 million Euros in 1989 to approximately 26.5 million Euros at year-end 2014. This increase is mainly attributable to the additional contributions from the founders, along with the inception and increase of the Studies and Research reserve fund in the early years, when receipts exceeded total costs. Returns from financial assets is another component of asset growth.

Contributions from the founders have financed in the early 90s the complete restructuring of FEEM's Milan headquarters at the prestigious Palazzo delle Stelline, while the Studies and Research reserve fund increased its capitalization, allowing the financing of extraordinary institutional activities.

The graph below shows the composition of FEEM's fixed assets net of depreciation. Over the past twenty five years the overall value of the investment portfolio has grown from the initial 14.7 million Euros invested in 1989 to the present 17 million Euros, following a risk-adverse investment strategy. The value of the lease on the headquarters building increased until 1998, when the restructuring was completed. In 2010 FEEM completed the restructuring of its new local site in Venice, an aisle of an historic building located on the Island of San Giorgio Maggiore, started in 2009.

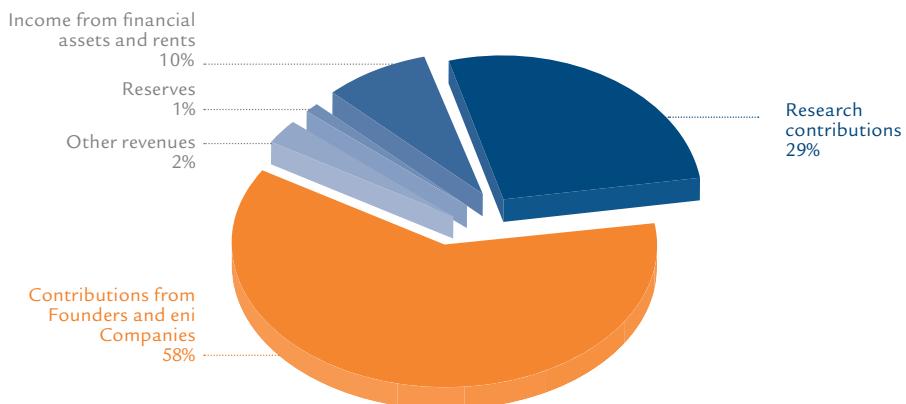


## Revenues

Total revenues for 2014 amounted to 8,065,974.43 Euros. Contributions from Founders and Eni companies represent the main source of funding for the annual budget, accounting for 58% of total revenues in 2014.

FEEM has developed a remarkable fundraising capability. External funding raised from third parties – mainly from the European Commission through the research framework programmes contributions, along with several domestic and international institutions – covers approximately 29% of FEEM's total revenues. In 2014 third party funding totaled 2.3 million Euros. Returns from the investment portfolio and rents represent 10% of total revenues. Financial assets, managed by professional asset managers, provided an annual income of approximately 0.7 million Euros in 2014. The remaining 3% comes from the use of the reserve funds and other extraordinary items. The revenues breakdown for 2014 is shown in the graph below.

### ..... Breakdown of Revenues 2014 .....



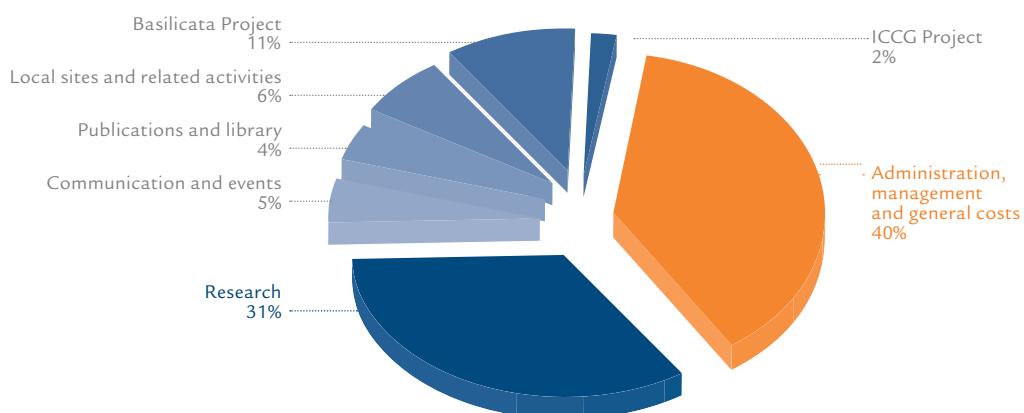
## Spending

In 2014, expenditure for research projects and other institutional activities amounted to approximately 4.7 million Euros (60% of the total budget), whereas administration and management expenses amounted to 3.3 million Euros (40% of the total budget).

Although FEEM's institutional activities have significantly increased in recent years, the minimization of the fixed cost component and the flexibility of the organizational structure have allowed the allocation of the largest part of the annual spending to research and related activities, such as publications, communication, and dissemination initiatives.

The graph below shows the breakdown of expenditures in 2014 for administration/management (including also taxes and general costs) and for the institutional activities. The personnel expenditure has been classified accordingly.

### ..... Breakdown of Spending 2014 .....



**Financial statement Balance sheet**  
**(Euros)**

	<b>31/12/2013</b>	<b>31/12/2014</b>
<b>FIXED ASSETS</b>		
Tangible fixed assets	2,001,642	2,004,968
Intangible fixed assets	8,025,105	7,749,862
Financial assets	18,436,980	16,969,997
<b>TOTAL FIXED ASSETS</b>	<b>28,463,726</b>	<b>26,764,827</b>
<b>CURRENT ASSETS</b>		
Receivables	304,959	573,810
Cash at bank and in hand	1,177,539	2,663,179
<b>TOTAL CURRENT ASSETS</b>	<b>1,482,498</b>	<b>3,236,989</b>
<b>DEFERRED CHARGES</b>	<b>1,052,834</b>	<b>1,118,303</b>
<b>TOTAL ASSETS</b>	<b>30,999,059</b>	<b>31,120,119</b>
	<b>31/12/2013</b>	<b>31/12/2014</b>
<b>LIABILITIES</b>		
Initial endowment	13,316,553	13,316,553
Grants from Founders	9,872,421	9,872,421
Studies and research fund	3,094,283	3,184,283
Surplus	144,610	92,630
<b>TOTAL NET LIABILITIES</b>	<b>26,427,867</b>	<b>26,465,887</b>
<b>RESERVE FUNDS</b>		
Investment portfolio fluctuation fund	675,453	675,453
Library fund	66,055	66,093
Reserve funds for future expenses	853,611	880,030
<b>TOTAL RESERVE FUNDS</b>	<b>1,595,119</b>	<b>1,621,576</b>
<b>SEVERANCE INDEMNITY FOR PERSONNEL</b>	<b>252,556</b>	<b>305,939</b>
<b>DEBTS</b>		
Suppliers	662,100	1,008,126
Other debts	359,821	565,964
<b>TOTAL DEBTS</b>	<b>1,021,921</b>	<b>1,574,090</b>
<b>DEFERRED INCOME</b>	<b>1,701,595</b>	<b>1,152,627</b>
<b>TOTAL LIABILITIES</b>	<b>30,999,059</b>	<b>31,120,119</b>

**Profit and Loss Account**  
**(Euros)**

<b>REVENUES</b>	<b>31/12/2013</b>	<b>31/12/2014</b>
Income from financial assets	548,882	703,254
Rents	65,000	65,000
Contributions from Founders and eni companies	4,645,000	4,645,000
Research contributions	2,084,399	2,265,133
Other revenues	269,388	244,510
Reserves	80,000	143,078
<b>TOTAL REVENUES</b>	<b>7,692,669</b>	<b>8,065,974</b>
<b>EXPENSES</b>	<b>31/12/2013</b>	<b>31/12/2014</b>
Personnel	1,913,877	1,915,804
Researchers and non permanent staff	2,135,606	2,373,098
Statutory bodies	223,751	377,569
Travel expenses	549,478	636,900
Consumables	118,611	101,943
Services	1,095,776	1,226,566
Insurances	40,959	43,628
Rent and shared ownership expenses	161,336	166,782
Taxes	304,506	408,613
Reserves and devaluations	389,786	114,924
Depreciation	444,053	448,553
Other charges	170,320	158,964
<b>TOTAL EXPENSES</b>	<b>7,548,059</b>	<b>7,973,344</b>
<b>Surplus</b>	<b>144,610</b>	<b>92,631</b>

## APPENDICES

# PUBLICATIONS, 2014

### FEEM Working Papers “Note di Lavoro”, 2014

- 1.2014 *Erin Baker, Valentina Bosetti, Karen E. Jenni and Elena Claire Ricci*: Facing the Experts: Survey Mode and Expert Elicitation
- 2.2014 *Simone Tagliapietra*: Turkey as a Regional Natural Gas Hub: Myth or Reality? An Analysis of the Regional Gas Market Outlook, beyond the Mainstream Rhetoric
- 3.2014 *Eva Schmid and Brigitte Knopf*: Quantifying the Long-Term Economic Benefits of European Electricity System Integration
- 4.2014 *Gabriele Standardi, Francesco Bosello and Fabio Eboli*: A Sub-national CGE Model for Italy
- 5.2014 *Kai Lessmann, Ulrike Kornek, Valentina Bosetti, Rob Dellink, Johannes Emmerling, Johan Eyckmans, Miyuki Nagashima, Hans-Peter Weikard and Zili Yang*: The Stability and Effectiveness of Climate Coalitions: A Comparative Analysis of Multiple Integrated Assessment Models
- 6.2014 *Sergio Curranini, Carmen Marchiori and Alessandro Tavoni*: Network Economics and the Environment: Insights and Perspectives
- 7.2014 *Matthew Ranson and Robert N. Stavins* : Linkage of Greenhouse Gas Emissions Trading Systems: Learning from Experience
- 8.2014 *Efthymia Kyriakopoulou and Anastasios Xepapadeas*: Spatial Policies and Land Use Patterns: Optimal and Market Allocations
- 9.2014 *Can Wang, Jie Lin, Wenjia Cai and ZhongXiang Zhang*: Policies and Practices of Low Carbon City Development in China
- 10.2014 *Nicola Genovese and Maria Grazia La Spada*: Trust as a Key Variable of Sustainable Development and Public Happiness: A Historical and Theoretical Example Regarding the Creation of Money
- 11.2014 *Ujjayant Chakravorty, Martino Pelli and Beyza Ural Marchand*: Does the Quality of Electricity Matter? Evidence from Rural India
- 12.2014 *Roberto Antonietti*: From Outsourcing to Productivity, Passing Through Training: Microeconometric Evidence from Italy
- 13.2014 *Jussi Lintunen and Jussi Uusivuori*: On The Economics of Forest Carbon: Renewable and Carbon Neutral But Not Emission Free
- 14.2014 *Brigitte Knopf, Bjørn Bakken, Samuel Carrara, Amit Kanudia, Ilkka Keppo, Tiina Koljonen, Silvana Mima, Eva Schmid and Detlef van Vuuren*: Transforming the European Energy System: Member States’ Prospects Within the EU Framework
- 15.2014 *Brigitte Knopf, Yen-Heng Henry Chen, Enrica De Cian, Hannah Förster, Amit Kanudia, Ioanna Karkatsouli, Ilkka Keppo, Tiina Koljonen, Katja Schumacher and Detlef van Vuuren*: Beyond 2020 - Strategies and Costs for Transforming the European Energy System
- 16.2014 *Anna Alberini, Markus Bareit and Massimo Filippini*: Does the Swiss Car Market Reward Fuel Efficient Cars? Evidence from Hedonic Pricing Regressions, a Regression Discontinuity Design, and Matching
- 17.2014 *Cristina Bernini and Maria Francesca Cracolici*: Is Participation in Tourism Market an Opportunity for Everyone? Some Evidence from Italy
- 18.2014 *Wei Jin and ZhongXiang Zhang*: Explaining the Slow Pace of Energy Technological Innovation: Why Market Conditions Matter?
- 19.2014 *Salvador Barrios and J. Nicolás Ibañez*: Time is of the Essence: Adaptation of Tourism Demand to Climate Change in Europe

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- 20.2014 Salvador Barrios and J. Nicolás Ibañez Rivas: Climate Amenities and Adaptation to Climate Change: A Hedonic-Travel Cost Approach for Europe
- 21.2014 Andrea Bastianin, Marzio Galeotti and Matteo Manera: Forecasting the Oil-gasoline Price Relationship: Should We Care about the Rockets and the Feathers?
- 22.2014 Marco Di Cintio and Emanuele Grassi: Wage Incentive Profiles in Dual Labor Markets
- 23.2014 Luca Di Corato and Sebastian Hess: Farmland Investments in Africa: What's the Deal?
- 24.2014 Olivier Beaumais, Anne Briand, Katrin Millock and Céline Nauges: What are Households Willing to Pay for Better Tap Water Quality? A Cross-Country Valuation Study
- 25.2014 Gabriele Standardi, Federico Perali and Luca Pieroni: World Tariff Liberalization in Agriculture: An Assessment Following a Global CGE Trade Model for EU15 Regions
- 26.2014 Marie-Laure Nauleau: Free-Riding on Tax Credits for Home Insulation in France: an Econometric Assessment Using Panel Data
- 27.2014 Hannah Förster, Katja Schumacher, Enrica De Cian, Michael Hübler, Ilkka Keppo, Silvana Mima and Ronald D. Sands: European Energy Efficiency and Decarbonization Strategies Beyond 2030 – A Sectoral Multi-model Decomposition
- 28.2014 Katherine Calvin, Shonali Pachauri, Enrica De Cian and Ioanna Mouratiadou: The Effect of African Growth on Future Global Energy, Emissions, and Regional Development
- 29.2014 Aleh Cherp, Jessica Jewell, Vadim Vinichenko, Nico Bauer and Enrica De Cian: Global Energy Security under Different Climate Policies, GDP Growth Rates and Fossil Resource Availabilities
- 30.2014 Enrica De Cian, Ilkka Keppo, Johannes Bollen, Samuel Carrara, Hannah Förster, Michael Hübler, Amit Kanudia, Sergey Paltsev, Ronald Sands and Katja Schumacher: European-Led Climate Policy Versus Global Mitigation Action. Implications on Trade, Technology, and Energy
- 31.2014 Simone Tagliapietra: Iran after the (Potential) Nuclear Deal: What's Next for the Country's Natural Gas Market?
- 32.2014 Mads Greaker, Michael Hoel and Knut Einar Rosendahl: Does a Renewable Fuel Standard for Biofuels Reduce Climate Costs?
- 33.2014 Edilio Valentini and Paolo Vitale: Optimal Climate Policy for a Pessimistic Social Planner
- 34.2014 Cristina Cattaneo: Which Factors Explain the Rising Ethnic Heterogeneity in Italy? An Empirical Analysis at Province Level
- 35.2014 Yasunori Ouchida and Daisaku Goto: Environmental Research Joint Ventures and Time-Consistent Emission Tax
- 36.2014 Jaime de Melo and Mariana Vijil: Barriers to Trade in Environmental Goods and Environmental Services: How Important Are They? How Much Progress at Reducing Them?
- 37.2014 Ryo Horii and Masako Ikefiji: Environment and Growth
- 38.2014 Francesco Bosello, Lorenza Campagnolo, Fabio Eboli and Ramiro Parrado: Energy from Waste: Generation Potential and Mitigation Opportunity
- 39.2014 Lion Hirth, Falko Ueckerdt and Ottmar Edenhofer: Why Wind Is Not Coal: On the Economics of Electricity
- 40.2014 Wei Jin and ZhongXiang Zhang: On the Mechanism of International Technology Diffusion for Energy Productivity Growth
- 41.2014 Abeer El-Sayed and Santiago J. Rubio: Sharing R&D Investments in Cleaner Technologies to Mitigate Climate Change

- 42.2014 *Davide Antonioli, Simone Borghesi and Massimiliano Mazzanti*: Are Regional Systems Greening the Economy? the Role of Environmental Innovations and Agglomeration Forces
- 43.2014 *Donatella Baiardi, Matteo Manera and Mario Menegatti*: The Effects of Environmental Risk on Consumption: an Empirical Analysis on the Mediterranean Countries
- 44.2014 *Elena Claire Ricci, Valentina Bosetti, Erin Baker and Karen E. Jenni*: From Expert Elicitations to Integrated Assessment: Future Prospects of Carbon Capture Technologies
- 45.2014 *Kenan Huremovic*: Rent Seeking and Power Hierarchies: A Noncooperative Model of Network Formation with Antagonistic Links
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- 48.2014 *Ahmet Alkan and Alparslan Tuncay*: Pairing Games and Markets
- 49.2014 *Sanjeev Goyal, Stephanie Rosenkranz, Utz Weitzel and Vincent Buskens*: Individual Search and Social Networks
- 50.2014 *Manuel Förster, Ana Mauleon and Vincent J. Vannetelbosch*: Trust and Manipulation in Social Networks
- 51.2014 *Berno Buechel, Tim Hellmann and Stefan Kölßner*: Opinion Dynamics and Wisdom under Conformity
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- 53.2014 *Thomas Longden and Greg Kannard*: Rugby League in Australia between 2001 and 2012: an Analysis of Home Advantage and Salary Cap Violations
- 54.2014 *Cristina Cattaneo, Carlo V. Fiorio and Giovanni Peri*: What Happens to the Careers of European Workers when Immigrants "Take their Jobs"?
- 55.2014 *Francesca Sanna-Randaccio, Roberta Sestini and Ornella Tarola*: Unilateral Climate Policy and Foreign Direct Investment with Firm and Country Heterogeneity
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- 59.2014 *Stuart McDonald and Joanna Poyago-Theotoky*: Green Technology and Optimal Emissions Taxation
- 60.2014 *ZhongXiang Zhang*: Programs, Prices and Policies Towards Energy Conservation and Environmental Quality in China
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- 64.2014 *Francesco Bosello, Ramiro Parrado*: Climate Change Impacts and Market Driven Adaptation: the Costs of Inaction Including Market Rigidities
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- 66.2014 *Achim Voß and Jörg Lingens*: What's the Damage? Environmental Regulation with Policy-Motivated Bureaucrats

- 67.2014 *Carolyn Fischer, Richard G. Newell and Louis Preonas*: Environmental and Technology Policy Options in the Electricity Sector: Interactions and Outcomes
- 68.2014 *Carlos M. Gómez, C. Dionisio Pérez-Blanco and Ramon J. Batalla*: The Flushing Flow Cost: A Prohibitive River Restoration Alternative? The Case of the Lower Ebro River
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- 70.2014 *Jaime de Melo, Mariana Vijil*: The Critical Mass Approach to Achieve a Deal on Green Goods and Services: What is on the Table? How Much to Expect?
- 71.2014 *Gauthier de Maere d'Aertrycke, Olivier Durand-Lasserve and Marco Schudel*: Integration of Power Generation Capacity Expansion in an Applied General Equilibrium Model
- 72.2014 *ZhongXiang Zhang*: Energy Prices, Subsidies and Resource Tax Reform in China
- 73.2014 *James A. Lennox, Jan Witajewski*: Directed Technical Change With Capital-Embodied Technologies: Implications For Climate Policy
- 74.2014 *Thomas Longden*: Going Forward by Looking Backwards on the Environmental Kuznets Curve: an Analysis of CFCs, CO<sub>2</sub> and the Montreal and Kyoto Protocols
- 75.2014 *Simone Tagliapietra*: The EU-Turkey Energy Relations After the 2014 Ukraine Crisis. Enhancing The Partnership in a Rapidly Changing Environment
- 76.2014 *J. Farlin, L. Drouet, T. Gallé, D. Pittois, M. Bayerle, C. Braun, P. Maloszewski, J. Vanderborght, M. Elsner and A. Kies*: Delineating Spring Recharge Areas in a Fractured Sandstone Aquifer (Luxembourg) Based on Pesticide Mass Balance
- 77.2014 *Frédéric Branger and Philippe Quirion*: Reaping the Carbon Rent: Abatement and Overallocation Profits in the European Cement Industry, Insights from an LMDI Decomposition Analysis
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- 89.2014 *Shuai Gao, Wenjia Cai, Wenling Liu, Can Wang and ZhongXiang Zhang*: Corporate Preferences for Domestic Policy Instruments under a Sectoral Market Mechanism: A Case Study of Shanxi Province in China
- 90.2014 *Marzio Galeotti, Yana Rubashkina, Silvia Salini and Elena Verdolini*: Environmental Policy Performance and its Determinants: Application of a Three-level Random Intercept Model
- 91.2014 *Laura Diaz Anadon, Valentina Bosetti, Gabriel Chan, Gregory Nemet and Elena Verdolini*: Energy Technology Expert Elicitations for Policy: Workshops, Modeling, and Meta-analysis
- 92.2014 *Lawrence M. Murphy, Ron Ondechek Jr., Ricardo Bracho and John McKenna*: Clean Energy - Bridging to Commercialization: The Key Potential Role of Large Strategic Industry Partners
- 93.2014 *Tim Keighley, Thomas Longden, Supriya Mathew and Stefan Trück*: Quantifying Catastrophic and Climate Impacted Hazards Based on Local Expert Opinions
- 94.2014 *Steve Charnovitz and Carolyn Fischer*: Canada – Renewable Energy: Implications for WTO Law on Green and Not-so-Green Subsidies
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- 96.2014 *Jacopo Bonan, Stefano Pareggio and Massimo Tavoni*: Access to Modern Energy: a Review of Impact Evaluations
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- 100.2014 *Wei Jin, ZhongXiang Zhang*: From Energy-intensive to Innovation-led Growth: On the Transition Dynamics of China's Economy
- 101.2014 *Vassiliki Manoussi, Anastasios Xepapadeas*: Cooperation and Competition in Climate Change Policies: Mitigation and Climate Engineering when Countries are Asymmetric
- 102.2014 *Masako Ikefuchi, Jan R. Magnus, Hiroaki Sakamoto*: Adaptation for Mitigation
- 103.2014 *Tony Beatton, Benno Torgler*: Volunteering and Life or Financial Shocks: Does Income and Wealth Matter?
- 104.2014 *Raouf Boucekkine, Fabien Prieur and Klarizze Puzon*: On the Timing of Political Regime Changes: Theory and Application to the Arab Spring
- 105.2014 *Samuel Carrara and Emanuele Massetti*: Should We Ban Unconventional Oil Extraction to Reduce Global Warming?
- 106.2014 *Sonia Orefice and Climent Quintana-Domeque*: Attractiveness, Anthropometry or Both? Their Relationship and Role in Economic Research
- 107.2014 *Kenneth Gillingham, David Rapson and Gernot Wagner*: The Rebound Effect and Energy Efficiency Policy
- 108.2014 *Francesco Bosello, Enrica De Cian and Licia Ferranna*: Catastrophic Risk, Precautionary Abatement, and Adaptation Transfers
- 109.2014 *Herman R.J. Vollebergh and Eric Drissen*: Unconventional Gas and the European Union: Prospects and Challenges for Competitiveness
- 110.2014 *Andrea Bastianin and Matteo Manera*: How Does Stock Market Volatility React to Oil Shocks?

**Books, 2014**

Climate Change Mitigation, Technological Innovation and Adaptation, *edited by Valentina Bosetti, Carlo Carraro, Emanuele Massetti and Massimo Tavoni - Edward Elgar Publishing*

**FEEM Press, 2014**

The Global Revolution of Unconventional Oil, *by John M. Deutch*

Islamism and Modernity: an Unconventional Perspective, *by Tarek Heggy*

The Ukraine Debacle, *by Anatol Lieven*

**Equilibri, Rivista per lo sviluppo sostenibile, Il Mulino, 2014**

1.2014 – Nuovi strumenti di rendicontazione

2.2014 - Forme di welfare in America del Sud

3.2014 - Clima. Tutto quello che occorre sapere

**Re3 - Review of Environment, Energy and Economics, 2014**

Nuclear Expansion or Phase-Out? Costs and Opportunities, *by Enrica De Cian, Samuel Carrara and Massimo Tavoni*

Turkey as a Regional Natural Gas Hub: Myth or Reality?, *by Simone Tagliapietra*

Benefits and Related Threats of Coral Reef Ecosystem Services, *by Sabah Abdullah*

Trends and Challenges for Environmental-Ecologic Indicators and Assessments, *by Francesco Bosello and Lorenza Campagnolo*

Behavioral Economics for Environmental Decisions, *Interview with Rachel T.A. Croson*

Money Creation: The Role of Trust for Public Happiness and Sustainable Growth, *by Nicola Genovese and Maria Grazia La Spada*

Educational Expenditure and Remittances: Is there a Link?, *by Cristina Cattaneo*

The Uneven Impacts of Climate Change, *Interview with Robert O. Mendelsohn*

Time Overruns in Public Procurement and Concession contracts: penalty fee and option value to delay,  
*by Chiara D'Alpaos and Sergio Vergalli*

The Future of Iran's Gas Market after the (potential) Nuclear Deal, *by Simone Tagliapietra*

Urban Areas and Watershed Services: Strategies for Ecosystem Management and Urban Risk Reduction, *by Yaella Depietri, Lorenzo Guadagno and Margaretha Breil*

All You Need to Know about the IPCC Fifth Assessment Report. Impacts, Adaptation and Vulnerability, *Interview with Sergio Castellari, Riccardo Valentini and Francesco Bosello*

Projecting Future Insured Coastal Flooding Damages with Climate Change, *by David C. Major, Daniel Bader, Robin Leichenko, Katie Johnson and Megan Linkin*

All You Need to Know about the IPCC Fifth Assessment Report. Mitigation of Climate Change, *by Carlo Carraro, Alessandro Lanza and Massimo Tavoni*

The Relaunching of Negotiations on Green Goods and Services: Any Breakthrough in Sight?, *by Jaime de Melo and Mariana Víjil*

The Impact of Salary Cap Violations in the NRL, *by Thomas Longden*

Greening economic s: It is Time, *by Carlo Carraro, Marianne Fay and Marzio Galeotti*

Home Team Advantage in the NRL, *by Thomas Longden*

Buy Coal to Solve Free Riding, *Video with Bård Harstad*

The Global Revolution of Unconventional Oil. New Markets, New Governances, New Policies, *by John Deutch*

Can Research Support Climate Negotiation Processes and Policy?, *by Jacopo Crimi*

Water Security Issue in the Caribbean Windward Islands, *by Mattia Amadio*

Light Duty Vehicle Battery Costs, *by Thomas Longden*

The Ukraine Debacle, *by Anton Lieven*

The Birth of a Jihadist Caliphate, *by Daniel Atzori*

Are Government Workers really more Public-Spirited than those in the Private Sector?, *by Mirco Tonin and Michael Vlassopoulos*

Focusing Climate Change Policy on Health in Cities, *by Sabrina Dekker*

- After the 2014 Ukraine Crisis: What's Next for the EU-Turkey Energy Relations?, *by Simone Tagliapietra*
- The Green Paradox, *by Yuting Li*
- Climate Change Impacts and Limited Market-driven Adaptation, *by Francesco Bosello and Ramiro Parrado*
- Growth and Poverty Reduction in Africa, *Interview with Francisco H.G. Ferreira*
- Climate Change Calls for Global, Comprehensive and Integrative Risk Management, *by Grammenos Mastrojeni*
- Rethinking African Solar Power for Europe, *by Emanuele Massetti and Elena Claire Ricci*
- Is it Too Late for 2°C?, *Interview with Thomas Stocker*
- Universal Access to Energy: a Reachable Target?, *by Jacopo Bonan*
- Illiquidity and all its Friends. A Discussion, *by Franklin Allen*
- Building Tomorrow's Europe. The Role of an "EU Energy Union", *by Simone Tagliapietra*
- Experimental Games and Climate Coalitions, *by Alessandro Tavoni*
- Firm Preferences for Environmental Regulation, *by Félix Muñoz-García and Sherzod B. Akhundjanov*
- New Challenges and Opportunities for European Gas Markets, *by Manfred Hafner, Simone Tagliapietra*
- FEEM and CMCC Annual Convention, *Interviews with Lucas Bretschger, Barbara Buchner, Carlo Carraro, Phoebe Koundouri and Anastasios Xepapadeas*
- From Lima to Paris 2015: challenges on the road to 2°C, *Interviews with Massimo Tavoni, Elmar Kriegler, Keywan Riahi, Detlef P. van Vuuren*

# EVENTS, 2014

## Main Conferences and Workshops, 2014

19th Coalition Theory Network Workshop - *Brussels, Belgium, 30-31 January 2014*

2nd Annual Conference of the Italian Association of Environmental and Resource Economists (IAERE) - *Milan, 13-14 February 2014*

Dissemination Conference on "Impact Assessment for Sustainable Development: Knowledge Systems for the Future" of the LIAISE project (Linking Impact Assessment Instruments to Sustainability Expertise), in collaboration with the European Commission - *Brussels, Belgium, 1-2 April 2014*

Sharexpo - Milano città condivisa per Expo 2015, in collaborazione con Collaboriamo, ModaCult-Università Cattolica di Milano e Secolo Urbano - *Milan, 15 April 2014*

"How does climate change affect our lives?" - Between poverty and environment. Lessons learned from a project funded by the European Commission, in collaboration with Fondazione AVSI, European Commission and Gruppo di Volontariato Civile (GVC) - *Milan, 17 April 2014*

ICCG Workshop on "Public-Private Partnerships: a focus on Energy Infrastructures and Sustainable Growth", in collaboration with Ca' Foscari University, Bocconi University and Why Not Italy? (WNI) - *Venice, 9 May 2014*

Expert workshop on "Uncertainty in Climate Change Modeling and Policy" of the ADVANCE project (Advanced Model Development and Validation for Improved Analysis of Costs and Impacts of Mitigation Policies), in collaboration with the European Commission - *Milan, 13-14 May 2014*

"Parchi e Sviluppo. I Parchi come Luoghi di Intreccio tra Green Economy e Green Society", in collaborazione con Federparchi, Consorzio AASTER e Fondazione Symbola - *Milan, 3 June 2014*

The 2014 International Energy Workshop – IEW - *Beijing, China, 4-6 June 2014*

International Workshop on "Oil and Commodity Price Dynamics" - *Milan, 5-6 June 2014*

Workshop on "Climate Change and Public Goods" - *Venice, 9-10 June 2014*

1st Meeting of the POCACITO project (Post-Carbon Cities of Tomorrow: foresight for sustainable pathway towards liveable, affordable and prospering cities in a world context) - *Milan, 10-12 June 2014*

Final Conference on "Impact Quantification of Global Changes" of the Global IQ project (Impacts Quantification of global changes) - *Brussels, Belgium, 17 June 2014*

3rd Workshop on "Europe and Global Challenges" of the GLOBAL LINKAGES Project (Europe's Global Linkages and the Impact of the Financial Crisis: Policies for Sustainable Trade, Capital Flows, and Migration), in collaboration with Kiel Institute for the World Economy (IfW) and Institute for Applied Economic Research (IAW) - *Milan, 18-20 June 2014*

International Workshop on "Practicing Integrated Thinking & Reporting - How Business and Societies Search for Competitiveness and Sustainable Growth", in collaboration with International Integrated Reporting Council (IRC) and University of Siena - *Milan, 19 June 2014*

5th World Congress of Environmental and Resource Economists - *Istanbul, Turkey, 28 June - 2 July 2014*

FEEM-ICCG-CMCC Policy Session on "Climate and Energy Policies in the Mediterranean Basin" at the 5th World Congress of Environmental and Resources Economists - *Istanbul, Turkey, 29 June 2014*

Conferenza Stampa di presentazione del Documento di Indirizzo di Sharexpo: "La sharing economy ai tempi di Expo 2015: Milano come territorio di sperimentazione di una realtà sempre più condivisa" - *Milan, 2 July 2014*

"Learning from Megadisasters" - What can the 2011 Great East Japan Earthquake teach to Italy and Europe? - *Milan, 9 July 2014*

International Workshop on "Energy Poverty and Energy Access: Global Challenges and Goals", in collaboration with Fondazione Giangiacomo Feltrinelli within the LabExpo Project, and Eni - *Milan, 10 July 2014*

FEEM Award Ceremony, 2014 - *Toulouse, France, 28 August 2014*

UNEP pre-conference training workshop on "Building Biodiversity and Ecosystem Services into National Policy" for civil servants from developing countries, in collaboration with United Nations Environment Programme (UNEP), International Union for the Conservation of Nature (IUCN), Graduate Institute of International and Development Studies (IHEID) and The Grantham Research Institute on Climate Change and the Environment - *Cambridge, United Kingdom, 20-21 September 2014*

16th Annual Biodiversity and Economics for Conservation (BIOECON) Conference: "Biodiversity, Ecosystem Services and Sustainability", in collaboration with United Nations Environment Programme (UNEP), International Union for the Conservation of Nature (IUCN), Graduate Institute of International and Development Studies (IHEID) and The Grantham Research Institute on Climate Change and the Environment - *Cambridge, United Kingdom, 22-23 September 2014*

"Implementing Climate Policies in the Major Economies" - Final Conference of the LIMITS project (Low Climate Impact Scenarios and the Implications of Required Tight Emission Control Strategies), in collaboration with the European Commission - *Brussels, Belgium, 25 September 2014*

Second Annual Conference of the Italian Society for the Climate Sciences (SISC) on "Climate Change: Scenarios, Impacts and Policy" - *Venice, 29-30 September 2014*

10th Annual Politeia Forum on Business Ethics and Corporate Social Responsibility in a Global Economy: "Back to basics: What is the Purpose of the Corporation?" - *Milan, 3 October 2014*

Sharexpo: progetti per una Milano condivisa - *Expo 2015 - Milan, 7 October 2014*

Il valore sociale nascosto dello Sri. Comprendere per condividere. Condividere per comunicare, in collaborazione con Eticanews - *Milan, 6 November 2014*

Meeting of the DYNAMIX project (Dynamic policy Mixes for absolute decoupling of environmental impact of EU resource use from economic growth): "Exchanging on first findings, challenges and ways forward in ex-ante assessment", in collaboration with the European Commission - *Venice, 6-7 November 2014*

FEEM Gas Talks 2014 "New Challenges and Opportunities for European Gas Markets" - *Milan, 20-21 November 2014*

"Climate Change and Sustainable Development Economics" - Third Convention of FEEM and CMCC fellows working on climate change and sustainable development economics - *Venice, 24-26 November 2014*

Conferenza stampa: "La Basilicata tra risorse e sviluppo: un progetto di turismo scolastico nelle valli dell'energia" - *Milan, 28 November 2014*

"Ancora Faust", colloquio di Giulio Sapelli e Danilo Taino con Geminello Alvi su "Le Seduzioni economiche di Faust", in collaborazione con Adelphi Edizioni - *Milan, 18 December 2014*

## Lectures, 2014

ICCG International Lecture by Ferenc L. Toth, International Atomic Energy Agency: "Climate change: impacts and adaptation in the energy sector" - *Venice, 26 February 2014*

FEEM Lecture by John M. Deutch, MIT: "The Global Revolution of Unconventional Oil: New Markets, New Governances, New Policies" - *Milan, 11 March 2014*

FEEM Lecture by Tarek Heggy, Gatestone Institute: "Islamism and Modernity: an unconventional perspective" - *Milan, 2 April 2014*

FEEM Lecture by Anatol Lieven, King's College London: "The Ukraine Debacle" - *Milan, 14 May 2014*

FEEM Lecture by Jean-Christophe Iseux von Pfetten, Royal Institute of East-West Strategic Studies and People's University of China: "Insights from China: Leadership, Policies, New World Balance" - *Milan, 10 June 2014*

ICCG International Lecture by Shonali Pachauri, International Institute for Applied Systems Analysis: "How does achieving a universal modern energy access goal affect the attainment of other SDGs?" - *Venice, 15 September 2014*

FEEM Lecture by Francisco H. G. Ferreira, World Bank: "Growth and Poverty Reduction in Africa" - *Milan, 24 September 2014*

ICCG International Lecture by Richard A. Houghton, Woods Hole Research Center: "What management of land can and cannot do to help control atmospheric CO<sub>2</sub>" - *Venice, 2 October 2014*

## Seminars, 2014

Unconventional Determinants of Greenhouse Gas Emissions: The Role of Trust - *Milan, 9 January 2014*

FEEM-IEFE Joint Seminar: Distributional impact of reducing fossil fuel subsidies in Indonesia - *Venice, 16 January 2014*

Global Climate Finance Landscape 2013 - *Venice, 30 January 2014*

The drivers behind crude oil production behaviors: an investigation on OPEC and non-OPEC producers - *Milan, 6 February 2014*

ICCG Seminar: Are Cereals Globally in Trouble? - *Rome, 13 February 2014*

Think Forward Film Festival alla FAO: selezione dei migliori cortometraggi presentati al concorso internazionale 2013, in collaborazione con Food and Agriculture Organization of the United Nations (FAO) - *Rome, 13 February 2014*

ICCG Seminar: Presentation of the book "The Green Book about Waste in Italy: Energy" edited by Andrea Segrè and Matteo Vittuari - *Venice, 19 February 2014*

Evaluation of Long-Dated Investments under Uncertain Growth Trend, Volatility and Catastrophes - *Milan, 27 February 2014*

Energy from a Societal Perspective - *Venice, 28 February 2014*

A Global Economy-Climate Model with High Regional Resolution - *Venice, 6 March 2014*

FEEM-IEFE Joint Seminar: Teams Punish Less - *Milan, 13 March 2014*

Multidimensional Welfare Rankings under Weight Imprecision - *Venice, 18 March 2014*

Performance Thresholds and Optimal Risk Taking - *Venice, 20 March 2014*

Long-Term Technology Diffusion and Near-Term Implications under Stringent Climate Change Control - *Venice, 27 March 2014*

ICCG Seminar: The impacts of climate change: focus on the Fifth Assessment Report of the IPCC (WGII AR5) - *Venice, 31 March 2014*

Participation and Duration of Environmental Agreements - *Milan, 1 April 2014*

Measuring Psychospread: Idiosyncratic Happiness of Italian Citizens Through the Analysis of their Tweets - *Milan, 3 April 2014*

Do Leaders Affect Ethical Conduct? An Experimental Study - *Milan, 8 April 2014*

The Indonesian Landscape of Public Climate Finance - *Venice, 10 April 2014*

ICCG Seminar: Mitigation of climate change: focus on the Fifth Assessment Report of the IPCC (WGIII AR5) - *Venice, 14 April 2014*

FEEM-IEFE Joint Seminar: Energy Market Liberalisation and Renewable Energy Policies in OECD Countries - *Milan, 17 April 2014*

FEEM-ICCG Joint Seminar: Focusing Climate Change Policy on Health in Cities: Can Using the Social Determinants of Health to Develop Climate Change Policy "Build" Resilient Cities? - *Venice, 24 April 2014*

FEEM-CMCC Joint Seminar: Bringing Ecosystem Services into Economic Analyses of Land Use - *Venice, 8 May 2014*

Directed Technical Change with Capital-Embodied Technologies: Implications for Climate Policy - *Milan, 19 May 2014*

Fair Intergenerational Utilitarianism: Risk, Learning, and Discounting - *Milan, 22 May 2014*

Boundedly Rational Opinion Dynamics in Directed Social Networks: Theory and Experimental Evidence - *Milan, 23 May 2014*

ICCG Seminar: Climate Ethics - *Venice, 27 May 2014*

FEEM-IEFE Joint Seminar: TU vs NTU in Coalitional Stability Analysis of Integrated Assessment Models: Taking Stock - *Venice, 29 May 2014*

International Seminar on "The Other Welfare: Forms and Proposals of Social Security at National and Local Levels. The Case of Contemporary Mexico. XIX-XXI Centuries", in collaboration with Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS), University of Milan and IULM - Oaxaca, Mexico, 2-3 June 2014

How Effective Are Energy-Efficiency Incentive Programs? Evidence from Italian Homeowners - *Milan, 5 June 2014*

Italy and Two Decades of Economic Decline. A Model-Based Analysis with Outsourcing and Oligopolistic Markets - *Venice, 12 June 2014*

**Italy and Two Decades of Economic Decline. A Model-Based Analysis with Outsourcing and Oligopolistic Markets - Venice, 12 June 2014**

**FEEM-CMCC Joint Seminar: Making Informed Investment Decisions in an Uncertain World: A Short Demonstration - Venice, 19 June 2014**

**Think Forward Film Festival at Art Night: ARcTic NIGHT - Venice, 21 June 2014**

**FEEM-CMCC Joint Seminar: Sustainability Assessment and Monitoring: the ACLIMAS Project - Venice, 24 June 2014**

**FEEM-IEFE Joint Seminar: First and Second Mover Advantages for Pioneering Countries on Environmental Markets - From National Lead Market to Lead Supplier Strategies - Milan, 26 June 2014**

**The IUCN Human Dependence on Nature Knowledge Basket: A Synthesis of Early Development and Future Challenges - Venice, 3 July 2014**

**The Role of Public Finance in Concentrated Solar Power: Lessons Learned - Venice, 10 July 2014**

**FEEM-IEFE Joint Seminar: Climate Change Impacts and Market Driven Adaptation: The Costs of Inaction Including Market Rigidities - Venice, 17 July 2014**

**Taste Heterogeneity, Elasticity of Demand and Growth - Milan, 24 July 2014**

**Revealing the Willingness To Pay For Income Insurance in Agriculture - Venice, 9 September 2014**

**Post-Carbon Cities of Tomorrow in the Global Context - Venice, 11 September 2014**

**FEEM-IEFE Joint Seminar: Energy Poverty in Italy - Milan, 18 September 2014**

**ICCG Seminar: Technology Innovation in the Energy Sector - Venice, 23 September 2014**

**The Water Abstraction Licence Regime In Italy: A Case for Reform? - Venice, 25 September 2014**

**Venetonight 2014 - Treasure Hunt - The City of Venice and the Challenge of Climate Change / Venetonight 2014 - Caccia al Vero Tesoro - La Città e la Sfida dei Cambiamenti Climatici - Venice, 26 September 2014**

**Comparison of Macroeconomic Models for Disaster Impact Analysis - Venice, 10 October 2014**

**FEEM-IEFE Joint Seminar: Ethnic Distribution, Effective Power and Conflict - Venice, 16 October 2014**

**FEEM-ICCG Joint Seminar: Coupling Remote Sensing, Statistics and Dynamic Modelling for an Advanced Assessment of Urban Heat Island Effects in European Cities - Venice, 23 October 2014**

**United We Stand, Divided We Win. Strategic Decentralization and the Provision of Global Public Goods - Milan, 30 October 2014**

**FEEM-IEFE Joint Seminar: Cheaper Electricity or a Healthier River? Estimating Fluvial Ecosystem Value in Southern France - Milan, 20 November 2014**

**The Global Greenhouse, a Physics Primer - Venice, 27 November 2014**

**FEEM-CPI Joint Seminar: What is Climate Finance? Definitions and Applications to One Geothermal Case Study - Venice, 4 December 2014**

**Think Forward Film Festival Preview: Cortometraggi sui temi dei cambiamenti climatici, energie rinnovabili e sostenibilità - Milan, 4 December 2014**

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FEEM-IEFE Joint Seminar: It Takes a Method to Recover Matter and Energy from Wastes - Integrating Resources' Flows, Scientific Knowledge, Risk Perception and Actors' Networks to Optimize the Recovery of Value from Wastes - *Milan, 11 December 2014*

Think Forward Film Festival 2014 - *Venice, 12-13 December 2014*

Delegation and Public Pressure in a Threshold Public Goods Game - *Venice, 18 December 2014*

### **Summer Schools and Training Conferences, 2014**

CMCC-ICCG Summer School on "Adaptation Policies and Practices in the Mediterranean Basin (MedAdapt)" - *Venice, 19-23 May 2014*

FEEM Summer School on "Cultural variables, Nation-building and Transition Processes in the South-Eastern Bank of the Mediterranean / Variabili culturali, nation-building e processi di transizione nella sponda sud-orientale del Mediterraneo" - Economy and Society Research Programme - *Butera, 1-4 July 2014*

EAERE-FEEM-VIU European Summer School on "The Economics of Adaptation to Climate Change" - *Venice, 6-12 July 2014*

## NOTES

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## **Fondazione Eni Enrico Mattei**

FEEM's headquarters are located in Milan, in an aisle of Palazzo delle Stelline, a former XV Century monastery fully restored in 1998. This is where the head office, the library and the facilities for events and seminars are located, and most of the staff and residential researchers work. Since 1996 FEEM holds offices also in Venice where important research projects are carried out, as well as congresses and seminars. FEEM offices in Venice are located in the Island of San Giorgio Maggiore, just in front of St. Mark's Square. In 2008 FEEM also established local offices in Viggiano, in the Basilicata region.

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