



# Eco-clusters for a green economy

OUTCOMES OF A EUROPEAN PARTNERSHIP FOR  
INTERNATIONALISATION AND GROWTH



Cluster Cooperation

EcoCluP

# Acknowledgements

The present brochure presents the activities and outcomes of the EcoCluP project “Eco-Innovation Cluster Partnership for Internationalisation and Growth” co-funded by the European Commission under the Competitiveness and Innovation Framework Programme CIP. EcoCluP is part of the European Cluster Innovation Platform.

Written and edited by Umweltcluster Bayern with contributions from consortium partners.

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# Foreword

The specific strength of clusters lies in their strong regional ties. Proximity helps in finding partners and working together. But clusters offer more than that. They also act as gateways to international markets and co-operation across borders. This becomes more and more important as not all skills and competences necessary to build and offer globally-competitive solutions may be found in the local area. EcoCluP was successful in combining strengths from different regions, thus widening the range of potential partners for co-operation and contributing to better visibility of European clusters in the field of eco-innovation worldwide.

Eco-innovation is a particularly promising, but also very demanding field for clusters. It is promising because it will develop the solutions that are so urgently needed for more sustainable production. This is not only a political target in order to reduce the risks of global warming and the waste of scarce natural resources; a greening of our industries also stimulates innovation and generates new markets and business opportunities that will create entirely new industries with great potential for Europe’s future. Unlocking this potential and turning it into concrete business opportunities is not trivial and often requires radically different approaches and mindsets. This may change the meaning of excellent cluster management.

More than ever, cluster managers must look over the fence from their regular business and help cluster firms discover more sustainable and energy efficient solutions and use them for the creation of new businesses. This is a demanding task that requires new skills, such as strategic thinking and being comfortable in communicating with partners from other parts of the world. Much still has to be improved in this respect. Not all eco-clusters in Europe can be easily ‘googled’, nor do all co-operate at European level or have a clear internationalisation strategy. The Directorate-General for Enterprise and Industry of the European Commission has a strong interest in motivating clusters to engage more in cross-sectoral activities and to support SME internationalisation by facilitating international contacts and partnerships within, and beyond, Europe. This is part of our “Mission for Growth”.

Internationalisation strategies must start in Europe. Not all clusters possess all the competences that are needed to offer attractive and internationally competitive innovative eco-solutions that find their market. In times of scarcer public support, clusters will have to specialise even more and cluster organisations will have to further rationalise and tailor their services and support measures for their members. This will force them to co-operate more with other clusters in Europe in order to maintain or achieve critical mass and build a strong international reputation. Many more efforts will have to be undertaken to better brand and promote the activities of clusters, which also in the future will be supported and facilitated by the European Cluster Collaboration Platform.

The EcoCluP project - co-funded by DG Enterprise and Industry - was a good start to help enterprises from eco-industries co-operate across borders and to enter into new global partnerships. Our hope is that the EcoCluP partners will continue to work with each other and seek synergies between them. We need more and closer European co-operation, not only in support of eco-innovation.



**Dr. Reinhard Büscher**  
Head of Unit - Support for Industrial Innovation,  
Directorate-General Enterprise and Industry, European Commission

# An introduction to the *Eco-innovation Cluster Partnership* for growth and internationalisation

In a context of environmental and global challenges, the need for innovative, efficient and clean technologies is becoming more and more important, especially when increasing material and energy prices have negative impacts on the competitiveness of European manufacturing industries - material, energy and water consumption account for around 50% of operating costs. Eco-innovation and improved resource efficiency and can therefore both compensate for rising prices and shortages of raw materials and substantially contribute to worldwide sustainable development.

Eco-Innovation is a new, multi-faceted industry, developing innovative technologies that help to reduce waste and greenhouse gas emissions and optimise the use of natural resources. In recent years, the eco-industry in Europe has grown by 8% annually, making it one of Europe's most dynamic industries, with a total turnover of more than €300 billion. In 2008, 3.4 million people were directly employed in the EU eco-industry, (about 1.5% of all European employment), with approximately 600,000 jobs created between 2004 and 2008.

The environmental technology industry in Europe mainly consists of small and medium sized enterprises (SMEs) that are characterised by a high level of specialisation and flexibility. In order to drive their innovation and internationalisation potential, many clusters and networks have been created within the last few years. The idea behind the Eco-innovative Cluster Partnership for Growth and Internationalisation (EcoCluP) project was to bring together these clusters at the European level.

EcoCluP has grown from an original group of 13 to a partnership of over 30 eco-innovative cluster organisations supporting the internationalisation, growth and innovation potential of European SMEs.

Through the connection of Europe's environmental clusters over 3,500 cluster companies and 430 research institutions focusing on eco-innovation are linked together and are able to share knowledge and expertise and start co-operation activities. From the start, the multi-faceted cluster network, EcoCluP, was designed to be hands-on, practical, and create real business impact for SMEs.



The EcoCluP consortium has adapted, tested and implemented a number of sector-specific cluster support tools and services to catalyse growth and internationalisation of its members. The project reached out to hundreds of SMEs, corporations, and research institutions within each of the participating clusters.

Over the course of the three-year project, EcoCluP delivered:

- A mapping of R&D capabilities across the project partners to facilitate pan-European collaboration between R&D institutes and SMEs;
- Over 500 cluster companies taking part in trans-national partnering with research institutions through match-making events;
- Around 140 companies participating in Masterclasses; 55 of them also received personalised one-on-one training on how to attract investors;
- Over 400 cluster companies and research institutions tested innovation services and tools ;
- Workshops for Cluster Managers in the use of new innovation services and tools;
- Thirteen internationalisation strategies; one for each of the founding eco-innovation clusters in the consortium;
- Internationalisation support for over 300 eco-innovative companies through training, coaching and business trips;
- Promotion of project results and outcomes with stakeholders and cluster organisations in other EU Member States and regions, including cross-fertilisation with the Enterprise Europe Network, the Cluster IP and other Europe INNOVA and PRO INNO projects;
- Strengthened partnerships between eco-innovation clusters across Europe.

EcoCluP has succeeded as a partnership as it has supported the development and growth of the European market for eco-innovative products and services by supporting Cluster Managers and their companies to help them innovate, internationalise and grow.

The project has yielded a number of positive outputs, including better cluster relationships; increased collaboration between companies, and the introduction of new business-cluster support tools. The exit strategy of the project is also paving the way for future collaborations and growth opportunities in the European eco-innovation marketplace.

The brochure on hand presents the EcoCluP project, its partners and activities by highlighting some of the consortiums' events and services, and gives an outlook on how the cluster partnership will continue to co-operate in the future.

**Gareth Jones**, EcoCluP Project Coordinator, Operations Manager at the UK Centre for Economic & Environmental Development (UK CEED), Peterborough, United Kingdom





# EcoCluP Partners

- 1

**Amsterdam Innovation Motor (AIM)**  
3,000 members + 89 (financially contributing)  
Amsterdam (Netherlands)  
Energy efficiency, waste, transport

- 2

**AXELERA**  
240 members  
Lyon & Rhône-Alpes (France)  
Green chemistry, environmental engineering, conservation, recycling

- 3

**Bayern Innovativ - Cluster Energietechnik**  
Approx. 2,000 associated partners  
Bavaria (Germany)  
Renewable energy, energy efficiency, power plant technology, smart grids, power grids, combined heat and power

- 4

**Cluster de Energía de Pais Vasco (CEPV)**  
94 members  
Basque country (Spain)  
Renewable energy, energy efficiency, sustainable construction, water treatment

- 5

**Copenhagen Capacity (CopCap)**  
250 members  
Copenhagen (Denmark)  
Renewable energy, energy efficiency, sustainable construction, waste, water treatment, air & noise, soil remediation

- 6

**ECO World Styria (ECO)**  
171 members  
Styria (Austria)  
Renewable energy, waste, energy efficiency, water treatment, soil remediation

- 7

**Environmental Industry Cluster (ENIN)**  
27 members  
Hungary  
Renewable energy, energy efficiency, waste management

- 8

**UK CEED - EnviroCluster Peterborough**  
350 members  
Greater Peterborough area (United Kingdom)  
Water treatment, energy efficiency, sustainable construction, waste management

- 9

**Developing Fyn - Lean Energy Cluster**  
Number of members  
Odense (Denmark)  
Energy efficiency, water treatment, waste

- 10

**Lahti Science and Business Park (LSBP) – Finnish cleantech cluster**  
400 members  
Finland  
Renewable energy, energy efficiency, sustainable construction, waste, water treatment, air & noise, soil remediation

- 11

**Oekoenergie-Cluster (OEC)**  
160 members  
Oberösterreich (Austria)  
Renewable energy, energy efficiency, sustainable construction

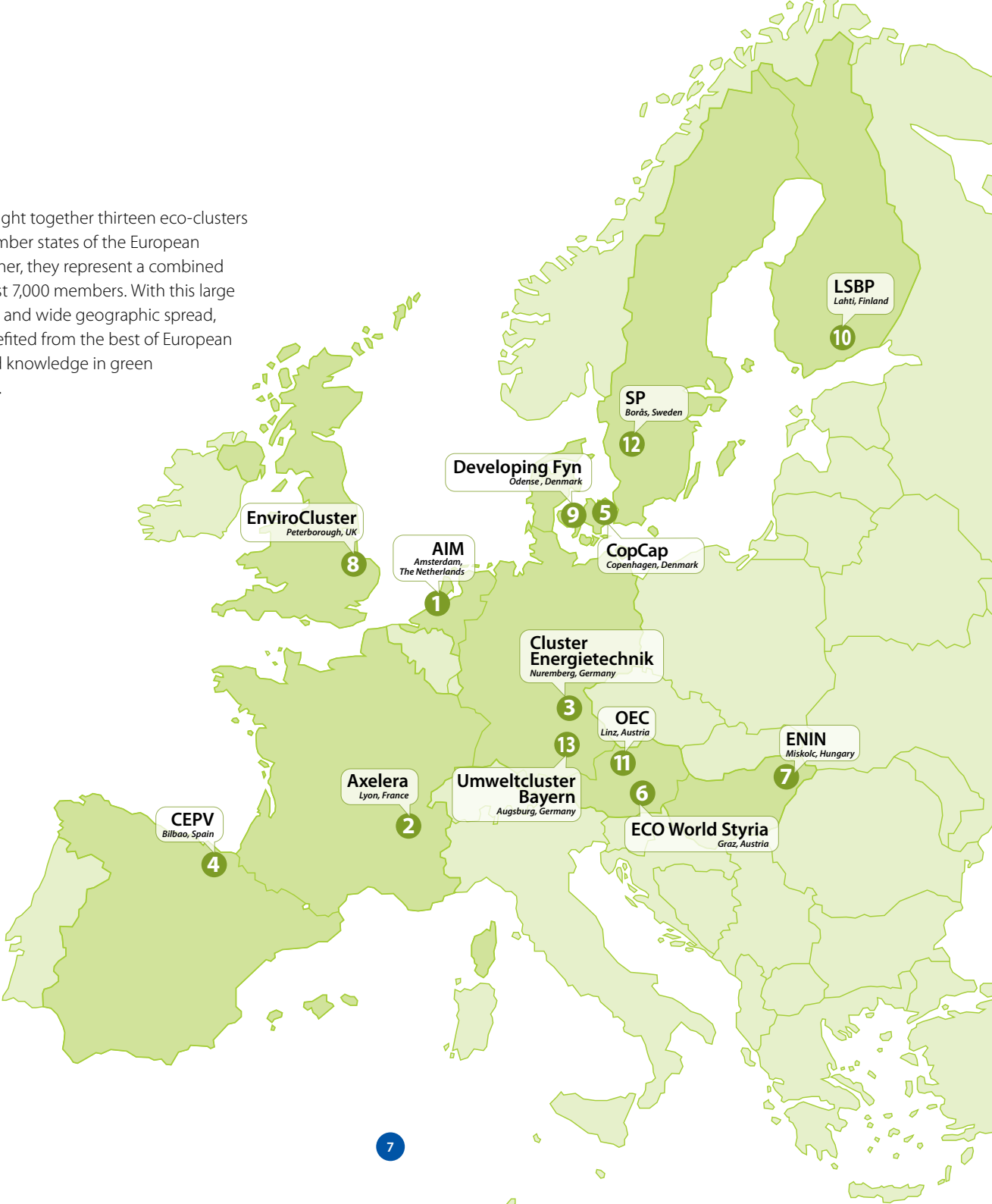
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**Technical Research Institute of Sweden (SP)**  
17 members  
Sweden  
Renewable energy, waste

- 13

**Umweltcluster Bayern**  
163 members ~ 40 partners  
Bavaria (Germany)  
Water and waste water treatment, waste & recycling, energy from waste, biomass, air pollution control, resource efficiency

EcoCluP brought together thirteen eco-clusters from ten member states of the European Union. Together, they represent a combined total of almost 7,000 members. With this large membership, and wide geographic spread, EcoCluP benefited from the best of European expertise and knowledge in green technologies.



# Cluster co-operation: Cluster Manager Days

One of the main objectives of EcoCluP has been to foster collaboration amongst eco-innovation cluster managers. Excellence in cluster management is a pre-requisite for any cluster organisation to achieve outstanding results for their members and the eco-innovation sector in their region. In this light, the EcoCluP cluster managers have been keen to meet their peers from different European regions to learn from their successes and failures.

Cluster management requires many skills: comprehensive management experience, deep market and technological know-how, strong interpersonal and communication skills and established contacts within the branch and beyond. For both clusters and SMEs, bundling strengths and making use of synergies are success factors. That is why networking with other clusters and exchanging know-how is essential for successful cluster management.

Cluster Manager Days provide a chance for eco-innovation cluster managers to come together to share their expert knowledge and experience. The main aim is to forge new and sustainable links between the clusters and enhance the professional ability of their management. Cluster Manager Days are organised as one or two day workshops, supported by moderated brainstorming discussions and group work. From practical discussions and topic-oriented working sessions, new ideas for individual or co-operative activities can be found.

With the Cluster Manager Days in Bilbao, Linz and Budapest, EcoCluP has offered a platform for direct and personal exchange of strategies and topics around cluster management. The Cluster Manager Days have become a fruitful basis for trusted and efficient co-operation. They became an essential element for the EcoCluP consortium and will continue to be held, open to all clusters from the eco-innovation field.

## • Bilbao, Spain (2010)

For the first Cluster Manager Day, the thirteen EcoCluP cluster managers accepted an invitation from Cluster de Energía de Pays Vasco to visit Bilbao. The day focused on the development and implementation of sustainable internationalisation strategies for eco-innovative clusters. The managers presented a variety of successful and unsuccessful experiences as well as tools for promoting internationalisation and in guiding eco-innovative SMEs to foreign markets. The direct discussions amongst peers laid a strong basis for the development of an internationalisation strategy for each cluster.

## • Linz, Austria (2011)

At the invitation of Ökoenergie-Cluster, EcoCluP members met in Linz to identify key factors for the success of cluster programs and activities. Topics included how to work best with partners and members and how to support innovation and R&D. Moreover, the clusters analysed the current and potential technological focus of each cluster partner. As a result more than seven joint projects or project applications at EU level have been initiated. All in all, the workshop days resulted in closer links and ideas for collaboration on future projects.

## • Budapest, Hungary (2012)

The final Cluster Manager Day in Budapest investigated how eco-innovation clusters can continue partnership and collaboration beyond the end of the EcoCluP project. New cluster partners from Portugal, France and Ireland contributed to discussions on points for the future, such as the organisational framework and responsibilities and setup of working groups. It was agreed that cluster manager meetings should continue to take place once a year.



*"Cluster Manager Days offer an excellent opportunity for exchanging ideas, successful approaches and inspiration among colleagues - there are so many things we can learn from each other! The Cluster Manager Days in Linz, held in the framework of the EcoCluP project, were a very good example for sharing best practice on cluster management. I got a number of good ideas for the day-to-day work in the Ökoenergie-Cluster".*

**Christiane Egger**, Ökoenergie-Cluster  
(Eco Energy Cluster Upper Austria)



*"The cluster manager days had a very positive effect on our own work and strategy. For one, the exchange has reconfirmed our approach on how to deal with typical cluster challenges: remain focused, work together with other institutions and partners and receive support when necessary. The cluster manager day also laid a basis for close co-operation with clusters in specific working fields. In the future and especially in regards to internationalisation, we hope to partner with other technology clusters and considerably extend our network."*

**Dr. Manuela Wimmer**,  
Umweltcluster Bayern  
(Bavarian Environmental Technology Cluster)





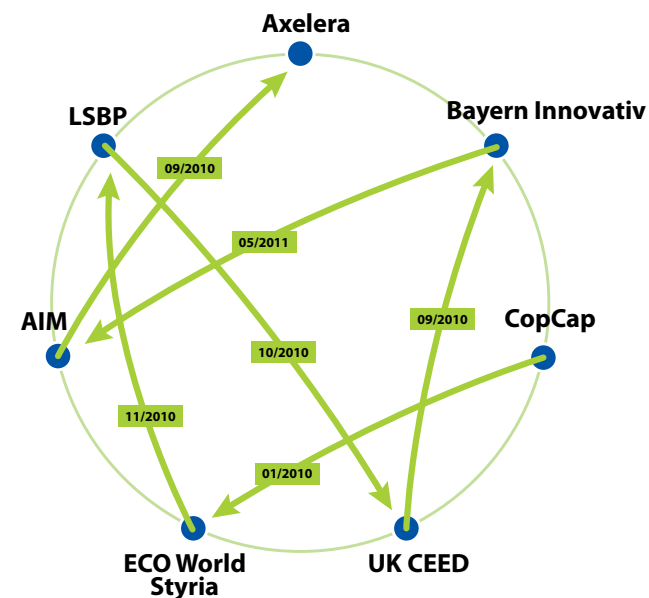
# Cluster co-operation: Staff exchanges

An important tool of EcoCluP for promoting co-operation between clusters was the staff exchange programme, designed to facilitate learning and knowledge sharing between the EcoCluP partners and to establish mutual trust. During the project, six short-term staff exchanges were organised.

The exchanges typically included a special activity, project or exhibition of interest for both clusters, allowing the visitor to become familiar with the host cluster and their region. A typical cluster staff exchange programme would take up to five days and could include:

- Meetings with companies of the host cluster,
- Attendance at a cluster event, international exhibition or matchmaking event,
- Study tours to selected companies, research installations or demonstration sites.

By getting to know the organisation, management and region of EcoCluP partners, staff exchanges enabled trans-national partnering and close collaboration between cluster organisations. Cluster managers had the chance to meet new eco-innovative organisations and to get a better understanding of the management and organisations of the partnering cluster. This two-way learning process forged strong business contacts and cross-regional opportunities for the participating clusters.



## Lahti Science and Business Park visit UK CEED, EnviroCluster

UK CEED received a representative from Lahti Science and Business Park to exchange knowledge and ideas on future business opportunities. The visit included a study trip to the European Future Energy Forum in London and an internationalisation workshop with UK CEED's members of its EnviroCluster, allowing British cleantech SMEs to find out more about the Finnish market and other Baltic Sea countries. Most of the companies were from the water sector, seeing Finland as an interesting market for water technologies. Accordingly, the SME's from UK CEED's membership were eager to find a partner or agent to help them access the Finnish market.

*"Short term staff exchanges are an ideal way to discover the cleantech landscape in different regions and learn how other clusters support their companies. My visit at ECO World Styria was a great possibility to get insights into the organisation and work approaches of the Styrian cluster and to meet cleantech companies from Styria."*

**Stephan Skare Nielsen** -  
Business Development Manager, Copenhagen Capacity



Bernhard Puttinger and Christian Köberl of ECO World Styria (Austria) with Nina Harjula from Lahti Science and Business Park (Finland) at their staff visit during the 5th Cleantech Venture Days, in Lahti (Finland), November 2010

## Danish cluster visiting Eco World Styria to learn about the Austrian cleantech sector

A three day visit by Copenhagen Capacity staff to the Styria Region of Austria included meetings and site visits to selected local companies that had an interest in the Danish cleantech industry and market. Meetings were also held with relevant Austrian organisations, including internationalisation and inward investment agencies. One of the highlights was an EcoCluP matchmaking event in Graz, which was organised by the host ECO World Styria. Numerous biomass companies gathered to discuss the future of the industry, uncover potential for co-operation, network and create contacts and share knowledge that could be taken back to the home cluster.

*"The visit was a success, allowing for exchanges of potential new business opportunities and networking. The connections we made then have been followed up and, for example, the UK companies and water networks have opportunity to collaborate with other European companies in the International Advanced Water Technologies Centre, a project with SUE Vodokanal of St. Petersburg."*

**Nina Harjula** - Development Manager,  
Lahti Science and Business Park



# Innovation tools:

## Making innovative SMEs investor-ready

**A key objective of the EcoCluP partnership was to jointly develop tools and services that support eco-innovative SMEs in their core activity: being innovative. Besides hands-on support at innovation and risk management workshops, funding innovative ideas has been identified as a key topic. For EcoCluP, one of the most successful innovation tools was a series of Masterclasses to help SMEs prepare for investors.**

All EcoCluP partners ran at least one Masterclass with their cluster companies, with the main objective of helping to identify the best routes for seeking and gaining investment, by providing an introduction to venture capital and equity.

With many practical examples and insights from the investment world, the companies got a strong introduction into different investment opportunities and venture capital. Thus, participants were shown what is required to receive investment in a business project.

Some clusters invited financial experts from their own networks to present products and services in combination with recommendations regarding investment and financing opportunities. There was also the possibility for subsequent individual coaching sessions to directly discuss project plans, which most of the participating companies made use of. Overall, the training sessions not only provided information on different types of business investment, investor-types and information on patents and shares, but participants also received excellent advice and guidance on how to present their businesses to investors.

In July 2010 a Business Plan Master Class was conducted by the Bavarian clusters, Energy Technology and Environmental Technology. Seventeen companies from Bavaria, many with confirmed projects and prepared business plans, received an introduction to venture capital and equity. Most participants also took the chance for an individual consultation regarding their project plans.

*"For an enthusiastic entrepreneur the InvestorNet MasterClass is an ideal way to prepare for meeting the expectations of a finance audience. The lecture helped me to understand how venture capital managers think."*

**Rule Niederstadt** - Ecotech



## Looking back: Success stories from the project

In September 2010, UK CEED ran an InvestorNET MasterClass in Peterborough, UK. Seventeen eco-innovative SMEs from EnviroCluster took part in the two-day workshop and were advised on different types of business investment and investor-types. Some of the SMEs took a one day surgery where they could meet the trainer on a one-to-one basis to receive support on the development of business or project plans. The event led to investment successes, including one participant who received £40,000 of funding from Shell Springboard, awarded to the most innovative business ideas on reducing carbon emissions.

Due to wide interest, some of the clusters opened workshops to non-member companies, providing a great opportunity to get new SMEs interested in the cluster and its activities. A workshop by Cluster de Energia de Pais Vasco, for example, resulted in OPTIMITIVE – a Spanish company providing information technologies for optimisation and energy saving in industrial processes – becoming a member of the cluster.

*"I now have a better understanding on how I can adjust my business plan to expectations and requirements of investors."*

**Javier García Sedano** - Founder and General Manager OPTIMITIVE, Spain



*"Very comprehensive and I came away with a clear idea of how to pitch and it has been invaluable. We have now secured our first stage funding"*

**Chris Murray** - Chief Executive CSEng Ventures, UK



*"Knowing what appeals to investors, how to convert a business concept into a strong business plan, and how to present it to investors and keep them engaged is crucial. Through the offered Masterclasses companies were trained how to overcome these difficulties and attract the right type of investors for their innovative business ideas"*

**Uffe Bundgaard-Jørgensen** - Trainer InvestorNet-Gate2Growth, Denmark

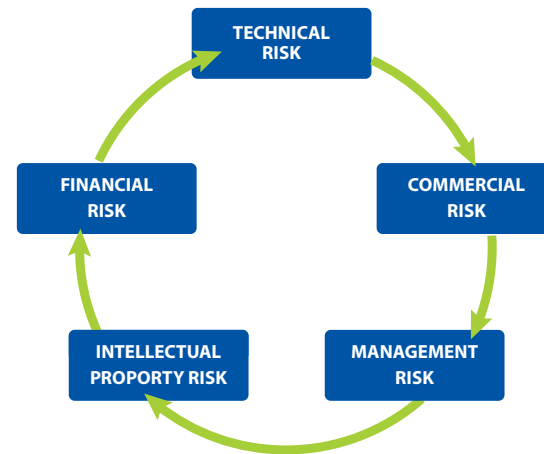


## Innovation tools: Risk assessment

Developing new products or services frequently entails taking risks, and the number of new products introduced to market mainly depends on effective innovation management rather than on the amount of money invested in R&D. Thus, improved innovation procedures and proper risk assessment may be seen as the basis for market success. This is where the innovation support services of EcoCluP come into play.

For example, the computer based assessment tools 'Innovation Management Quick Check', analyses factors that may have an impact on innovation procedures - such as the company's strategy, ideas, project management, R&D budget and market orientation. Using a scoring method, the tool produces a spider graph illustrating the company's performance. Based on that, and with the assistance of the professional cluster personnel, recommendations for improvement can be formulated together.

Another tool is the Risk Assessment Tool which calculates specific risks associated with the various dimensions in product development according to company data. By comparing the calculation with self-judged risk, uncertainties or gaps can be detected. Generally, the tool helps to make company representatives aware of critical topics in innovation and risk management.



Some of the clusters decided to run workshops on risk assessment and risk management in innovation processes for companies that would like to familiarise themselves with methods that allow for the detection, evaluation and remediation of risks. Participants here learnt how to build up or optimise a risk management system within their organisation.



## Internationalisation: Workshops

The demand for internationalisation of eco-innovative SMEs and research organisations is driven by potential customers and the business opportunities present in international markets. In fact, many European eco-innovators may find that it is easier to find customers in international markets than in their home market, which is often overcrowded and very competitive. Therefore, companies are encouraged to internationalise, but this can be extremely difficult for a growing business, due to constraints on time, skills, market intelligence and finances. Often, SMEs are in need of support to gain ground in international business.

In order to direct company interest to overseas markets and encourage them to become active in exporting products or taking part in international R&D projects, EcoCluP partners conducted internationalisation workshops. In these seminars, participants either learn about the advantages of internationalisation or get advice, contacts and information about business opportunities in selected markets.

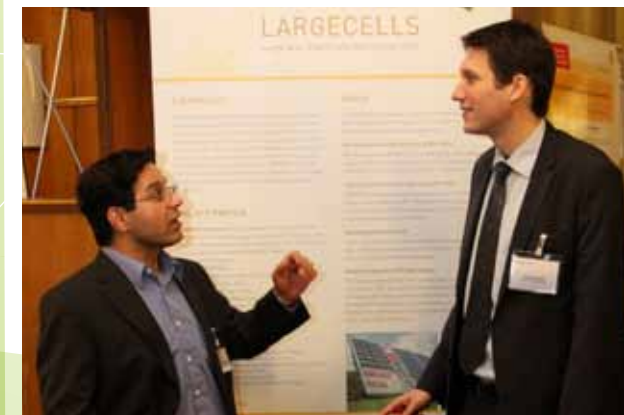
One of the workshops was run by the Cluster Energietechnik at INTERSOLAR-Europe in Munich in 2010. Around 70 participants came to learn about the photovoltaic markets in Spain, Turkey and Bulgaria from local experts on regional macro-environments, market requirements and future developments. Debate focused on the administrative and bureaucratic challenges that need to be overcome in order to make the most of the three markets.

*"Companies often need reminding that the majority of their customers are likely to be based outside of their home market and that the internationalisation of their business is an important consideration"*

Gareth Jones, Operations Manager  
UK Centre for Economic & Environmental  
Development (UK CEED), Peterborough, UK

*"The keys to success of this workshop are the long-term networking activities of Cluster Energietechnik within an international context, the outstanding contacts to industry and science and especially the cooperation with strong partners throughout Europe."*

Dr. Robert Bartl,  
Manager of the Bavarian Cluster  
Energietechnik at Bayern Innovativ GmbH







Members of NeWaTec on a business-trip to India in December 2011

### A success story from Germany

Based on an internationalisation strategy, developed with the support of EcoCluP, Umweltcluster Bayern organised internationalisation workshops on the Indian market – a key region for the cluster. The seminars took place in Nuremberg and Munich and were great successes. In total more than 50 SMEs attended in order to learn more about the chances and opportunities for eco-innovative companies in the India.

During the workshops, representatives from Indian institutions and companies active in the market delivered important information to participants, who had the chance to discuss existing or upcoming projects, initiatives and other ideas for internationalisation. A crucial element was the following networking where several companies active in the water market were able to combine efforts to expand their economic activities to India.

In August 2011, a year after the first meeting of the companies, the Indo-German Network for Water Technologies (NeWaTec) consisting of about nine Bavarian companies was founded, partly funded by the German Federal Ministry of Economics and Technology.

NeWaTec's objective is the joint development of innovative system solutions for the Indian water market along the supply chain of wastewater treatment and water management. By forming a supply chain within the network, participating companies can offer a broad service portfolio and state of the art technologies. Together with associated universities and research institutions they provide synergetic expertise in the triangle of technology, research and economics.

*"Participating in the EcoCluP project has substantially contributed to the international activities of Amsterdam Innovation Motor. The network functions as a base for building consortia on specific themes and is an important source of information of foreign markets. This information is crucial in the internationalisation support of companies within Amsterdam Green Metropole."*

**Drs. Ilse van den Breemer**, Amsterdam Innovation Motor (AIM), the Netherlands

## Internationalisation: European matchmaking events

Environmental technologies have strong export potential for many European companies though the most promising markets are often outside of Europe. The continent's excellent reputation for advanced environmental technology is a clear asset that cleantech companies can build on when entering international markets. However, this potential has, so far, been underexploited.

Internationalisation is one of the key challenges for many companies looking to stay competitive, grow or secure know-how and resources. That is why one of the objectives of EcoCluP is to support the internationalisation of its clusters and their member companies, through matchmaking and international business trips.

### Biomass Matchmaking in Graz

ECO World Styria organised the 'Biomass Business Talk 2011' in the framework of the Central European Biomass Conference. As a hub of information, the conference provided an up-to-date overview of the political, economic and technological developments in the sector of biomass energy utilisation and acted as a platform for the exchange of information, results and experiences.

The event attracted eighty participants, comprising companies, consultants, research organisations and universities from sixteen countries, including international representatives from outside of the EU. This resulted in 170 bilateral meetings and three co-operations being agreed to, with over 70 attendees saying they were considering co-operation or further contact with others.

### Green Hot Dutch Day – Matchmaking in Amsterdam

Amsterdam Innovation Motor organised a matchmaking event for EcoCluP partners at the 'Green Hot Dutch Day' of the annual Cleantech Forum in Amsterdam. In attendance were European and international cleantech corporations, investors, innovators, cluster managers, municipalities and government officials.

The morning of the matchmaking event was reserved for Dutch companies and research institutions to present their latest products and achievements. The day proved to be a success for several companies, including 'GreenHabits', 'Plugwise' and 'Tocado'. In total, nineteen matches were made, providing a solid foundation for further talks on possible co-operations.

### Water Connect – Matchmaking in Peterborough

Water Connect was a major European water and wastewater conference and matchmaking event, hosted by UK CEED and organised by EcoCluP, in conjunction with Anglian Water, British Water and the Enterprise Europe Network. Over eighty representatives of companies, research institutes, networking organisations and associations came to the event to find out about opportunities within the UK water sector, meet with experts from the European water industry and make contact with companies looking for innovative water technologies and services.

Matchmaking was supported by a half-day conference, presenting and discussing the challenges that the water industry, water utility companies and industrial end-users face in the UK.

Altogether, 67 participants from eleven European countries attended the brokerage event resulting in 92 bilateral meetings. The water matchmaking event thus provided a great opportunity for small and medium sized eco-innovative enterprises to find partners for co-operation, to find or present industrial water efficiency solutions or to simply share knowledge and provide technology transfer.



# Internationalisation: Business trips

To support SME internationalisation, clusters need to have their own internationalisation strategy and network. This not only ensures transparency among their members but also helps keep the cluster “on-track” and allows for the necessary know-how and contacts for delivering internationalisation support. These strategies and subsequent cluster activities need to refer to specific markets and technology fields in order for them to be effective.

Each cluster developed its own internationalisation strategy setting out aims relevant to the companies in their own clusters. Due to their diverse technologies and services, the clusters focus on different geographical markets and eco-innovative sectors. However, the cluster consortium could identify a number of common target markets as being of interest for the clusters and their companies such as Russia, Brazil and Canada. Hence, to enable

cluster managers to get in contact with significant stakeholders in their target markets and to build up a solid network for future activities, EcoCluP ran a series of international business trips to new markets. Host companies organised site-visits and matchmakings, whilst business and fact finding trips were also conducted to help make first contact with potential business and institutional partners, as well as learn more about the local market situation and onsite challenges.

So far, three business trips to Russia, Turkey and Brazil have been successfully conducted, bringing clusters and European eco-innovative SME's to potential grow markets outside Europe. A fourth trip in October 2012 will go to North America, visiting the cleantech scene in Montreal, Canada and Burlington, US.

## EcoCluP Business Trips and fact finding missions to environmental technology markets outside Europe



## Looking back: Examples of successful business trips

EcoCluP business trips created opportunities in new markets, connections with suppliers and deeper dialogue between SMEs.

During the Cleantech Expo seminar in Lahti, VCS Denmark – a Danish water and wastewater company – established first contact with representatives from Sue Vodokanal St. Petersburg – a Russian waste water plant operator.

Based on these contacts, VCS joined the EcoCluP Business Trip to St. Petersburg in 2012 where business talks were continued. Developing Fyn Ltd. – a Danish business and tourism organisation – also participated in the trip and was asked to support a trip to Denmark by Sue Vodokanal - a visit that resulted in a commercial contract.

The Russian delegation also met LM pumps – a manufacturer of large energy efficient pumps with a focus on the Russian market.

In addition, LM Pumps was interested in innovation projects that would focus on energy efficient water treatment – an idea that fitted with an innovation event by Developing Fyn, in October 2012.

## EcoCluP fact finding mission to Brazil

In June 2012, SP Technical Research Institute of Sweden organised an EcoCluP fact finding trip to São Paulo, Brazil with interested companies, cluster managers, research institutes and public organisations to discover the Brazilian market in integrated solid waste management.

After twenty years of legislative debate, Brazil passed its first national waste management law in 2010, a move that will affect the practices of nearly every business operating in the nation. The fact finding mission involved a workshop, seminar and study trip that enabled discussion and exchange of experience on how waste management works in Brazil, what challenges are to be met and how the legislation will affect companies operating in Brazil in 2012 and beyond. Twelve cluster managers from six European countries participated in the fact finding mission.

*At Developing Fyn Ltd. we appreciate the excellent international co-operation within the EcoCluP network, and believe our experiences illustrates how important it is to have a diversified and flexible ‘toolbox’ when assisting SMEs in both export and innovation.*

## Developing Fyn Ltd

Member of Lean Energy Cluster, Odense, Denmark



*The fact finding mission was a great opportunity to exchange experience and to learn more about the Brazilian waste market and discuss future projects. It is of great importance to exchange experience and knowledge between Brazil and Europe to understand each other's markets and to learn from each other.*

## Anna Sager

SP Technical Research Institute of Sweden





## AIM Amsterdam Innovation Motor

### Amsterdam Innovation Motor (AIM)

The Amsterdam Innovation Motor (AIM) promotes innovation, co-operation and new business in the Amsterdam region between higher education institutions, commerce, industry, government and social organisations.

Within AIM, the Amsterdam Green Metropole cluster focuses on energy, waste, water, buildings, mobility, creative industry, information technology and materials, aiming to create new markets by matching large and small businesses, identifying new opportunities and supporting cleantech start-ups. The cluster is open to municipalities, as well as companies and organisations.

[www.aimsterdam.nl](http://www.aimsterdam.nl)



### AXELERA

AXELERA is a cluster for the chemical and environmental industry. Founded in 2005, they now have 240 members, made up of SMEs, large companies, R&D centres, economic development agencies and industry associations

The cluster works with chemical and environmental industries to support industry activities through the entire value chain, from basic research to industrial applications, with a focus on five strategic research areas: green chemistry and environmental engineering, conservation, recycling, plant-based chemistry and next-generation production plants.

[www.axelera.org](http://www.axelera.org)



### Bayern Innovativ - Cluster Energietechnik

The energy technology cluster managed by Bayern Innovativ GmbH works to increase co-operation between companies and research institutions in the areas of renewable energies, energy efficiency in power generation and consumption, energy storage systems and transmission and distribution networks.

The cluster, which has more than 900 members - provides services such as co-operation fora, cluster meetings with companies and institutes, the provision of studies on current problems and it suggests and initiates joint projects by involving supra-regional partners.

[www.cluster-energietechnik.de](http://www.cluster-energietechnik.de)

### Cluster de Energia de Pais Vasco (CEPV)

The purpose of the CEPV is to perform promotion and research activities to improve competitiveness among companies operating in the Basque Country. It was created in 1996 by the Basque Government Industry Department and fifteen major companies to promote co-operation for internationalisation, technology, commerce and finance in areas of common interest, including smart grids, transport and distribution, and renewable energies.

CEPV now has 94 associated companies, with target markets of the EU-27, United States, Latin America, China and India.

[www.clusterenergia.com](http://www.clusterenergia.com)



### Copenhagen Capacity – Copenhagen Cleantech Cluster

Copenhagen Cleantech Cluster (CCC) was initiated by Copenhagen Capacity and launched by nine partners in 2010. With 610 cleantech companies CCC is one of the largest global cleantech clusters, with a combined turnover of €30 billion in 2011.

CCC plays a vital role in Copenhagen's aim to become a carbon-neutral city by 2050 by supporting existing companies, assisting new companies and attracting foreign companies to the region. Key sectors are energy efficiency, renewable energy, water, wastewater, waste and recycling.

At the international level, CCC is working with other cleantech clusters from the EU-27, Norway, Singapore and the US. Other important markets include China, India, Brazil, and Russia.

[www.cphcleantech.com](http://www.cphcleantech.com)



### ECO World Styria

ECO World Styria - the cluster of the Green Tech Valley - supports renewables and cleantech companies in their strategic goals, focusing on innovation, know-how and new markets. Members include more than 170 cleantech companies, manufacturers, service providers and scientific organisations

With innovative cluster services and double-digit growth rates in the industry, the Styrian green-tech cluster and its strategic partners secure sustainable growth for the cluster clients through the entire service and product value chain in the areas of biomass, solar energy, material flow management, waste and water.

[www.eco.at](http://www.eco.at)





### Environmental Industry Cluster (ENIN)

The ENIN Environmental Industry Cluster was founded in 2007 in North Hungary. Most of its members are SMEs with some large companies, research institutes and NGOs, all working in the fields of waste management, environmental services and heat energy production.

A key activity of ENIN is to introduce, distribute and sell its leading technology in the production of methanol from waste. Current R&D and innovation focuses are: biomethanol production, liquid CO<sub>2</sub> and green electricity. The cluster's joint vision is to create a central and eastern European environmental industry model region by 2015, on the basis of a comprehensive regional co-operation effort.

[www.enin.hu](http://www.enin.hu)



### EnviroCluster Peterborough (UK CEED)

EnviroCluster Peterborough is a growing network of 350 environmental businesses, entrepreneurs, investors, academic partners and researchers, developing cleantech solutions, with strengths in energy generation and efficiency, water supply, wastewater treatment, contaminated land remediation, biodiversity management, waste management, recycling and consultancy.

EnviroCluster is supporting cleantech growth in the city by providing innovation and incubation support, promoting skill development, inward investment, sharing of knowledge and opportunities and internationalisation with the aim of creating a globally-recognised centre of excellence for cleantech and eco-innovation. EnviroCluster is managed by the UK Centre for Economic & Environmental Development (UK CEED).

[www.envirocluster.co.uk](http://www.envirocluster.co.uk)

### Developing Fyn – Lean Energy Cluster

Udvikling Fyn A/S (Developing Fyn Municipal Ltd) was founded in January 2012 and works to support all areas of industry relating to environmental commerce and tourism, such as sustainable construction, corporate social responsibility, destination management, energy efficiency, food production information technology, mechatronics and sports.

By working with the Lean Energy Cluster, a regional cluster development initiative, Udvikling Fyn strengthens its work on energy efficiency. Lean Energy Cluster focuses on intelligent energy systems, energy efficiency and green energy production.

[www.udviklingfyn.dk](http://www.udviklingfyn.dk)



### Lahti Science and Business Park - Finnish Cleantech Cluster

Lahti is Finland's leading region for clean technology business, research and education. Lahti Science and Business Park is the biggest environmental technology centre in the Nordic countries, supporting companies in the Finnish Cleantech Cluster to develop their Cleantech operations, networking and international business.

The cluster offer companies office space and the chance to co-operate with universities and research organisations. At the moment Lahti Science and Business Park is focused on key areas of management of waste and water, as well as efficiency in material and energy use.

[www.cleantechcluster.fi](http://www.cleantechcluster.fi)



### Oekoenergie-Cluster (OEC)

Oekoenergie-Cluster (OEC) is a network of green energy businesses in Upper Austria managed by O.Ö. Energiesparverband, with the objective of supporting renewable energy and energy efficiency businesses in innovation and competitiveness. Cluster partners are companies and organisations which produce renewable energy and energy efficiency technologies, or act as suppliers on different production and service levels.

The OEC also contributes to the region's excellent reputation in renewable and efficient energy, with 32% of primary energy consumption coming from renewable sources. In 2006, OEC was awarded the European Cluster Award by the European Commission.

[www.esv.or.at](http://www.esv.or.at)







### SP Technical Research Institute of Sweden

SP Technical Research Institute of Sweden is a leading international research institute, working to create value, deliver high-quality input in all parts of the innovation chain, and developing the competitiveness and sustainability of industry. Their mission is to provide world class expertise for innovation and create added value for the corporate and sustainability sectors.

SP consists of nine technical departments and six subsidiary companies covering a variety of topics, including chemistry and materials, electronics, energy and fire technologies, structural and solid mechanics and wood technology.

[www.sp.se](http://www.sp.se)



### Umweltcluster Bayern

Umweltcluster Bayern is a network of Bavarian companies, researchers and local municipalities active in the field of environmental technology. Founded in 2006, the cluster bundles competences in the areas of waste treatment, management and recycling, drinking water and waste water treatment, alternative energy generation, especially energy from waste and biomass, air pollution control and resource efficiency.

The cluster includes companies, researchers, service providers and planners, turning new technological findings into applicable and competitive technology. Umweltcluster Bayern is supporting environmental technology companies in Bavaria through networking and information exchange and with the initiation and support of projects and co-operation on regional, national or international level.

[www.umweltcluster.net](http://www.umweltcluster.net)

## Enlarging the network

The objective of the strategic partnership with other cluster organisations through the signature of Memorandum of Understandings (MoU) is to establish co-operation with a view to strengthening business, research and technological partnerships in the areas of environment, renewable energy and climate protection. It particularly aims to facilitate the international cooperation of the cluster

organisations and their members to create business opportunities and green jobs and to enhance smart, sustainable growth. With this purpose in mind, EcoCluP initiated an outreach with other cluster organisations in Europe and beyond and signed 19 Memorandum of Understandings. Listed below are all the MoU partners of EcoCluP.

#### SolarInput

Germany, Erfurt

[www.solarinput.de](http://www.solarinput.de)

#### Cluster Leistungselektronik Nürnberg

Germany, Nürnberg

[www.clusterle.de](http://www.clusterle.de)

#### Ecotech

Québec (Canada)

[www.ecotechquebec.com](http://www.ecotechquebec.com)

#### AVAESEN

Valencian region

[www.avaesen.es](http://www.avaesen.es)

#### Polight

Piemonte

[www.polight.piemonte.it](http://www.polight.piemonte.it)

#### Plattform Umwelttechnik e.V.

Baden Württemberg

[www.pu-bw.de](http://www.pu-bw.de)

#### Netzwerk Umwelttechnologie

Lake Constance area

(Vierländerregion Bodensee)

[www.umweltnetzwerk.net](http://www.umweltnetzwerk.net)

#### cd2e

Northern France (Nord-Pas de Calais)

[www.cd2e.com](http://www.cd2e.com)

#### Ecoconnect

United Kingdom

[www.eco-connect.org](http://www.eco-connect.org)

#### CSRNW

Northwest region of Russia

<http://eng.csr-nw.ru>

#### The Green Way

Dublin region

[www.thegreenway.ie](http://www.thegreenway.ie)

#### CleanTech Business Club

Rotterdam area, The Netherlands

[www.cleantechbusinessclub.com](http://www.cleantechbusinessclub.com)

#### Russian Green Building Council

Moscow area, Russia

[www.rugbc.org](http://www.rugbc.org)

#### Éa éco-entreprises

[www.ea-ecoentreprises.com](http://www.ea-ecoentreprises.com)

#### ENERGYIN

Portugal

[www.energyin.pt](http://www.energyin.pt)

#### Green Development Forum

Russia

#### GAL MERIDAUNIA

Puglia region, Italy

[www.meridaunia.it](http://www.meridaunia.it)

#### Union of Black Sea Local Authorities, Black Sea Energy Cluster

Bulgaria

[www.ubbsla.org](http://www.ubbsla.org)

# EcoCluP exit strategy

**The EcoCluP programme officially draws to a close in October 2012 when European Commission funding for the project comes to an end. However, the consortium agreed that the most successful and useful parts of the project for Cluster Managers should be taken forward as part of the project's exit strategy.**

The key achievements of the project have been:

- Improvement of closer working relationships between Cluster Managers;
- Increased collaboration between clusters and cluster businesses;
- The introduction of tools to assist with the growth and development of cluster businesses;
- An increase in pan-European networking of eco-innovative SMEs.

Several options for an exit strategy were discussed by the consortium, including the formation of a spin-off company which could have European status and deliver on the skills developed in EcoCluP, or transferring EcoCluP know-how to the European Climate Change Programme. Also discussed was the possibility of forming a permanent partnership which could gain support from the European Cluster Collaboration Platform.

It was decided that the best way to continue co-operation was through a 'living network' of European Cluster Managers in eco-innovation.

To achieve this, the consortium agreed to a number of points as the backbone of the exit strategy:

- The focus of the exit strategy will be on Cluster Managers;
- Annual Cluster Manager Days will be held so Cluster Managers can meet, exchange experiences, discuss ongoing projects, best practices, potential collaborations, funding possibilities and future plans for the partnership;
- Bi-annual Skype calls are to be held with consortium partners;
- An EcoCluP website will promote the outcomes of the project, offer tools for download and recruit new Cluster Managers to the partnership;
- There is to be continued hosting of an internal partner platform to host documents and share ideas and opportunities;
- EcoCluP's Memoranda of Understanding are to be renewed and attempts to find new partners will continue.

The most difficult challenge of the exit strategy was to get commitment to the Cluster Manager Days without European Commission funding. It was therefore agreed that responsibility for hosting should rotate amongst the consortium to share the work load or to subcontract this work to a third party.

An offer to host the 4<sup>th</sup> Cluster Manager Day (the first outside of the funded project) has been proposed by Ronan Furlong, Cluster Manager at The Green Way in Dublin, Ireland and is set to take place in the coming year.

[www.ecoclup.eu](http://www.ecoclup.eu)



