Ecologic Institute Project Handbook 2011



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The Ecologic Institute Family



Number of Employees







On a Personal Note

Dear Reader,

Two thousand and eleven has proven to be yet another exciting and intellectually enriching year for our institute. In our sixteenth year of researching and shaping European environmental policy, we not only continued to provide high quality and innovative expertise to the European community, but we also grew consistently – both in our diversified staff and our competencies.

Our greatest strength, our staff, consists of a unique combination of young, up-and-coming talents and skillful, sophisticated experts. In 2011, Ecologic Institute carried on its tradition of gathering promising scientists, researchers, legal trainees, and interns from across the globe and bringing them to Berlin. But we did not only expand our staff: This year we also enlarged our offices in Berlin, thereby creating new opportunities for conferences, presentations, lectures, and other events that focus on collaboration and dialogue.

Among these events was a training course for officers of the Chinese Ministry of the Environment, which dealt with important aspects of European and German environmental policy. Along with our ICAP summer schools on emissions trading in Madrid, Beijing, Berlin, and The Hague, this event reflected Ecologic Institute's understanding of environmental policy as an increasingly global issue, and we are looking forward to more of those exchanges in the future.

All of this positive development garnered us a great deal of recognition. Ecologic Institute placed among the top ten environmental think tanks in the University of Pennsylvania's 2011 "Go-To Think Tank Index," coming in at number 6, as in 2010. This was of course a wonderful honor, but it has also spurred us to deliver even better work.

Finally, this year also marks a milestone for our office in Brussels, which celebrated its anniversary in September 2011: Ten years of guiding European environmental policy in the "capital of Europe" were recognized with a special event held in Brussels.

So what are we planning for 2012? In addition to strengthening and building upon our existing projects, we are also moving forward with new ventures and initiatives.

We are excited about the opportunities that lie ahead of us!

Sincerely,

R. Andreas Kraemer

Nationalities at Ecologic Institute



Staff Profile

Who we are

Today, Ecologic Institute's staff consists of more than 100 employees at the top of their fields: scientists, policy associates, advisors, and fellows, all of whom contribute significant innovations to environmental policy and research. Our staff's diverse set of backgrounds, nationalities, and experiences has always played a crucial role in the success of our institute's dynamic work. The strength of this distinct network of employees and partners allows us to deal easily with interdisciplinary issues that span the EU or take place on a global scale.

Opportunities

Our staff is the backbone of our work. Therefore, we place great value on ensuring that the particular interests, abilities, and experiences of every single employee are respected. We offer a broad range of skill enhancement opportunities and support individual career planning.

Promoting young professionals is essential to us:

 Each year, Ecologic Institute offers promising graduates to take part in its international environmental research program. While working at Ecologic Institute as a trainee for 6 to 12 months, young researchers have the opportunity to participate in events and conferences hosted by various organizations in Berlin's environmental community to gain a broader understanding of important policy issues.

- Students and recent university graduates from the US, Canada as well as South America are invited to apply for a position as a Transatlantic Intern. Through our Transatlantic Program they will have the chance to be involved in the work done at Ecologic Institute.
- In addition, we host fellows from a variety of different programs, funded by organizations like the Alexander von Humboldt foundation and the Robert Bosch Stiftung.
- Also frequently, we host Konrad von Moltke Fund grantees. The Konrad von Moltke Fund, managed by Ecologic Institute, provides international mobility grants for young researchers working on "Konrad's Agenda."
- We offer many further opportunities to young professionals, such as legal traineeships, various internships, and volunteer work.

ecologic.eu/opportunities konrad-von-moltke-fund.org

Earnings by Source 2010



German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Our Project Work

Generating knowledge about important environmental issues for both policy makers and the general public is one objective towards which Ecologic Institute strives in multiple facets of its work. Driving forces such as climate change or changing economic conditions often yield unexpected challenges and new opportunities, which require innovative solutions that can only be developed through a combination of careful analysis and creativity. Ecologic Institute is regularly called upon to tackle novel issues and expand the knowledge base required to address them. Sometimes this is simply a matter of bringing together existing policy instruments in new ways, but in other cases, only innovative approaches can provide a workable way forward.

These are the most important aspects of our project work:

 A significant portion of our work as a think tank focuses on the development of environmental policy in the European Union and its member states. We bring fresh ideas to environmental and sustainable development policies and support the evolution of environmental policy on a national, EU, and global scale.

- Whatever form it takes be it reports, comparative studies, policy evaluations, metastudies, or discussion papers – the scientific research conducted by Ecologic Institute provides crucial insights for policy makers to use in the decision-making process.
- On this basis, we develop new ideas in our applied policy work that often involve several different policy communities.
- Frequently, we collaborate with other institutes to provide multi-faceted analyses of today's environmental challenges.
- We foster intellectual exchange around the world, especially within the transatlantic policy context.

A selection of our current initiatives is outlined on the following pages.

ecologic.eu/projects

Global Governance

Implementation and development of international environmental law

This area of law is currently in a phase of consolidation, as the adoption of new treaties has recently become less prevalent. Instead, the implementation and further development of the existing provisions have moved to the forefront. This is accomplished mainly by conferences of the parties to multilateral environmental agreements (MEA), so-called "regimes," with their own institutional framework. Implementing the rules within such regimes has generated new legal problems requiring fast and flexible positioning. The growing breadth and depth of the various MEAs can also lead to legal conflicts between environmental regimes.

Ecologic Institute's legal team analyzes gaps in international environmental governance and the relationship to other areas of international law. We offer legal expertise on current issues of international environmental law to the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety at the national and EU level as well as at international negotiations, for example by providing legal opinions or assessing third parties' positions and proposals.

ecologic.eu/3307

Regulation of geoengineering

In several new projects, Ecologic Institute is contributing to the international debate and major studies on "geoengineering." Based on growing concern over insufficient efforts to reduce greenhouse gas emissions, the potential of geoengineering techniques is increasingly discussed.

They are deliberate interventions in the planetary environment of a nature and scale intended to counteract anthropogenic climate change and its impacts. Geoengineering includes concepts such as reducing incoming net solar radiation or removing CO_2 from the atmosphere. While the feasibility and potential side-effects of many of these concepts are unclear, they already raise important legal, political, scientific, and ethical concerns.

In projects for the Secretariat of the Biodiversity Convention, the German Parliament and the Federal Environment Agency, Ecologic



Institute analyzes the legal framework applicable to geoengineering, identifies regulatory gaps and develops governance options. The projects focus on international law and the particular political context for governance, but also cover EU and German law.

Based on this analysis, members of the Ecologic Institute's legal team explore the criteria for and design of appropriate governance structures. The team also contributes to the on-going debate via academic articles and conferences.

ecologic.eu/4168

Rio+20: Financing International Environmental Governance

Ecologic Institute is assessing the current system for financing International Environmental Governance in the run-up to the Rio+20 summit. This system comprises different mechanisms for funding actions to protect the global environment; at the same time, it is about funding international environmental institutions, such as the UN Environment Programme (UNEP). The current system suffers from several shortcomings, such a as a lack of coherence, unpredictability of funding and insufficient overall funding levels.

Ecologic Institute will provide an overview of funding levels and governance structures and assesses the effectiveness of mechanisms such as the Global Environment Facility or the recently established Adaptation Fund. On this basis, Ecologic Institute will develop recommendations for improving the current system. The project supports the German government in developing a position for Rio+20. ecologic.eu/4543

Policy Assessment

Social and economic benefits of enhanced environmental protection

This research project has quantified the social and economic benefits of environmental protection for all 16 countries covered by the European Neighbourhood Policy (ENP) and the Russian Federation. By highlighting the economic and social benefits of environmental policies, the goal is to raise the importance of environmental issues on the national agenda and to encourage more proactive policies. In this way, the project aims to support these countries in improving their environmental strategies, mainstreaming environmental considerations into other policies, and promoting convergence of their national environmental policies with those of the EU. In a time of fundamental change in the Arab World, Ecologic Institute analyzed the economic and social benefits for Israel and the occupied Palestinian territories, which are part of the ENP, contributed to the assessment methodology, and conducted the central analysis for the economic benefits of improved freshwater policies in all 16 countries. ecologic.eu/3651

Monitoring the European Sustainable Development Strategy

Every two years the European Sustainable Development Strategy (EU SDS) is put to the test. With its biennial monitoring reports, the European statistical office Eurostat presents EU-wide data on the development of the Sustainable Development Indicators (SDIs) identified in the EU SDS. Together with partners, Ecologic Institute drafted the monitoring reports for the European Sustainable Development Strategy 2009 and worked on the draft monitoring reports for 2011. The SDIs cover various issues including climate change, economic growth, biodiversity, and the financing of health care systems. In addition to working on the monitoring report, Ecologic Institute, together with the other consortium members, is drafting 10 short publications addressing specific cross-cutting issues especially relevant to sustainable development. The publications are based on the latest data and will be published as part of the Eurostat "Statistics in Focus" series



Evaluation of the German National Climate Protection Initiative

As part of a research consortium, Ecologic Institute is evaluating the impacts of the German National Climate Protection Initiative, launched in 2009. Funded through revenues from auctioning emission allowances under the EU emission trading scheme, the initiative currently draws an annual volume of 280 million Euros and represents a cornerstone of Germany's climate protection efforts. The consortium is assessing the contribution of supported projects to Germany's climate policy targets.

The evaluation follows a common methodology, clustering projects into segments such as concepts, innovation and feasibility studies, implementation, specific counseling, decision knowledge, campaigns, and training. Evaluation criteria are grouped into four categories: climate change mitigation, approach and relevance, broader effects of the project, and economic impacts. This approach allows cross-segment comparisons and aggregation of certain criteria. **ecologic.eu/3207**

Evaluation of the implementation of the Europe 2020 Strategy

This project, led by Ecologic Institute, supports the Committee of the Regions (CoR) in carrying out its responsibility to involve regional and local authorities in European decision-making processes at the earliest stage vis-à-vis the implementation of the Europe 2020 Strategy. Specifically, Ecologic Institute has provided the CoR with several analytical studies of CoR surveys as well as other documentation, such as the National Reform Programmes, in order to gauge the progress made in implementing the Europe 2020 Strategy at the local level.

Based on the results of the studies, the CoR is able to make concrete recommendations to the EU Commission and other relevant bodies to address obstacles and limitations in the Europe 2020 Strategy and to increase social cohesion, competitiveness and sustainability in all parts of the EU territory.

ecologic.eu/4130 ecologic.eu/4488

Responding to Climate Change

Climate change mitigation strategy 2020PLUS Baden-Württemberg

In 2011, Germany's third largest federal state (Bundesland), Baden-Württemberg, adopted a new climate policy strategy. Its "Climate Change Mitigation Strategy 2020PLUS" sets ambitious targets: The government aims to reduce the region's greenhouse gas emissions by 30% by 2020. The long-term goal is to emit only 2 tons of CO_2 equivalents per capita by 2050.

To achieve these targets, the strategy encompasses 145 measures to improve energy efficiency, boost the use of renewable energies, and reduce emissions in all relevant sectors of the economy. By 2050, renewable energies are meant to provide nearly 100% of the region's electricity consumption. Ecologic Institute supported the Ministry of the Environment, Climate Protection and the Energy Sector of Baden-Württemberg scientifically and organizationally in developing the strategy, including facilitation of stakeholder and expert consultations. Our web specialists implemented a web-based consultation platform which allowed citizens, businesses, and civil society groups to contribute their ideas for the new strategy.

In addition, Ecologic Institute elaborated on proposals for future mitigation measures in the fields of agriculture and waste as well as cross-cutting measures in the fields of municipal mitigation strategies, climate-friendly business, and environmental education.

ecologic.eu/3526

New market mechanisms in a post-2012 climate regime

A number of proposals have been put forward by parties involved in the UN climate talks to increase the scale of the Kyoto Protocol's Clean Development Mechanism (CDM) to a sectorbased and more ambitious emissions reduction mechanism in the post 2012 climate framework.

This project assesses the political, strategic, and practical issues relating to the negotiations around such new market mechanisms in a post 2012 climate regime. Specifically, it analyzes the incentives and barriers to the transition from the CDM to new mechanisms; additionally, it identifies most promising countries, sectors and regions for taking on new



market mechanisms; and finally develops interim solutions for this transition.

Ecologic Institute, together with partners, is exploring how these new market mechanisms could be implemented successfully, focusing on the political challenges facing the negotiations, and the options for ensuring a smooth transition from the existing project based mechanism to a new system.

ecologic.eu/4172

Costs and benefits of adaption measures for climate change

In late 2009, the German government adopted its National Strategy for Adaptation to Climate Change. The strategy covers multiple sectors and lists a number of potential adaptation measures for each sector.

However, a sectoral assessment of the adaptation needs is not a sufficient basis for choosing the most effective and efficient policy responses to the changing climate. This must be complemented by a cross-sectoral comparison that assesses the need for adaptation measures, for which a common metric is needed.

Costs and benefits provide one such measure. The main objective of this research project was to develop and apply a consistent methodology for this new type of cross-sectoral cost-benefit analysis in the field of climate change adaptation. Ecologic Institute and partners assessed state of the art economic analysis techniques for adaptation measures, developed economic criteria for cost-benefit analyses, and conducted such cost-benefit analyses for several adaptation measures.

Based on a literature review of the economic costs and benefits of adaptation to climate change, the consortium consolidated and harmonized the results of existing analyses in order to make adaptation measures comparable, transferred the results of existing foreign studies to the German context, and complemented existing analyses with additional research for several sectors.

The results were discussed and validated through a number of expert interviews and workshops.

Green Infrastructure and Ecosystems

Green infrastructure

Green infrastructure can be understood as a network of environmental zones and green areas in rural and urban landscapes that can enhance the resilience of species and ecosystems to global change while securing multiple co-benefits and ensuring the provision of ecosystem services. Investing in and building up green infrastructure requires smart, integrated approaches to spatial planning to ensure that Europe's limited land is utilized in ways that can provide multiple functions for nature and society.

In this context, Ecologic Institute and partners worked on two research projects for the European Commission to support the upcoming EU Green Infrastructure Strategy. The team analyzed, compared, and evaluated diverse examples of implemented green infrastructure projects, concentrating on their design, implementation, funding process, and cost-to-benefit ratios. A particular focus was to identify the diverse types of European green infrastructure projects and initiatives, both in rural and urban areas including e.g., the restoration of nature, management of floodplains, sustainable urban drainage or cooling systems utilizing green spaces, improvement of natural water retention and purification by reforestation, wetland restoration, and soil management.

Furthermore, the studies analyzed the environmental, social, and economic impacts of implementing green infrastructure in EU Member States via the analysis of four policy scenarios. This research will facilitate the development of the EU Green Infrastructure Strategy and will contribute to the achievement of the EU's new 2020 target for biodiversity and ecosystem services.

ecologic.eu/3933 ecologic.eu/3984

In another project on this topic, Ecologic Institute and partners are analyzing innovative policies and practices from Germany, dealing with the use of green infrastructure for stormwater management that are potentially transferable to the US. Information is extracted from in-depth research and expert interviews on both sides of the Atlantic and made available to political decision-makers for the development of goal-oriented concepts for environmental policy in the US. In parallel, potential policy barriers and impediments to transnational exchanges will be investigated and suggestions will be made to initiate communication and facilitate a practical transfer of technologies and experience.



Market-based instruments for ecosystem services

The ecosystems embedded in central European cultural landscapes provide a multitude of benefits to human society. Ecologic Institute and partners are analysing the relationship between economic policy instruments, the provision of ecosystem services, and human well-being in two study areas. By involving local stakeholders in participatory processes such as scenario development and policy evaluation, the project develops recommendations for a reconcilement of climate protection, nature conservation, and land-use policies. In this context, the study focuses on highlighting potential for sustainably designed market-based instruments for ecosystem services.

ecologic.eu/2897

Ecosystem-based approaches for climate change adaptation and mitigation

Adaptation measures to climate change and the enforcement of mitigation measures are urgently needed in many sectors of business and society such as agriculture, forestry, water management, nature conservation, and human health. Actions and measures which adopt the ecosystem-based approach are becoming increasingly important, as they can provide multiple benefits and are often considered more cost-effective than technological approaches for tackling climate change. This study, coordinated by Ecologic Institute and supported by the Environmental Change Institute, aimed to gain a better understanding of the role and potential of ecosystem-based approaches in climate change adaptation and mitigation in Europe. Factors that hinder or facilitate the implementation of ecosystembased approaches in climate change programs at local, regional, national, and transnational levels were illuminated. On this basis, appropriate recommendations for overcoming existing obstacles were developed.

Land Use

Guidance on making agricultural measures clear and transparent at farm level

Agricultural practices remain a large source of water pollution and over-abstraction and are also responsible for habitat degradation. At the same time, agriculture plays a positive role in the provision of public goods and environmental quality. It also harbors great potential for solving water protection problems and has already contributed significantly to this goal.

The Water Framework Directive (WFD), a central policy tool in this context, requires that EU Member States adopt River Basin Management Plans, including Programmes of Measures (PoM). After the adoption of these plans, measures that have been identified in the PoMs must be made operational before the end of 2012.

A guidance document, developed as part of this project, provides a tool to support the WFD's implementation at farm level and gives advice to national and river basin management authorities on how mandatory and voluntary measures included in the WFD POMs can be operationalized. This guidance document was developed through a collaborative program involving the WFD Common Implementation Strategy (CIS) partners. Ecologic Institute strongly supported the drafting of the guidance itself as well as the organization of the CIS workshop on "Clear Measures for Farmers" that provided input for the project. Specifically, the guidance identifies administrative principles, methods, and tools for implementing measures at farm level as well as the different communication and decision support tools that help to provide clear and transparent information to farmers and feedback to the WFD authorities.

ecologic.eu/4194

Conference on "Climate Change in Agriculture"

What role does agriculture play in climate protection, and how can it adapt itself to climate change? What approaches in science and policy can address this problem, and how can the Common Agricultural Policy contribute in this area? Over 100 scientists, policy makers, and experts from pertinent government agencies and associations discussed these and other



questions at the conference "Climate Change in Agriculture," which took place in January 2011 in Berlin. Dr. Norbert Röttgen, the German Federal Minister of the Environment, opened the conference, which was organized by the German Federal Agency for Nature Conservation and Ecologic Institute.

The main discussion point was agriculture's role in climate change, which is threefold: First, it causes part of the release of greenhouse gas emissions through intensive land use, the raising of livestock, and land use changes. Second, agriculture is directly affected by the consequences of climate change through phenomena such as droughts and water scarcity and is subject to heavy rain events that can endanger productivity. Third, agriculture serves to preserve natural resources and established cultural landscapes by increasing soil carbon contents and adapting management practices to preserve carbon sinks. In the discussion, the key role played by consumer behavior was emphasized: Consumers need to be informed about the connections of the consumption of animal products, greenhouse gas emissions and climate change. ecologic.eu/3909

Ressource-efficient land use

The aim of this project is to identify existing land use policies and develop possible governance tools towards a more resource efficient and sustainable global land use. The project team assesses past and current land use patterns by sector in order to identify drivers and trends of global land use changes. In parallel, a governance screening is being undertaken to gain an overview of land use planning approaches on international and EU level as well as in selected countries. Both governmental and non-governmental approaches are screened and best practice examples are identified.

Based on these analyses and through a close interaction with relevant international institutions, the project team will develop conceptual and strategic suggestions for potential approaches towards a global sustainable land use standard, regulation, or other instruments. Ecologic Institute is leading the work on governance screening and the formulation of policy recommendations.

Water

Support for the implementation of the Water Framework Directive

Since 2006 Ecologic Institute, as part of a pan-European consortium, has been supporting the implementation of the Water Framework Directive (WFD). The consortium gave independent and impartial advice on scientific, socio-economic, and technical issues related to the WFD and contributed to the development of a common, EU-wide approach to implementing the WFD. Specific issues addressed by Ecologic Institute covered linkages between the WFD and agriculture, heavily modified water bodies, hydromorphological measures, and socio-economic aspects.

This project provided the basis for our ongoing activities in the field of water and land use related research.

ecologic.eu/1859

Workshop: Water management, Water Framework Directive and Hydropower

In September 2011, the 2nd Common Implementation Strategy Workshop took place in Brussels. The key aim of the workshop was information exchange on legal and technical requirements to implement measures for environmental improvement at hydropower plants. The workshop also fostered incentives to support hydropower and improve the water environment by supplying strategic planning tools for the implementation of the Water Framework Directive Article 4.7 for hydropower development. Germany, the United Kingdom, and the European Commission jointly held the workshop together with a committee organizing the Common Implementation Strategy. Ecologic Institute was asked to support the conceptual preparation of this workshop.



European Topic Centre on Inland, Coastal and Marine Waters

The European Environment Agency's (EEA) European Topic Centre on Inland, Coastal and Marine Waters (ETC-ICM), a consortium of partner institutions, aims to support the assessment, development, and implementation of EU policies through data analysis, data monitoring, and scientific knowledge sharing. As a member of this consortium, Ecologic Institute is investigating the economic and social impacts of environmental changes in European waters and providing expert advice on EU measures such as the Water Framework Directive, the Marine Strategy Framework Directive, the Common Agricultural Policy, and the Integrated Maritime Policy. Our water and economic experts are assisting the EEA in incorporating economic components into the water resource efficiency indicators being developed by ETC-ICM. Furthermore, Ecologic Institute is developing socio-economic indicators for several sectors of the maritime economy such as coastal tourism, fisheries, maritime shipping, offshore energy generation, and ports.

The 3Ts - Tariffs, Taxes, and Transfers - in the European water sector

The 3Ts concept has been developed by the OECD Horizontal Programme on Water in order to describe and categorize the three ultimate financial sources of investment for the water sector: taxes, tariffs, and transfers (primarily official development assistance). Establishing the water sector on a financially sustainable basis requires an appropriate balance and relationship between the 3Ts. The aim of this concept is to assist decision makers by promoting and explaining the distinctions between the 3Ts and other forms of finance.

In cooperation with EUREAU, The European Federation of National Associations of Water and Waste Water Services, Ecologic Institute developed a handbook to establish a consistent procedure tailored to end-users for the structuring of financial data. The 3Ts methodology established by the OECD provided the basis for this practical methodological guide. ecologic.eu/4154

Energy

Environmental impacts of electric vehicles

In order to meet the long-term climate mitigation objectives of the EU, a drastic reduction of transport-related greenhouse gas (GHG) emissions is needed.

Transport is one of the few sectors that shows a steady growth of CO₂ emissions. Electric Vehicles (EV) and Plug-in Hybrid Electric Vehicles (PHEV) are promising technologies with the potential to drastically reduce the environmental burden of road transport. In fact, electric mobility was identified in a project by DG Environment as the GHG reduction approach with the highest reduction potential for passenger cars and light commercial vehicles in the medium to long term (2020-2050). At the same time, both EV and PHEV are still far from being proven technologies and the real reduction potential of electric mobility is still unclear.

For EU policy makers, it is important to get a reliable and independent assessment of the current state of these issues in order to develop a targeted and appropriate GHG reduction policy for transport. The study investigated the potential environmental impacts of largescale market penetration of electric vehicles in the EU in 2050 and developed scenarios and formulated policy recommendations. ecologic.eu/3544

Implementation of the Renewable Energy Directive by EU Member States

The EU Member States are obligated to pass measures that contribute to the EU target of a 20 % share of energy from renewable sources of the EU gross final energy consumption by 2020. Member States had to present their envisaged implementation measures in National Renewable Energy Actions Plans.

Ecologic Institute is assessing the implementation of the Renewable Energy Directive in Germany and the United Kingdom. In total, the project consortium, to which Ecologic Institute belongs, covers all 27 Member States. In the context of a comprehensive analysis, the measures that have been notified to the European Commission as part of the National Renewable Energy Actions Plans are being assessed.



The consortium examines whether the implementation measures are complete, consistent, effective, of good legal quality, and sufficient to meet the national targets set in the Renewable Energy Directive. Best practice examples and deficits will be pointed out, and infringement procedures might be initiated by the European Commission based on identified implementation gaps.

ecologic.eu/4164

Anchoring renewable energy in teacher training

From November 2011 until April 2014, Ecologic Institute is participating in a project on renewable energy in teacher training supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. This project aims to further qualify future teachers with regard to general knowledge about renewable energies as well as methodologies that may help them share this knowledge in schools.

It will also develop supportive teaching materials for related topics such as energy efficiency, energy saving, future energy scenarios, and electric mobility. These materials will be available online and disseminated all over Germany. They will then be the basis for carrying out 80 teacher training seminars.

Ecologic Institute will work with the "Independent Institute for Environmental Issues" (UfU) that leads this project and the association "SolarFuture." The consortium builds on the activities and experiences gained within the project "Experiencing Renewable Energies: powerado-plus." The Ecologic Institute's work will concentrate on the development of the teaching materials, and pilot 20 training seminars throughout Germany.

Environmental Reporting and Indicators

Integrating mainstream economic indicators with Sustainable Development objectives (IN-STREAM)

Mainstream economic indicators, such as Gross Domestic Product (GDP), are useful measures with great influence on public and private decisions, but they are flawed as measures of human welfare and give little feedback on progress of environmental goals and sustainable development. Through both qualitative and quantitative analysis, this project developed new recommendations for indicators that assess progress in economic development, human well-being, environmental protection, and long-term sustainability. The project provided important lessons and methodologies for policy-makers aiming to measure and affect not only economic throughput but also multiple dimensions of sustainability. Identifying and balancing trade-offs of sustainability can be done by using various modeling techniques (e.g., trade-offs between competitiveness, climate change action, and land use) or by using composite indicators. Although composite indicators are subjective, they can be important and effective communication

tools to the public for the inherently complex messages of sustainability assessments.

In 2011, a workshop on sustainability indicators was organized by Ecologic Institute. The aim of the workshop was two-fold: to discuss the use of indicators to assess the progress on economic and sustainability goals and to share experiences on how to improve green growth and green innovation policies.

ecologic.eu/2510

EU Sustainable Development Indicators

In June 2012, world leaders will meet again in Rio de Janeiro to mark the 20th anniversary of the UN Conference on Environment and Development (UNCED). The objectives of this project are to support the preparations for the summit with publications and audiovisual materials. The project consortium, to which Ecologic Institute belongs, will prepare two publications related to the European Union's Sustainable Development Indicator (SDI) set. The first publication will be a manual explaining conceptual issues of the EU SDI set as well as describing the individual indicators in detail. The second publication will be



a statistical guide dedicated to the Rio+20 conference (UNCSD 2012). Furthermore, the project teams will generate videos on sustainable development and its monitoring based on statistical information.

The approach and methodology applied combine interdisciplinary expertise on the economic, social, environmental, and institutional dimensions of sustainable development in the European Union and the world with professional creative input, based on experience and skills in targeted media communication to make the videos engaging, compelling, and informative.

ecologic.eu/4420

Indicator-based environmental reporting

Indicators are becoming more relevant for environmental reporting at the national and international level. The German Core Indicator System (KIS) is currently under revision to match new political requirements. At the same time, the European Commission is developing a comprehensive Environmental Pressure Index. The German Environment Agency wanted to examine various options for initiating a new key indicator set or the use of an environmental index. Ecologic Institute developed recommendations for the focused, concise communication of environmental information using key indicators and indices. The study was managed by Ecologic Institute with Bosch & Partner's support with regards to the KIS. ecologic.eu/3862

ecologic.eu/3002

Environmental Pressure Index

Ecologic Institute assessed and assembled data sources for the Environmental Pressure Index, a composite index aggregating more than forty different indicators of environmental pressures, which will serve as an overall indicator for human pressures on the environment. Ecologic Institute contributed to data identification, selection, and compilation with the objective of providing a comprehensive statistical picture of environmental pressures in the EU for sixteen indicators. In close cooperation with the European Commission, our researchers and experts provided statistics regarding greenhouse gas emissions, waste, water guality (inland and marine), transport noise, intensification of agriculture, invasive species, nuclear fuel, fish catches, soil sealing. and other environmental concerns.

Knowledge Generation and Exchange

One of Ecologic Institute's main objectives is and always has been the international exchange of knowledge and ideas. By fostering this exchange, we strengthen the capacity of national and international actors to develop, implement, and enforce effective environmental policies. Therefore, several event formats have been established over the years to promote and support public diplomacy efforts worldwide:

- Study Tours
- Summer Schools
- Duke University Courses
- Media Dialogues
- Dinner Dialogues

Ecologic Institute designs and organizes madeto-measure programs depending on the professional background of the group and the general topic of the visit. Programs can include meetings with experts from ministries, think tanks, and NGOs as well as field trips to leading examples of the German "ecological industrial policy". The Ecologic Dinner Dialogues bring fresh ideas from outside Germany to Berlin by providing a forum for opinion leaders and decision-makers from policy and business, science and civil society. They are characterized by informal debates about salient topics, where ideas flow across the boundaries of countries, scientific disciplines, businesses, and policy communities.

Our Media Dialogues, on the other hand, aim to provide journalists with insights on local, regional, and international efforts to craft policies, initiatives and partnerships, as the media plays a key role in raising awareness and spreading knowledge for environmental policy. In addition to explaining the German perspective, the programs are meant to provide a forum to exchange views and create a foundation for further discussion and cooperation.



Study Tour: Green growth and environmental management

As part of the Sino-German Environmental Policy Programme, Ecologic Institute organized a 2-week-long study tour for a group of directors and assistant directors of various Chinese environmental agencies and the Chinese Ministry of Environment. Experts from Ecologic Institute provided in-house policy and scientific background information, complemented by excursions to political institutions, ministries, and agencies. The group also visited industrial sites including a waste management plant, a waste fueled power station, a biogas plant, and a sewage treatment plant. **ecologic.eu/4041**

Study Tour: Transforming economies through community (I-CITE)

Ecologic Institute and the Atlantic Council of the United States are hosting transatlantic study tours as part of a civil society dialogue focused on transformation processes in three areas: agriculture and forestry, industrial redevelopment and the energy economy. In August 2011, the first study tour took place in Germany and Austria. It focused on the transformation of land use, paying significant attention to the development of bioenergy and biofuels. In October 2011, the second study tour investigated the transformation of structurally disadvantaged industrial regions and opportunities for their recovery and job creation by visiting Detroit, Michigan and Pittsburgh, Pennsylvania. The third study tour will look at the transformation of the energy economy (natural gas, renewables, and electric mobility) with visits to Berlin, Northern Germany and Denmark.

Knowledge Generation and Exchange

ICAP Summer School on emissions trading

The International Carbon Action Partnership (ICAP) Summer School courses for emerging and developing countries promote global participation in compatible emissions trading systems. The European Commission and the governments of the respective host countries make ICAP's outreach activities possible by funding this project. Designed by Ecologic Institute and ICAP, the curriculum focuses on providing know-how about best practices for designing, implementing, operating, and administering national and regional emissions trading systems. It uses lectures, simulations, and interactive group exercises. Each year, the faculty is drawn from Ecologic Institute and elsewhere, including representatives of ICAP members and of established educational and research institutions.

In 2011, the third and fourth Summer School courses took place in Beijing and Madrid and today, the ICAP Summer School Alumni-Network counts more than 100 members from 25 countries.

ecologic.eu/de/4220 ecologic.eu/de/4124

Duke University course on environmental policy in Europe

As part of the annual Duke in Berlin Program of the Duke University, Durham, North Carolina, R. Andreas Kraemer lectures on European integration and environmental policy in the context of transatlantic relations. The course covers the legal foundations of European environmental policy from the beginning to the present day. In terms of policy substance, the course addresses key elements of European environmental policy including the EU Sustainable Development Strategy and the Cardiff Process of environmental policy integration. Among the recurring themes are European water policy, renewable energy, resource efficiency and waste management, climate change, and the integration of environmental protection requirements into other policy fields. It also addresses international environmental governance, the reform of the United Nations Environment Programme, the role of the EU in international environmental negotiations, transatlantic regulatory cooperation, and the impact of European policy on other world regions.



Media Dialogue: Climate Change and Energy Policy in the Arab Region

What is the current state of climate and energy policies in the Arab countries? What countries and which initiatives are leading the way? Who are the key drivers for climate protection? Which options for Arab-German cooperations exist, and how can countries in the region benefit from Germany's experiences? These and other issues were explored by 25 journalists and experts at a German-Arab Media Dialogue in Abu Dhabi. Organized by the Ecologic Institute in cooperation with the German Embassy in Abu Dhabi, the event was funded by the German Federal Foreign Office.

ecologic.eu/3838

Dinner Dialogue: Risk Regulation in the United States and Europe

In October 2011, Ecologic Institute had the honor to host a dinner dialogue with Prof Jonathan B. Wiener (Duke University) and Prof Peter H. Sand (University of Munich) on the occasion of the launch of the book "The Reality of Precaution – Comparing Risk Regulation in the United States and Europe" of which both are editors. The main objective of this event was to discuss the application of the precautionary principle in the risk regulation of the United States and Europe in order to "bridge the transatlantic gap" between the debate over the abstract theory of the precautionary principle and the reality of its application in practice.

ecologic.eu/4344 dinner-dialogue.org

Ecologic Institute – A respected research organization

Scientific research and technological innovation will play a crucial role in the realization of the Europe 2020 Strategy for smart, sustainable and inclusive growth.

Ecologic Institute contributes to this goal through a range of research projects, especially those sponsored by the European Union's "Seventh Framework Programme for Research and Technological Development" (FP7). Including themes and focal points like climate change, sustainable development, freshwater supply, and biodiversity, the FP7 projects allow us to put our various competencies and skills into practice.

Restoring rivers for effective catchment management (REFORM)

The REFORM project targets the development of guidance and mechanisms to make river restoration and climate change mitigation measures more cost-effective. To achieve this, REFORM aims to assess more effectively the state of rivers, floodplains, and connected groundwater systems towards providing a framework for improving hydromorphological restoration measures. Ecologic Institute, as part of the project consortium, supports the second and future phases of River Basin Management Plans of the EU Water Framework Directive.



Individuals in context: Supportive environments for sustainable living (InContext)

Is action at local and individual levels vital to bringing Sustainable Development (SD) to life?

The continued existence of policies designed to initiate local and individual transitions suggests that it may be, but the expected changes have not yet been realized. Although there are numerous local SD initiatives and many individuals proactively create and lead sustainable lifestyles, such behavior has not yet become mainstream enough to engender societal transitions. Thus, this project seeks to assess the drivers and barriers of establishing sustainable development on an individual level.

While prior research on sustainable development has mainly focused on external factors, InContext also takes internal factors into account:

Based on the notion that both individual and collective behaviors respond to an inner and outer context, we analyze factors like individual needs and subconscious drivers, such as values and priorities. Therefore, InContext employs the following methods:

- Participatory scenario development and backcasting exercises in three local communities that employ innovative cooperation mechanisms and engage various agents for change.
- Development of ways for EU and local-level policy to address an individual's internal context and simultaneously foster sustainability-driven action.
- Assembling innovative policy mixes for sustainability-driven action, considering the roles of actors on different levels such as policy, business, and civil society.

Ecologic Institute's role in this project is twofold: Working in an international consortium of diverse project partners, we oversee the research program and project management as well as synthesize and develop policy recommendations.

ecologic.eu/3950 incontext-fp7.eu

Ecologic Institute – A respected research organization

Dissemination and uptake of FP water research results (WaterDiss2.0)

The implementation of the EU Water Framework Directive (WFD) and the Floods Directive constitutes an exceptional challenge to water managers and governments across Europe, as the transfer of research results to policy and management is often inefficient or incomplete. Assessments of the current status of implementation have shown that less than 40% of water bodies will meet Good Ecological Status, the general objective of the WFD, by 2015. From 2011 until 2013, Ecologic Institute, as part of the WaterDiss2.0 consortium, works to boost knowledge transfer by identifying project-specific uptake barriers and by designing and implementing tailored strategies and events for improving uptake throughout Europe. Another measure will be to engage scientists, policy makers, and water managers in the European Water Community, a communication platform aiming at the connection of science and policy.

ecologic.eu/3903 waterdiss.eu

Evaluating economic policy instruments for sustainable water management in Europe (EPI Water)

Economic policy instruments have received widespread attention over the last three decades and have increasingly been implemented to achieve environmental policy objectives. This research project aims to assess the effectiveness and efficiency of economic policy instruments in achieving water policy goals and to identify the preconditions under which they complement or perform better than alternative policy instruments. Ecologic Institute plays an active role in all areas of the project research, focusing on the review of empirical evidence and experiences of earlier implementations.

ecologic.eu/3880 epi-water.eu



Ecological and human health risk assessments of drugs in the environment (PHARMAS)

Over the last couple of decades, pharmaceutical products have been repeatedly found in environmental waters and even in drinking water. As there are no studies on long-term effects of continuous ingestion of trace pharmaceutical concentrations in water by the general population or wildlife, this project addresses some of the knowledge gaps for this subject, targeting two specific compound groups: antibiotics and anti-cancer drugs.

A prototype web-based classification system will be developed to inform citizens about the environmental risks of pharmaceuticals.

Ecologic Institute is involved in determining the information requirements of different stake-holders for this web-based classification system as well as in establishing the link with policy processes and the dissemination of project results. The results will enable EU regulators and policy makers to make better decisions on the issue of pharmaceuticals in the environment. ecologic.eu/4276

Sustainable farm management aimed at reducing threats to soils under climate change (SmartSOIL)

The SmartSOIL project focuses on various farming systems in Europe and will develop an innovative approach using the soil carbon flow and stocks concept to assess the impact of carbon management on crop productivity, soil organic carbon stocks, and other ecosystem services. It will identify and develop actions that increase carbon stocks and optimize carbon use, at the same time considering the cost-effectiveness of policy measures.

SmartSOIL will develop a decision support tool to enable farmers, advisors, and policy makers to discuss and select the most appropriate practices regarding particular farming systems, soils, and climates. Ecologic Institute is leading the task of developing the decision-supporttool and policy recommendations and supports the process of involving stakeholders.

ecologic.eu/4444 smartsoil.eu

pharmas-eu.org

Ecologic Institute – A socio-ecological research organization

Intergenerational equity, quality of life, social cohesion, and international responsibility – these are only a few of the highly complex objectives to which the German Federal Government has committed itself in its "National Strategy for Sustainability." Consequently, these tensions between nature and society are placed on top of the government's research agenda.

The German Federal Ministry of Education and Research (BMBF) has founded the SOEF – Social-ecological Research – program to facilitate the National Strategy for Sustainability. As a socio-ecological research facility, Ecologic Institute collaborates closely with the ministry.

The general aim of the ministry's SOEF program is to develop interdisciplinary strategies for a socially, environmentally, and economically sustainable future, with the accompanying social transformation processes. Because Ecologic Institute regularly cooperates with academic institutions and other research organizations – some of our experts holding university teaching positions – we are able to use our network capabilities to maintain SOEF's transdisciplinary approach and involve all kinds of stakeholders.

While holding ourselves to high ethical standards as a non-profit organization, we provide new perspectives and innovative approaches for the ministry.

The following two projects are examples of our work in this context. **sozial-oekologische-forschung.org/en**



Regional adaptation strategies for the German Baltic Sea coast (RADOST)

Ecologic Institute is coordinating the five-year project RADOST, which deals with the potential consequences of climate change along the Baltic coastline of Mecklenburg-Western Pomerania and Schleswig-Holstein. The aim of the project is to develop regional adaptation strategies in a dialogue between research institutions, businesses, public administration, and civil society.

During the second project year, the issue-specific networks of stakeholders in the region were successfully expanded. Additionally, further data on sea level, general sea state, currents and sediment transport, water quality, ecology, and biodiversity have been collected, and based on these research results, the first implementation projects have been launched. A particular concern of RADOST is to maintain and extend international contacts in order to disseminate regional adaptation strategies and exchange knowledge and experience with other coastal regions and the international community. **ecologic.eu/2926**

Integrated water and land management at regional level in Europe and Southern Africa

The interconnectedness of water and land issues and their relevance for sustainable development have been well documented: yet, both resources are still largely managed as separate policy issues. Therefore, this project aims to improve the political, economic, and cultural understanding of these two crucial policy fields, especially regarding sustainable livelihoods, food security, and ecosystem stability. Ecologic Institute, together with the South African Council for Scientific and Industrial Research, develops policy recommendations and fosters collaboration between German and South African researchers in order to expand the knowledge transfer between the EU and Southern African Development Community regions. ecologic.eu/3753

ecologic.eu/2926 klimzug-radost.de/en

Ecologic Institute, USA Washington DC San Mateo CA

Ecologic Institute, USA - in Washington DC and San Mateo CA - collaborates closely with our European offices. Thematically, Ecologic Institute, USA focuses on:

Europe and its policies

Drawing on the diverse expertise of staff in its European counterpart offices and a broad network of partner organizations, Ecologic Institute is in an ideal position to provide stakeholders in the United States with in-depth knowledge and advice on environmental policy developments in the European Union, including the underlying political dynamics, key actors and institutions, and the legal, social, and economic contexts.

Climate and energy

Climate change mitigation and adaptation, energy security, and a sustainable, resource- and energy-efficient economy are core elements in the work program of Ecologic Institute. Its portfolio includes the organization of a number of high-level events, publications on a broad spectrum of issues and the provision of expert advice on the design of climate and energy policies to national governments and regional and international organizations. Having helped design many of the climate and energy policies currently in place in Europe, Ecologic Institute can bring ample practical experience to bear in the ongoing debate in the United States.

Economics of transformation

On both sides of the Atlantic, aging or outdated infrastructure calls for unprecedented levels of investment; meanwhile, declining regions and industries struggle to adapt to changing economic circumstances in a rapidly transforming world. With an expanding global trading system and cooperative responses to systemic threats, such structural challenges are elevated to the international level. Ecologic Institute has been engaged in these issues in Europe for over a decade, gaining experience with regional transformation processes and the growth of a vibrant green economy, so that it can harness this knowledge to foster transatlantic debate and facilitate the transfer of successful practices to the United States.

Biodiversity and ecosystems

Despite concerted efforts to halt the rapid loss of biodiversity around the globe, habitats continue to deteriorate and species disappear at a record pace. With a rich tradition and more than a century of experience in nature conservation, both the United States and Europe offer valuable insights to promote conservation efforts around the globe. Ecologic Institute is at the forefront of policy developments fostering innovative solutions to ecosystem service finance and biodiversity preservation by way of protected areas. Thanks to its presence on both sides of the Atlantic, it is able to harness substantive expertise and promote a fruitful dialogue through outreach activities and policy advice.

Transatlantic outreach

With a shared history and cultural heritage, Europe and the United States have traditionally held similar views on a wide range of global challenges. Increasingly however, perceptions of the role and scope of policies to preserve the environment have differed across the Atlantic, threatening to undermine the strength of this alliance. As both sides explore different approaches to environmental leadership and innovation, increased dialogue and knowledge transfer offer useful opportunities to strengthen the transatlantic partnership. Moreover, with the emergence of new powers and a redefined geopolitical landscape, strong cooperation between Europe and the United States will become increasingly important going forward. By convening experts and fostering an informed debate, the Ecologic Institute promotes a closer transatlantic exchange and helps further a shared vision of a sustainable, prosperous future.



Financial Information Ecologic Institute, USA

Balance Sheet

	US Dollars		Euros	
Assets	2009	2010	2009	2010
Fixed assets	3,899	2,093	2,721	1,564
Intangible				
Tangible	3,899	2,093	2,721	1,564
Financial				
Current assets	270,078	148,553	188,431	110,985
Value of ongoing projects				
Receivables due	91,869	65,201	64,096	48,712
Cash	178,209	59,411	124,335	44,386
Other	0	23,941	0	17,886
Total assets	273,977	150,646	191,152	112,548
Liabilities				
Capital and reserves	229,624	125,182	160207	93,524
Reserves and provisions	137,304	229,624	95,796	171,553
Surplus	92,320	-104,442	64,411	-78,029
Creditors	44,353	25,464	30,945	19,024
Advances received	0	0	0	0
Leasing/loan liabilities	0	0	0	0
All other liablities	44,353	25,464	30,945	19,024
Total liabilities	273,977	150,646	191,152	112,548

	US Dollars		Euros	
	2009	2010	2009	2010
Revenue	369,790	256,523	257,999	191,650
Variation in project value				
Other operating income	-3,282	-16,353	-2,290	-12,217
Costs of material/ consumables	-89,016	-79,055	-62,106	-59,062
Other operating charges	-60,685	-52,053	-42,340	-38,889
Staff costs	-123,276	-211,697	-86,009	-158,160
Gross operating surplus	93,531	-102,635	65,255	-76,679
Depreciation	-1,211	-1,806	-844	-1,349
Net Operating surplus	92,320	-104,441	64,411	-78,028
Financial income	0	0	0	0
Interest paid	0	0	0	0
Surplus on ordinary activities	92,320	-104,441	64,411	-78,028
Net transfer to reserves	0	0	0	0
Taxes	0	0	0	0
Surplus for the year	92,320	-104,441	64,411	-78,028

Financial Information Ecologic Institute, EU Group

Balance Sheet

	Euros		US Dollars	
Assets	2009	2010	2009	2010
Fixed assets	106,590	113,968	152,775	152,546
Intangible	30,350	18,442	43,500	24,685
Tangible	75,140	95,526	107,698	127,861
Financial	1,100	0	1,577	0
Current assets	2,810,054	3,996,508	4,027,650	5,349,326
Value of ongoing projects	884,209	1,529,739	1,267,337	2,047,556
Receivables due	720,666	775,281	1,032,931	1,037,714
Cash	1,100,806	1,647,871	1,577,784	2,205,675
Other	104,373	43,616	149,598	58,380
Total assets	2,916,644	4,110,476	4,180,425	5,501,872
Liabilities				
Capital and reserves	1,116,408	1,352,373	1,600,147	1,810,151
Subscribed capital	120,000	65,000	171,996	87,003
Reserves and provisions	963,272	1,249,168	1,380,658	1,672,011
Surplus	33,136	38,205	47,493	51,138
Creditors	1,800,236	2,758,103	2,580,278	3,691,721
Advances received	857,910	1,698,442	1,229,642	2,273,365
Leasing/loan liabilities	5,324	3,195	7,631	4,276
All other liablities	937,002	1,056,467	1,343,005	1,414,081
Total liabilities	2,916,644	4,110,476	4,180,425	5,501,872

Income Statement

	Euros		US Dollars	
	2009	2010	2009	2010
Revenue	4,548,646	4,893,098	6,519,574	6,549,411
Variation in project value	-156,961	667,178	-224,972	893,017
Other operating income	1,008,259	945,342	1,445,138	1,265,341
Costs of material/consumables	-1,254,708	-1,659,104	-1,798,373	-2,220,710
Other operating charges	-893,742	-948,555	-1,281,001	-1,269,641
Staff costs	-3,128,225	-3,596,726	-4,483,685	-4,814,217
Gross operating surplus	123,269	301,233	176,681	403,200
Depreciation	-64,021	-89,246	-91,762	-119,456
Net Operating surplus	59,248	211,987	84,919	283,745
Financial income	2,694	4,806	3,862	6,433
Interest paid	-33	-930	-47	-1,245
Surplus on ordinary activities	61,909	215,863	88,734	288,933
Surplus carried forward	50,181	33,136	71,924	44,352
Net transfer to reserves	-79,067	-204,937	-113,327	-274,308
Taxes	113	-5,857	162	-7,839
Surplus for the year	33,136	38,205	47,493	51,137

Project Value Development

Ecologic Institute Group in the EU and Ecologic Institute in the USA are legally and financially separate non-profit organizations. A Cooperation Agreement provides the framework for joint programs and projects and mutual support within the Ecologic Institute family.

The Ecologic Institutes are purely project-funded organizations and state their commitment to not-for-profit objectives and ethical standards. We are officially recognized with tax privileges for our donors and work in the public interest. A distribution of any surplus or profit is not allowed.



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