# Report on Project Impact


# GreenXpo

## "Accelerating progress towards the green economy"

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|---|---|---|---|
| **Contract number** | **603696** | **Instrument** | **Specific Support Action** |
| **Start date** | **2013-06-01** | **Duration** | **24 months** |

| GreenXpo deliverable fact sheet | |
|---|---|
| Project start date: | 01 June 2013 |
| Project duration: | 24 months |
| Project web-site: | http://www.innovationseeds.eu/ |
| Document | publishable summary, results section |
| Deliverable number: | |
| Deliverable title: | Report on Project Results |
| Due date of deliverable: | 31 July 2015 |
| Actual submission date: | 31 July 2015 |
| Editors: | Karen Böhme (JUELICH) |
| Authors: | Karen Böhme (JUELICH) |
| Reviewers: | |
| Participating beneficiaries: | All |
| Work Package no.: | WP 1 |
| Work Package title: | Management and Coordination |
| Work Package leader: | JUELICH |
| Work Package participants: | All |
| Estimated person-months for deliverable: | |
| Dissemination Level: | PU |
| CO (Confidential, only for members of the consortium including the Commission Services) | |
| PU (Public) | |
| PP (Restricted to other programme participants, (including the Commission Services) | |
| RE (Restricted to a group specified by the consortium including the Commission Services) | |
| Draft/Final: | Final |
| No of pages (including cover): | 29 |
| Keywords: | dissemination, publishable summary, results |

# Content

# greenXpo final reporting: RESULTS, MAY 2015

The project could reach all envisaged aims. All deliverables were finished in time and all planned milestones were reached successfully.

In order to facilitate knowledge transfer, uptake and exploitation of research data, as well as good policy measures related to eco-innovation, the particular methodology of greenXpo was developed as a combination of the following items:

- For the first time, greenXpo gathered in a holistic, well and systematically structured way eco-innovation knowledge from different areas comprising technologies, services, business models, processes, and policies. This offers tailor-made access to eco-innovation best practice to each of the different stakeholder groups, and this user-friendly greenXpo virtual library allows intuitive linking and quick navigation across all areas of eco-innovation.
- The greenXpo experts used one single and common methodology to package each piece of eco-innovation knowledge, highlighting potential functionalities and rating the readiness level for uptake as market successes and policy measures. This unique functional analysis for each result allows for a direct understanding how new eco-innovative knowledge might be used by a wide range of potential end-users. Derived from the TRL Scale for technologies, the GML Scale (Generic Maturity Level) was developed and applied for all non-technological best practice cases, including policies and networks supporting eco-innovation.
- The online approach of greenXpo was complemented with real-life knowledge-sharing events addressing specific industries and target audiences. After a sound analysis of promising industry sectors, these events facilitated the understanding of the eco-innovation potential which arises from a value chain approach.
- The central web portal is the interface with social networking tools to involve a wide audience of eco-innovation stakeholders and foster the development of a broad-based international eco-innovation community.

The following chapters describe results and insights gained from the greenXpo project in detail. For the sake of a clearer structure the description follows the structure of the work packages.

**WP1 (Management and Coordination)** provided the administrative frame for the project. All partners were involved. The WP guaranteed the quality of the work, helped to adapt it if necessary and guided the partners in their way to successfully fulfil the tasks of the project and to reach all its ambitious goals. JUELICH acted as overall co-ordinator of the greenXpo project, the project partners each being responsible for the delivery of information in their field of expertise. The co-ordinator was supported by the Executive Board of the project as well as by the WP leaders. In order to co-ordinate their work and to keep to the structure of the project, appropriate measures were taken: The knowledge management plan was updated regularly, a common depository for documents and shared working space was created as well as monthly joint management calls established in order to safe resources and to work efficiently.

During the project lifetime, six meetings were organised and held in addition to the activities in the other WPs: The project Kick-off meeting in month 1, the 6, 12, and 18 months progress meetings as well as the Final Conference. In order to safe resources and to enhance efficiency, the meetings were

held back to back with other events. All partners presented progress per WP, decisions were taken on the base of sound and comprehensive discussion as agreements, and action plans were provided and monitored by JUELICH.

The periodic reporting was delivered in a pyramidal process: Task leaders reported to WP leaders who in turn reported to the coordinator. All Consortium partners reported their activities, justifying their cost claims, directly to the coordinator. Financial claims were made by all partners directly via the ECAS Portal of the Research Participant Portal. In order to steer the project efficiently, internal reports were part of the Consortium agreement, allowing for a 6months overview on project activities. The coordinator thoroughly reviewed the data provided by the other beneficiaries. Where necessary, corrective actions were taken, and the coordinator reported the comprehensive activity and financial report to the client (milestones 1 and 2). In case that work had to be adapted compared to the original plan, the coordinator proposed the project officer necessary steps. It shall be noted that the cooperation between project officer and coordinator was very efficient, open-minded, friendly and always with the aim of bringing the project forward. This collaborative approach was highly appreciated by the Consortium.

Based on the project results and soundly discussed during meetings as well as during the monthly joint calls the main outcome of WP1 was successfully developed and achieved: Led by G!E (Technofi) a business plan for the sustainable future maintenance and exploitation of the greenXpo platform at www.eu was developed and agreed.

In **WP2 (web environment tool)** is the work package developing the platform in greenXpo. The work was led by youris.com, and Technofi was in charge of defining the functional specifications of the greenXpo portal. All partners were involved.

The objectives consisted in:

- Establishing the functional specifications of the greenXpo portal (i.e. architecture of the website) as well as establishing the functional specifications for the database format. These tasks were prepared and presented to the Consortium. Discussion results and feedback were included into the further development and implementation. The WP leaders provided material to guide the Consortium during the work at the functionally features articles, and the partners helped growing it by delivering even more articles than planned originally
- To release a new version of the INNOVATIONSEEDS.eu portal for greenXpo, exploiting the knowledge integration potential of the greenXpo consortium. Therefore the characteristics of the INNOVATIONSEEDS portal were specified in accordance with the findings of greenXpo's work. The first version of the portal went online in month 14 as it is shown in figure 1 (cp. results_May_2015.pdf, milestone 3). The collection of eco-innovation cases in four key domains was finalised. Based on intense feedback and fed by the ongoing work in the analytical WPs the relaunch of the portal was prepared and implemented in month 18 (milestone 4). This completion and further improvement of the knowledge integration allowed for more services and information in order to provide a better experience for users.


**Figure 1: screenshot of the new portal home page**[1]

- To develop a one-system approach that caters for various target groups. The virtual library with its unique navigation approach allows for tailor-made access for each target group. With the functional featuring of best practice cases and the cross-linking search functionality a comprising, but simple interface is provided. Best practice cases from all areas of eco-innovation are framed by news, events, and social media activity. Registered users additionally get access to in-depth analysis and material on financing eco-innovation. An overview on the features is given in figure 2 (cp. results_May_2015.pdf).


**Figure 2: screenshot of the virtual libraries**[2]

[1] Deliverable2 3_2014_11_21_final.pdf, p.2
[2] Deliverable2 3_2014_11_21_final.pdf, p.3

The Community building activity began with the start of the project and continued throughout its whole duration, through different activities:

A monthly **newsletter** has been designed, sent out (first release November 2014) and advertised through the project's social media in order to encourage new registrations. Recipients were registered users of the portal (*337 in May 2015*), registered users of the Asian version of the portal (*1,427 in May 2015*) and additional databases from the partners (*823 overall*). The newsletter content was structured as follows:

- An editorial that can announce news from the project, participation to events and similar "update" news.
- A selection of three featured articles, from the project's libraries
- A selection of upcoming events from our section on the website.
- The release of the NL is monthly, in order to share as many news as possible and to keep the interest of our readers up.


**Figure 3: screenshot of the newsletter**[3]

Partners delivered content for newsletter and event section of the portal and marketed it during the off-line events. Figure 3 shows an example of the newsletter (cp. results_May_2015.pdf).

The **LinkedIn group**, "Green Knowledge for Industry and Politics", was animated as it was during the previous reporting period, with a frequency of about two stories per week and contents like:

- news from the project
- WP3 articles promotion
- eco-innovation news

The consortium partners actively fed new information into the group on their own or via the editing of YOURIS.

The **Twitter account animation** was as well continued with particular focus on the following contents:

- news from the project
- events live coverage
- WP3 articles promotion
- eco-innovation news

In order to encourage as well as enable greenXpo partners to actively make use of social media disseminating greenXpo results, YOURIS conducted a webinar on the efficient use of Twitter.

The live coverage activity was in particular applied to WP6 dialogue events and will be reported in more detail there: the hashtag **#greenXpo** was used to ensure the proper contextualisation of the tweets by the audience and to allow the tracking of the results. The final event of greenXpo as well was covered live on the project's Twitter account in order to outreach a significant number of people and maximise the impacts of the conference.

[3] Deliverable2 3_2014_11_21_final.pdf, p.3

The greenXpo community has reached the objectives by showing an overall growth of more than 23% from the end of the first reporting period until the end of the project and a considerably enlargement to the values given in table 1 (cp. results_May_2015.pdf).

**Table 1: Development of user numbers in the different media used by greenXpo**

| Typology of users | June 2013 | June 2014 | November 2014 | May 2015 |
|---|---|---|---|---|
| **Twitter followers** | 119 | 224 | 253 | 300 |
| **LinkedIn members** | 161 | 267 | 300 | 334 |
| **Website users** | 271 | 300 | 304 | 337 |
| **Asian portal users** | - | 1,261 | 1,309 | 1,427 |
| **Total** | **551** | **2,052** | **2,166** | **2,398** |

To extend the outreach to the global eco-innovation community the Taiwanese partner NCKU launched the greenXpo Asian portal (www.greenxpo.tw) in April 2014. It comprises a newsfeeds, abstracts of the European eco-innovation cases in Chinese, Asian eco-innovation cases, eco-innovation-related activities, and other latest information. The content is renewed on a weekly basis, and in order to allow a broader user base the portal got a second version in simple Chinese characters.

At the heart of greenXpo was **WP3 (Identifying and featuring cases of eco-innovation )**, the presentation of eco-innovation best practice on the platform, thus collecting cases and by offering them facilitating their uptake by the different stakeholder groups as well as accelerating its use. The WP was led by JUELICH, but the specific areas of eco-innovation were promoted by G!E and Technofi, SP, CSCP and Technopolis. NCKU provided 10 cases as well, and all partners were involved in the quality insuring procedure. WP3 focussed on sharing online relevant eco-innovation knowledge in an attractive and user-friendly manner, highlighting how the knowledge can be used by the audience. Four types of knowledge related to eco-innovation have been promoted:

- Technological eco-innovations,
- Non-technological eco-innovations,
- Policies in support of eco-innovations (including good practices), and
- Networks in support of eco-innovations.

greenXpo used for this work two assets built during the ECOPRO project:

- The web portal which already embedded a virtual library of technological R&D results related to publicly funded eco-innovations, and a related web community interacting via social networks;

- The **Knowledge3** [4] methodology which aims at describing knowledge and at efficiently sharing it online, the readers being able to easily grasp the use they can make of the proposed knowledge.

The diagram in 4 pictures the overall WP3 process and main interactions with other work packages (cp. results_May_2015.pdf).

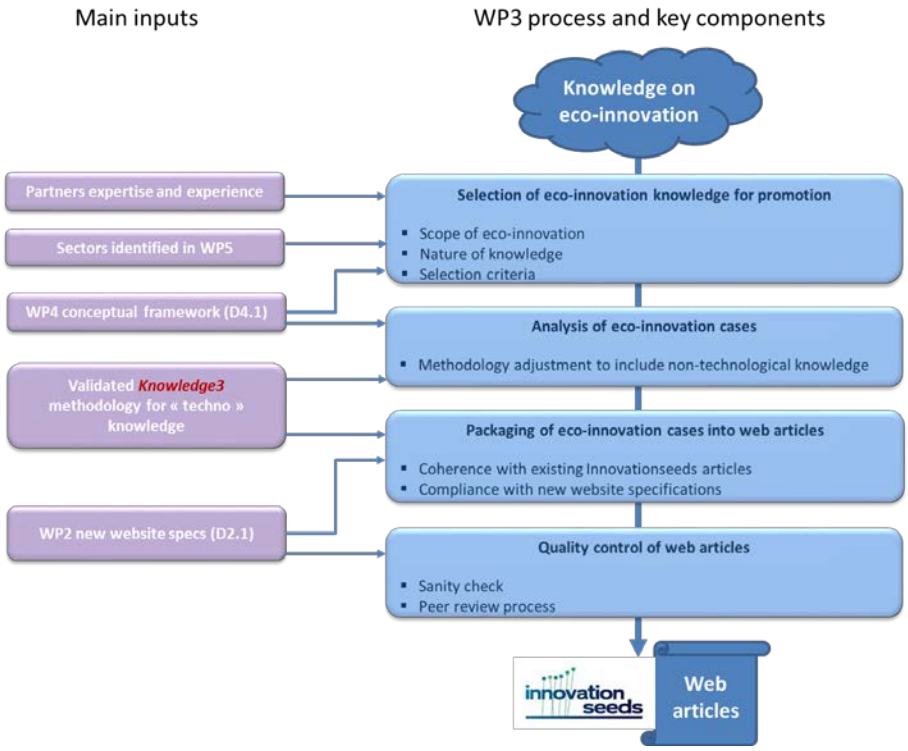


**Figure 4: process description in WP3**[5]

Regarding the Selection of eco-innovation knowledge, the scope of *Eco-innovation* adopted in greenXpo follows the Eco-innovation Observatory's definition.[6] A set of selection criteria was defined collectively, including the aspects of replication/scaling up/ transferability of the innovation or good practice, actual reduction of environmental impacts, and balanced coverage between geographical zones, types of policy measures, types of stakeholders involved in coherence with greenXpo target audiences.

The results of the selection process was a list of more than 200 eco-innovation cases, and counting (as partners decided to further contribute new cases if appropriate; milestone 5). The collected eco-innovations include:

- 49 technological eco-innovations: they include 22 technological results from recently completed FP7 projects (environment, energy, ICT, NMP), plus national cases of eco-innovations at pre- and post- market introduction stages. With regard to the FP7 project results, the main fields of application are energy efficiency in building (energy management

[4] *The **Knowledge3** methodology is proprietary of TECHNOFI*
[5] Deliverable3 2_2014_12_19, p.4
[6] see www.eco-innovation.eu

systems, insulation material), waste management (municipal waste treatment, recyclability of construction wastes), resource efficiency in industry (optimisation of processes, monitoring and standards), renewable energy use (geothermal, photovoltaic, wind, concentrated solar power), transports (electric vehicles), and water treatment.

- 34 Non-technological eco-innovations (social, managerial, business model innovations, etc.): they include social and institutional case studies, organisational case studies, and marketing case studies. Cases address concepts such as circular and functional economy, social business, behavioural change towards sustainable consumption and lifestyle, performance-based and community-based business models, corporate responsibility, local procurement, or knowledge and information sharing.
- 71 cases of policies in support of eco-innovations: they include good practices at local, national and EU level, demand side and supply side measure. They encompass measures related to R&D financing, support to networking (e.g. clusters, new recycling markets), development of standards and benchmarking tools such as sustainability indicators and rating systems, financial support to spread good practices related to energy, waste or recyclability, integrated urban management, or new regulations and fiscal schemes. Specific emphasis is put on good practices in green public procurement, a domain that shows a high potential both in terms of spreading out innovations and reducing environmental impacts.
- 43 cases of networks in support of eco-innovations: driven by different types of stakeholders in industry, civil society, local authorities, the selected networks cover different geographical areas from very local to regional, national or EU wide (plus some examples outside EU). These networks aim at different functions, from industry promotion to competence sharing, awareness raising, or increased local collaboration/integration.
- Additionally, 10 cases were added by NCKU, covering Asian eco-innovation best practice cases from different sectors.

The selected eco-innovation cases were analysed using the ***Knowledge3*** methodology, which aims at sharing online a corpus of knowledge among a community of practice in such a way that community members can easily grasp the use they could make of this knowledge. The innovative approach of the methodology is to propose, in complement of the common search functionalities usually offered by online knowledge databases, a knowledge description and search functionalities that are made:

- according to a set of functions: the knowledge is described in terms of functions (e.g. planning, funding, etc.) and mapped according to the links between these functions,
- according to a maturity assessment: to each knowledge content is allocated a level of maturity according to predefined scales, thus helping the reader evaluate the “readiness for use” of the knowledge.

The ***Knowledge3*** methodology was initially developed to feature technological knowledge, therefore the maturity assessment was based on the standard Technology Readiness Level (TRL) scale. This scale is originally organised in 9 levels, but for the purpose of the description of eco-innovation best practice it was extended to a “beyond 9 level” in order be able to describe cases that analyse the actual commercialisation phase of eco-innovation products/services. This level is called “beyond 9” and corresponds to “market introduction”.

In complement to the TRL scale, a more general scale was designed to allow providing some maturity assessment for non-technological cases (policies, business models, networks, etc.). The **Generic Maturity Level Scale (GML)** was therefore developed so as to

- cover the broad range of mechanisms or instruments, the scale is kept as generic as possible.
- keep a maximal homogeneity with the TRL scale, the number of levels and terminology used for the Generic Maturity Levels scale is as close as possible to the TRL scale.

A key notion used for the highest levels of the scale is the term “deployment”, which includes the extension of concept to other geographical zones, other activity sectors, other types of stakeholders, other topics of research, etc. This notion covers the ideas of “scaling up”, “replication” or “transfer” that are used with evolving definitions in the policy research fields or in business economics.

In line with the website specifications designed in WP2 guidelines were provided to turn the eco-innovation cases into attractive web articles including hyperlinks that allow intuitive search and browsing among the database of articles. Quality control of the produced articles was one important process step and followed a strict procedure. In order to guarantee the high quality and relevance of the cases promoted in the library, and to make sure that their format is highly relevant for an internet usage, a full quality control system was established between the consortium partners.

The selection of eco-innovation cases was performed following a five-stage approach:

1. An individual selection of cases performed by each involved partner,
2. A peer review where each partner reviewed the cases selected by another in order to check the compliance with the defined selection criteria,
3. An update of the selection of cases by each partner according to the recommendations of the peer review.

Also in the writing process itself, quality control steps were introduced:

4. A sanity check was performed on the format of articles, to ensure that they comply with a web usage and fully use the potential of tags and filtering systems proposed by website functionalities.
5. An English proof reading was implemented to guarantee the quality of language in the final articles.

The summary of the entity of featured eco-innovation cases was presented as a deliverable by the end of 2014. In order to make better use of the gathered knowledge the greenXpo Consortium decided to make a step beyond the basic requirement and to deliver an in-depth analysis of the cases covered by the articles on the platform. The resulting document presents an exhaustive overview on geographical coverage, type of innovation, main sector of deployment and similar points of interest.

**WP4 (Analysis of processes resulting in innovation)**, led by Technopolis and supported by other partners) was created to extend the analysis on selected good practice eco-innovation cases collected in the WP3. WP3 and WP4 were strongly connected since WP4 was overall based on the successful outputs of WP3, and given that they share the same definitions of the different types of eco-innovation. Particular aim of WP4 was to identify most interesting technological, non-technological, policy and network cases and pursue deeper analysis. The purpose was to draw findings from individual cases with a focus on drivers and barriers to eco-innovation

encountered by companies/SMEs and policy makers. The analysis did result in 13 stand-alone case studies and the background of the practical guidance notes addressed to policy makers.

Work package 4 addressed the following individual objectives:

- To provide comparative analysis and assess success factors and barriers to eco-innovation
- To provide policy guidance to support measures for eco-innovation uptake
- To foster exchange of relevant experiences and knowledge

The consortium was being encouraged to select the case studies with the objectives of WP5 in mind. That is, to preferably selecting cases that are in accordance with the five sectors that were being chosen as traditional industry sectors with great potential "to green the value chain". Figure 5 illustrates the variety of changes which support or lead to eco-innovation in its various aspects (cp. results_May_2015.pdf).

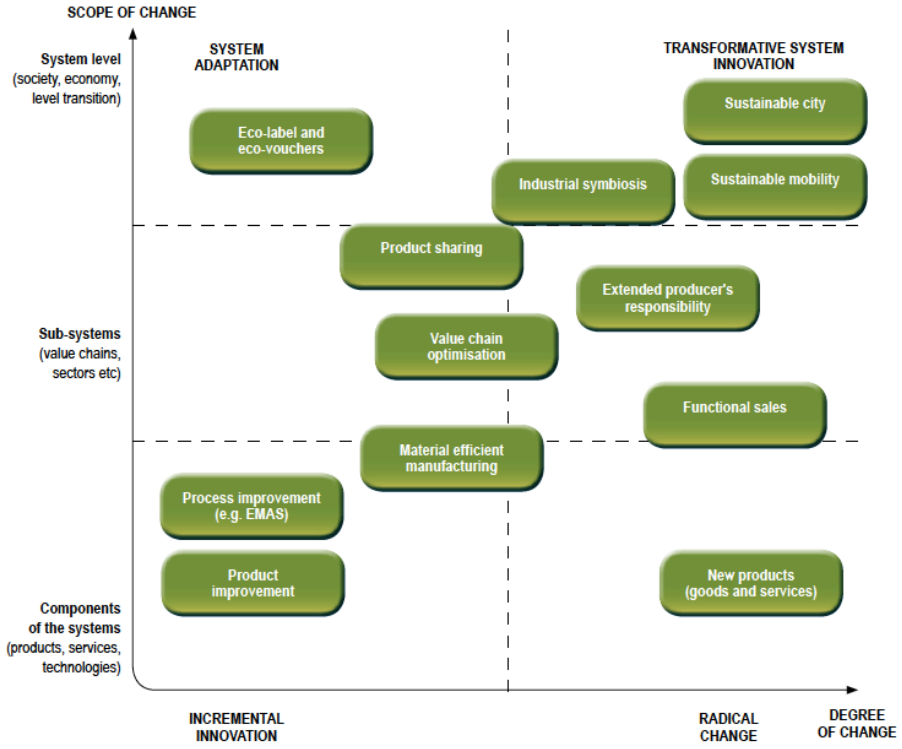


**Figure 5: From product improvement to transformative system innovation**[7]

Originally, 12 case studies were planned, three cases of technological eco-innovation, three cases of non-technological eco-innovation, three cases of policy measures supporting eco-innovation, three cases of networks promoting eco-innovation. While working on them another interesting case was identified. The management of resources allowed adding this additional 13th case. All the cases were chosen since they are supposed to feature exceptional examples of eco-innovation, and to be used by all target groups: eco-innovators, eco-innovation intermediaries, policy makers, multipliers, and other potentially interested users.

[7] greenXpo_Deliverable_4_1_Concept case template_10_10_2013, p.7

Base for the work was the sound theoretical background research paper D 4.1 which included a template for the case studies itself. It introduced as well a quality procedure similar to the process in WP3, the article writing: All partners were encouraged to identify appropriate cases. This initial list underwent a peer-reviewing in order to break it down to the best ones, which then were the starting point for the analysis itself.

For each of the eco-innovation area concerned a particular template was developed. This allowed for focussing on the similarities of all cases without neglecting the particularities when looking at so different aspects like networks or technologies supporting eco-innovation. The main structure was the same for all case studies: a one page fact sheet followed by the in-depth analysis, which was guided by chapters headed by lead questions. The case studies were conducted based on desk research and a structured interview with a person in charge for the respective case. After producing the study, the interviewee reviewed the paper and authorized its publication in the greenXpo frame. For finalisation, the case study went to an English proof-reading step before being transferred to the design adaptation. Finally, the case studies got an introductory chapter and went public on the section reserved for registered users on the INNOVATIONSEEDS portal.

The following paragraph shows as an example the template for policy measures supporting eco-innovation.

Lead questions:

- What is this case about?
- Which challenges does it address?
- Which eco-innovations does it promote?
- Important factors to be aware of (barrier and drivers)

Summary table:

- (title of the measure)
- Country (name of the country or other geographical coverage)
- Owner (full name of the organisation)
- Budget (in € or in original currency and in €; if relevant indicate private sector investment leveraged)
- Period (from XXXX to XXXX)
- Thematic focus (societal challenge the measure responds to)
- Objectives (main objectives in bullet points)
- Activities (type of support / target groups)
- Results and impacts (expected/demonstrated results and impacts in bullet points)
- URL (if available)

Date, name of the interviewee and her/his position in the organisation completed the analysis. Emphasis was put on the idea to write the case studies in a way that they are easy to understand in order to simplify the uptake of message and method for the reader. Wherever possible and appropriate, tables, pictures and quotations were used to give the text a user-friendly structure.

Since the greenXpo Consortium aimed at identifying, creating and using synergies of their work effort wherever possible, decision was taken to upload the case studies as a pile of documents, not as one comprehensive single piece of work. As it is the case with the best practice collection in the virtual

library, such storage allows for direct search and identification of the particular case an innovation seeker is interested at. Additionally, it was made sure that for each of the in-depth case studies an article in the eco-innovation library is available, which in turn refers to the analysis. This approach facilitates the identification of the particular best practice the recent user is searching. S/he thus will be guided to the article in question and will be informed, that more and in-depth information is available if needed. Vice versa, a person who reads through the case study might think of informing a colleague about the case, but does not want to ask for too much time reading the whole case study. The library article also offers the opportunity to compare the case of the case study to other cases, i.e. regarding geographical coverage, target group, area etc. Using this double approach the highest possible degree of interactivity, value adding as well as fostering the exchange of relevant experiences and knowledge was reached.

The entire collection of eco-innovation cases, the in-depth case studies as well as the theoretical research on barriers and success factors was combined into a policy guidance paper. As eco-innovation comprises much more than just technical innovations or singular policy approaches a whole new concept is necessary in order to bring Europe forward on the way to prospering sustainability. Before that background, a policy guidance paper on Circular Economy (including recommendations) has been drafted and uploaded to the INNOVATIONSEEDS portal with access for registered users. After a first version the Consortium decided that the topic is important enough to spend a bigger effort and to update the document with more information and discourse. Experts reviewed the paper, and valuable inputs were received from the policy dialog events. It is important to note that according to the proposal this document (D 4.2) was supposed to be a short document with recommendations. However the team has decided to produce a more detailed manual type of policy guidance on the topic of Circular Economy, which is acquiring particular importance in eco-innovation and resource efficiency policy domain.

The overall objective of **WP5 (Cross-sectoral information exchange and spill-overs)** was to promote cross-sectoral information exchange and spill-overs and develop interfaces to relevant initiatives. The aim is especially to bring eco-innovation knowledge into traditional sectoral value chains. This WP, led by G!E and mostly supported by CSCP and SP, is particularly relevant for the better dissemination of eco-innovation best practices and the uptake of eco-innovation at market level. It took into account the research findings about the superior impact of greening entire value chains as opposed to greening single companies.

Main result of the work was a document on industrial sectors which were identified as the most promising regarding the aims of greenXpo and chosen for the dialogue events. During the discussion process, the indicators to decide for appropriate cases were as well identified (i.e. milestones 6 and 7).

In a first step, an argumentation was developed explaining the rationale for the selection of five traditional value chains chosen for the industry dialogue events. These events were meant to facilitate cross-sectoral exchange and spill-overs, since each of these sectors has considerable potential for eco-innovation uptake and greening of their value chains. The document fed into the second part of the work planned under WP5, the organisation of Industry Dialogue events as such, and it also set the scene for the approach that was being utilised for the design of the dialogue events.

The following aspects were identified as cornerstones to choose the most promising industry sector for further work:

- Importance of the sector to European GDP
  The chosen sector should be of sufficient importance economically. Contribution to national/ European GDP is taken as proxy to assess this.
- European relevance
  The chosen sector should be important in terms of GDP and employment to at least 3 European Member States in order to meet these criteria.
- Propensity to introduce eco-innovation / pressure to eco-innovate
  The selected sectors must show a realistic potential for change towards more eco-innovation. A proxy to assess this criterion can be European legislation and targets that allow assuming that the sector will need to change from business as usual to greener ways of doing. Another proxy can be the expected cost increase of resources used in the sector that is likely to induce change.
- Potential impact at sector level of implementing eco-innovations
  While quantitative data is probably lacking for the assessment of the additional eco-innovation potential of greening an entire sectoral value chain, the consortium seeks to select those sectors where cooperation across the value chain is likely to unlock significant additional eco-innovation potential that goes beyond greening efforts of a single company. Due to lack of experience with greening of value chains, the consortium relies on its own experience and individual reports.
- Level of organisation of the target sector and type of value chain actors
  This criterion aims at giving insight into the nature of the sectoral value chain. Some value chains are very short, some are dominated by a large player at their end that dictates all innovation or stops it. The consortium seeks value chains that are dominated by SMEs that can benefit from cooperating on eco-innovation.

In its second half, the greenXpo project has promoted a dialogue in form of a series of events between small and medium sized enterprises (SMEs), larger companies, representatives of sectorial organisations and other stakeholders on the concept of eco-innovation along the value chain, as well as sector-specific challenges and opportunities for the uptake of proposed technological and non-technological eco-innovations.

The rationale behind this was the hypothesis that value chain eco-innovation that can lead to much larger resource savings than on an individual company level. This was formulated as follows: “Strategic collaborative eco-innovation along an industrial value chain results in a resource efficiency savings potential superior to the sum of individual company’s savings”.

The goal of the events was to test the awareness about the superior potential of supply chains innovations to cut costs and increase resource efficiency with sectoral industry stakeholders, to discuss a number of concrete cases of supply-chain-level eco-innovations, and finally to validate the success factors for implementing supply-chain-level eco-innovations and at the same time understand the obstacles that might prevent it as well as potential ways to support it.

In order to assess the needs and wishes of different industry players for the dialogue events, an online survey was prepared by CSCP and distributed to relevant industry experts by the consortium

between February and May 2014. 18 industry representatives answered the survey. The results provided insights on the needs of industry representatives related to eco-innovation, as well as their wishes for the format and content of the dialogue events.

The key findings are summarised in figure 6 (cp. results_May_2015.pdf). Firstly, the survey demonstrated the key topics of interest for the industries, the most important barriers and drivers of eco-innovation, and secondly gave insights into the most relevant benefits related to a dialogue event and the event formats that the industry representatives saw as most promising.

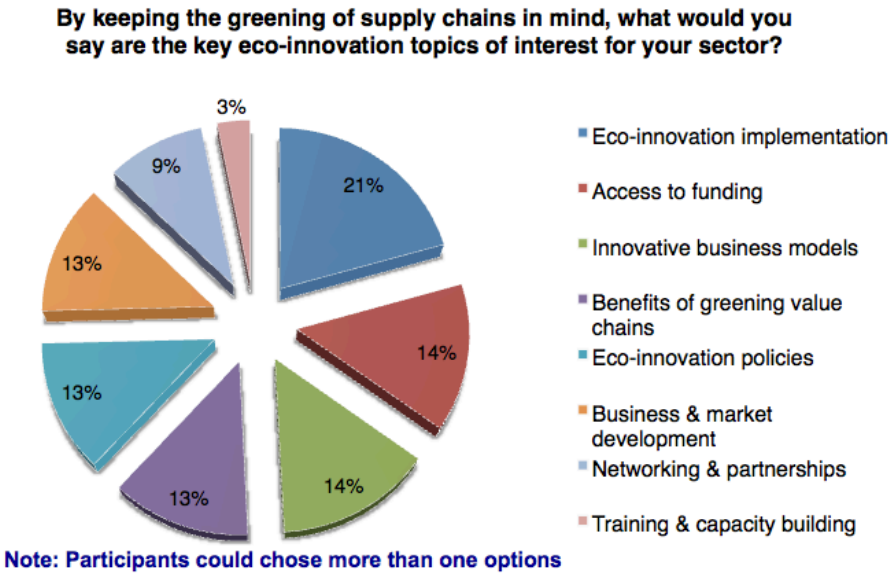


**Figure 6: Eco-innovation topics of interest**[8]

These results were used in the preparation and organisation of the industry dialogue events, and the following **five events** were organised in 2014 and 2015:

1) Cross-sectoral event "Benefitting from Innovations for Greening the Value Chain": Brussels, Belgium
2) Food & drink industry "The Future of Communication between Companies and Society", Cologne, Germany
3) Chemical industry "Greater interface efficiency in chemical value chains – challenges and potential'', Chester, UK
4) Construction industry "The Future of buildings – Eco-innovation as a basis for sustainable construction", Graz, Austria
5) Pulp & paper industry "Greater interface efficiency in pulp and paper value chains – challenges and potential'' Örnsköldsvik, Sweden

The discussions of these events show a complex yet clear picture of the challenges and opportunities related to this new concept. It appeared clearly that in the case of value-chain level eco-innovation, three different types of barriers hinder the change process, and that these barriers are cumulative. These are company-level, value-chain-level and sector-specific barriers. It is therefore realistic to conclude that while pilot study findings confirm the potential of value chain eco-innovation to

[8] greenXpo_Deliverable_5 2 1_Discussion_Document_10.02.2014_final, p.13

significantly improve the competitiveness of European traditional industry sectors, this potential will not be realised without public support due to the high level of complexity of the process. We are hence in the presence of a market failure that invites for a political remedy.

When looking at the wishes the industry partners had related to sectoral dialogue events, almost 70% of the participants named the exploration of potential for cross-sector partnerships as the key topic of interest for their sector (cp. D5.2). This answer was taken into account when deciding that the first of the five dialogue events would be done with a cross sectoral approach, to allow participants to explore partnerships between different sectors. Over 60% of the participants named learning and discussing business models as a key interest, 50% learning about EU & national polices and existing & emerging technologies, while 45% wanted to learn about tools and methodologies. The interest to learn about eco-innovation business development and success factors, drivers and barriers and to influence policy decision making scored just below 40%. All of the elements mentioned above were included in the outlines of the GreenXpo events, either by having presentations on the topics or by discussing them in group work to learn from the experience of the present participants. There was a lower interest in the topics of presenting and showcasing the experience of the own business and in engaging with the relevant cross-sectoral organisations.

As an interesting side effect, the events gave also insight in the most appropriate format to get in efficient contact with industry representatives. As shown in figure 7, most of the participants prefer a half-day event to a breakfast/dinner meeting format even if this means more time to spend (cp. results_May_2015.pdf).

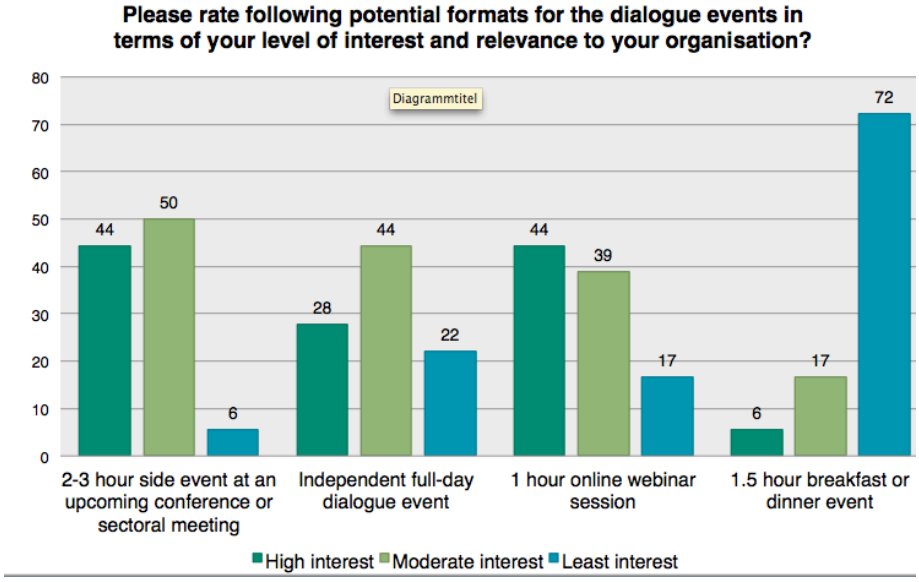


**Figure 7: Preferred meeting format as indicated by the attendees of greenXpo industry dialogue events**[9]

## In WP6 (Interfaces, promotion and outreach - beyond dissemination)

the aim was to proactively take up the eco-innovation knowledge gathered and arranged in the central one-stop portal into the relevant target groups of policy makers, market players and society and create interfaces for multi-directional knowledge exchange between the target groups.

[9] greenXpo_Deliverable_5 2 1_Discussion_Document_10.02.2014_final, p.16

## Target groups

Information does not automatically reach its target groups, even if it is professionally prepared and publicised on an attractive interactive portal. In order to make the greenXpo platform effective at the European and global level, project partners have proactively promoted and disseminated the work and the results of the project to the larger European audience that included policy-makers, market players, and development organisations.

All communication material produced was vehicle for the main purpose of the project: featuring cases of best practices and hands-on innovative solutions in the important areas of eco-innovation on the platform. It facilitates functional understanding of the cases as well as efficient connection of relevant groups and individuals. The greenXpo project had impact on a number of different target groups, addressing their needs and offering particular value to each of them. These target groups and added value for them was determined in the beginning of the project as well as taken into account when planning and conducting dissemination actions:

- Eco-innovation seekers and eco-innovation solution providers can find their counterparts, thus offering matchmaking opportunities for co-development of new technical as well as policy related solutions, for accessing up-to-date information on existing and emerging technologies, or for getting in contact with other eco-innovation projects to share experiences and learnings.
- Intermediaries, umbrella associations and the Commission Services wish to support their clients in providing up-to-date information on trends, (potential) partners, solutions or further (business) opportunities. The platform offers that information.
- Financial institutions and individual experts. This use of the platform as kind of an observation instrument will enable financial institutions and individual experts from technical centres, testing laboratories, engineering and legal offices to check on state of the art eco-innovation information. They also can promote their own know-how as well as positioning themselves as service providers via the greenXpo platform. Since the eco-innovative cases are featured according to the standards of an innovation circle approach, this interaction will help to speed up the implementation of promising instruments and solutions.
- Policy makers will find clear and practical political guidance in the featured case studies on successful eco-innovation support instruments, including success factors and suggestions for replication elsewhere. An additional effect will be the learning from the analysed failures in the background material.
- Online community. Last but not least the platform will facilitate the knowledge transfer process within the online community: Society at large is at the basis of all particular groups of stakeholder. The assemblage and consolidation of various web-based repositories on eco-innovation may facilitate a much better understanding of the subject. To understand what eco-innovation is about, to explore what Europe and its partners are doing in the field, and to participate in one of the various off-line actions will help to improve the implementation of eco-innovation at large.

The specificity of the greenXpo approach is the combination of measures aiming at reaching a very high number of relevant stakeholders, together with measures aiming at engaging a limited number of target stakeholders in view of deeper impact and real uptake of eco-innovation knowledge: There have been ambitious goals for reaching the target groups and variety of means was used to spread

the knowledge of the platform. WP6 hence consisted of a variety of tasks including seminars, innovation sessions, one-to-one meetings, presentations, news & blogs, articles and social media covering wide range of stakeholders interested in the topic of eco-innovation.

The work was led by LADEC and the entire Consortium made an effort to go “beyond dissemination”. An impressive number of dissemination activities was conducted, adding up to more than one activity per week throughout the whole lifetime of the project. Since in reality the project had to decide and develop its dissemination strategy and materials first, the frequency of relevant dissemination activity was much higher.

## Communication Material

First main result was the production of identity and communication material, i.e. an adapted visual identity of greenXpo. The identity and communication materials were designed and produced in the beginning of the project and same visual identity was used in all dissemination activities. The further development of the platform after the end of the greenXpo project was also taken into consideration in the materials as INNOVATIONSEEDS brand and logo was highlighted and kept as the main message through all dissemination so that the restricted lifetime of the greenXpo project as such would not be barrier for the future development of the platform. Before this background, a corporate greenXpo identity was developed, i.e. a complete visual identity with logos and templates in PowerPoint and Word formats has been developed. In addition, a standard PPT describing the project, as well as a one page project description in line with the visual identity were created. A brochure has also been produced and printed and was used by all partners. Additionally, a roll-up banner and a podcast were also produced. When it became clear that the communication material needed an update during the second half of the project, another edition of the portal flyer and a new roll-up banner were produced. These activities were complemented by the production of material for Asia: Using the Corporate Identity of greenXpo, a brochure in Chinese was made available by NCKU in Taiwan. Using this material in the dissemination activities it became obvious that the understanding of the eco-innovation mission of greenXpo could be taken up in a better way if it would be described in simple Chinese letters. NCKU hence produced a second version of the brochure in order to disseminate it more widely in Asia (Japan and South Korea in addition to Taiwan and the Republic of China).
The following list summarises the materials produced during the project:

- Adaptation of visual identity for greenXpo
- Design of ppt-template
- Design of word template
- Production of brochure
- Production of brochure Traditional Chinese version
- Planning of the production of roll-up and updating the brochure of the platform
- Roll-up and updated small brochure produced
- Production of brochure simplified Chinese version
- Podcast describing greenXpo and eco-innovation which is available on the platform

## Range of Dissemination Activities

In order to achieve a deeper impact and real uptake of eco-innovation knowledge developed within the project, a series of activities were undertaken in support of creating visibility and substantive connections with the major eco-innovation communities and networks. These included bilateral meetings, face-to-face presentations, attendance at different conferences and events, among others. greenXpo's off-line activity, i.e. policy as well as industry dialogue events targeted the respective group, policy makers on different levels (city, local, regional, national, EU) and industry (SMEs, bigger companies, associations and support entities), whereas the online activity aimed at reaching out to the entire eco-innovation community with all its different strands and players. The following description of results will follow this structure.

As a part of the project the Innovation Session Model (ISM) developed in Lahti Region was to be further developed. This model has proven to be an efficient way to support and boost multi-actor innovation processes. ISM supports the generation, selection and furthering of the practice-based innovation processes. The method helps companies, company groups and public actors to face changing customers, markets, or technologies by bringing various sources of top knowledge and expertise into the practical innovation processes. The method is based on the models of open and practice-based innovation. In the practice-based model, innovation is no longer focused to the process of creating something new from the beginning to the end but can include the capacity to quickly adopt externally created innovations that may benefit the company. Innovation session process typically takes 1-2 months from a problem definition to the identification of expertise needed, and culminating in a specific 1 to 2 day innovation session that brings different areas of expertise together for a creative dialogue in a common problem-setting – in a process of "cross-fertilisation". The concept further developed during the project was aiming at implementing a light weight approach of the ISM for international use combining the elements of ISM and the Co-Design workshop method also developed in Lahti Region. Previously the ISM was not used in international context and in the development LAHTI wanted to create an approach that anyone could easily follow to organise such an event.

## Policy and Market Session Model

**The policy and market sessions model was planned to follow the general framework described below:**

1. Identification of the needs/challenges of the primary beneficiaries of the session – national and/or regional policy makers in the case of policy sessions, cluster organisations and the companies acting in the clusters in the case of market sessions. These needs/challenges should be common to two or more regions or clusters in order to ensure their broader relevance and sharing of ideas and experiences between the actors. It is anticipated that there will be 1 to 3 concrete needs/challenges identified in one session process.

2. Identification of the relevant best practices and cases from the greenXpo platform. The selected practices and cases need not provide direct answers to the identified challenges, but serve as an external input to launch and support the dialogue on the possible solutions between the participating actors. Typically, there will be 1 to 3 identified practices and cases that will be presented during the session process.

3. Organisation of the session. In one session, there will typically be about 20 to 30 participants. The participants will be selected so that they represent different sectors, expertise areas and viewpoints in order to facilitate "intellectual cross-fertilisation" between the actors. Innovative co-working tools will be utilised in the session workshops. As a result of the session, there will be 3 to 5 identified concrete themes for further development - either proposed practices/cases to be implemented and utilised, or issues to be solved with further work between the actors.


In the greenXpo project the nature of the policy and market sessions made it most beneficial to focus on the first two steps: preparing the focus of the session and finding the potential participants and to the actual innovation session organised and facilitated by the project member.

The main learnings from using the ISM were the following:

- During the implementation of the policy/market sessions it was seen important to know who are going to participate in the events so that the specific point of interests can be identified.
- 
- In most of the cases in greenXpo the preparation phase was done by the people organising the events and there were no possibilities to wider engagement of the participants to be involved in the first steps – in future would be good to send out questionnaire beforehand to ask the interests of the participants (anyhow this is challenging to get people to answer).

**Figure 8: greenXpo colleague Emmi Kaipio from LADEC at the Global Cleantech Cluster Association, 2014**[10]

- The working method of ISM to be in roundtables is very effective to collect the information from different stakeholders.
  The role of the facilitator is the key to success in these kind of sessions.
  To get then the results of group discussions presented to all participants a final "panel discussion" where each table's chairman was representing the table was interesting and effective way to summarise the results.

The main results of using these methods for the sessions was the actual testing in international setting and the final panel concept for reporting the results that was seen as interesting way for other participants as well.

## Eco-Innovation Policy Session

In order to support the implementation and utilisation of the best European and global models for eco-innovation policies in this task four policy sessions were organised. The aim of the sessions was to bring together the policy makers from different countries, regions and municipalities in order to

[10] greenXpo_del_6_2_WP6_FINAL.pdf, p.13

share the efficient instruments. These events were organised in collaboration with regional actors and back to back with existing events to guarantee the participation of the relevant stakeholders.

The greenXpo knowledge platform served as an input to the sessions, providing the case studies, experts and learnings (barriers and drivers) from the identified articles in the platform.

The sessions utilised the Innovation Session Model and Co-Design model whenever suitable for the nature of the event. The roundtable discussions with facilitation and the presentations of the platform were the main tools for the policy sessions.

The specific focus areas of the policy sessions were defined before the events and the following policy dialogue events were organised:

- Policy session, focusing on the local Cleantech clusters role in accelerating eco-innovation policies was organised in cooperation with Global Cleantech Cluster Association (GCCA) on June 11th, 2014 at Lille, France as a part of GCCA Cluster Manager Days and GCCA Europe Gateway meeting.
- Policy session focusing especially on the role of cities, municipalities and regions in eco-innovation policies was organised with EURADA as a part of Agorada 2014 on 17th June 2014.
- Policy session focusing especially on the role of cities, municipalities and regions in eco-innovation policies with ICLEI as a part of EcoProcura 2014 on 22nd September 2014.
- Policy session focusing on bringing European eco-innovation knowledge to Central Asian markets was organised as a part of the Green Bridge Forum in Latvia on 17th April 2015.
- Policy Session during the greenXpo final meeting in Jyväskylä, Finland 22nd-24th April 2015

A very interesting picture appeared during the discussion with regional policy makers in June 2014. Their answer to the question “What arguments should be presented to policy makers in order to convince them to make eco-innovation a priority for the regional development?” was the following, as depicted in figure 9 (cp. results_May_2015.pdf).


**Figure 9: The arguments to present to policy makers in order to convince them to make eco-innovation a priority for the regional development; collected at the AGORADA policy event**[11]

[11] greenXpo_del_6_2_WP6_FINAL.pdf, p.19

With focus on public procurement as a powerful instrument to promote eco-innovation, the policy session during the EcoProcura had the following insights: During the market lounge tables at EcoProcura the importance of market dialogue in achieving eco-innovation as a result of a procurement procedure was highlighted by several policy makers. However, it was also stressed that many cities are afraid to engage in dialogue with the market as they are nervous of legal action being taken. One policy maker indicated that in Sweden on average 3,500 procurement related cases are brought before the courts each year. Therefore, many policy makers exchanged how they deal with this issue in their city and how they can ensure that market engagement occurs and leads to the procurement of eco-innovation, despite the perceived legal hurdles.

Since eco-innovation has to be seen in a global context, the policy session during the Green Bridge Forum aimed at stressing the outreach point. The main objective of the Green Bridge Forum is to strengthen environmental governance and enhance cooperation between the EU and the Central Asian countries in water management, energy efficiency, renewable and alternative energies as well as in reliable, sustainable, low-carbon technologies to facilitate the green growth activities across the EU and Central Asia region. In doing so, the Forum evaluated the current progress, reviewed cooperation activities, and considered further steps within the framework of the EU-Central Asia Platform for environment and water management. It aimed at sharing knowledge on concrete solutions and proposals for technologies that can be used. The Forum facilitated the shift to a green economy which itself provides opportunities for increasing competitiveness and advancing the well-being of current and future generations.

During the Final Conference policy sessions, the questions *Which Role for Enablers in a Value Chain?* as well as *Which tools are valuable?* were discussed. The challenging conclusion was : It is time and there is need to develop a new concept entitled "circular intelligence for policy makers".


**Figure 10: Need for a concept of *circular intelligence for policy makers* was expressed at the greenXpo Final Conference, 2015**[12]

In total, a broad range of stakeholders could be reached via presentations, including both policy-makers and practitioners directly involved in topics related to eco-innovation. During the presentations, all target groups welcomed the project, and provided positive feedback regarding its results, especially the INNOVATIONSEEDS portal and outcomes of the industry dialogue events on

[12] greenXpo_del_6_2_WP6_FINAL.pdf, p.34

eco-innovation along value chains. Policy makers welcomed such a comprehensive instrument where technology, services, networks as well as best practice policies are presented together. It was stressed that the transferability is a real added value to a best practice presentation per se, most notably because of the GML scale. An instrument to compare the strongly differing approaches to eco-innovation is something comparatively new and therefore particularly interesting. The combination of online portal with focussed social media activity with off-line events like the policy dialogues were considered valuable. It could be expected, especially in the case of associations, that the information about the greenXpo project and its results was further communicated to member organisations, ensuring high dissemination impact. This gaining of more visibility as well as critical mass helped increasing the implementation speed and the impact of greenXpo's best practices on the eco-innovation development in Europe and beyond. Policy makers often prefer sound briefing by organisations deeper linked to the operational daily work. Hence, it is crucial to keep further developing the platform in a way that policy-relevant information is easily accessible in the libraries and is edited in a tailor-made, i.e. target group specific manner. Best policy practices where risks, challenges and advantages are easy to grasp are the best way to keep the platform attractive for policy makers looking for boosting their area of expertise also now after the end of greenXpo. Vice versa, keeping them as active members of the eco-innovative community on and around the platform will feed back the needs of the policy side into its successful development.

In total, approximately 210 city-level policy makers from across Europe were reached via the presentations. At EcoProcura and the EURADA Agorada, these policy makers came from cities across Europe and at EcoProcura included EU level policy makers directly involved in the topics of procurement and innovation. Such events proved to be useful forums for engaging with others policy makers, as they are the perfect place to present good practice examples, and discuss opportunities and barriers which can arise when a city wishes to procure eco- innovation.

Based on the calculations of unique visitors on the PPI Platform and SPRC websites over the given weeks in which the articles were published, as well as the number of people registered for the SP Update and GPP Newsalert, the articles published covering greenXpo reached 6,131 people approximately. These figures ensured that awareness was raised as regards both the greenXpo project and the INNOVATIONSEEDS platform, and the activities of the greenXpo project were highlighted. The primary impact and achievement was that by discussing the examples relating to the procurement of eco-innovation, constructive discussions took place as regards how possible it would be to replicate a given procurement or approach to achieve eco-innovation in another context.

In conclusion, case studies such as those provided by greenXpo on the INNOVATIONSEEDS platform, prove very useful and interesting to policy makers, as they provide them with an insight into how other European public authorities are procuring eco-innovation. Very often, city-level policy makers have not thought of taking a different approach, but seeing what worked for other cities, and what did not, in case studies such as those now published on the INNOVATIONSEEDS websites appears to be a useful approach when combined with presentations and face-to-face discussions about the topic of procurement of eco-innovation.

Finally, well established websites with much relevant traffic, such as the SPRC and PPI Platform, as well as publications with many relevant subscribers such as the GPP newsalert and SP Update, ensured that the activities results of the greenXpo platform were well distributed among policy-makers.

As a particular topic the outreach to Asia was part of greenXpo's work. The objective of this task, led by NCKU, was to facilitate interfaces and knowledge exchange on best eco-innovation practices on a global level, with focus on East Asian region. In order to reach the global market and to implement eco-innovative solutions, European eco-innovative companies need in-depth knowledge and understanding on the local context and active dialogue (instead of simple one-way promotion) with the relevant actors in the target market. The experiences on the implementation of eco-innovations from the East-Asian region have high added value for the outreach of the greenXpo platform.

The channels used to reach East Asian stakeholders included the following:

- Face-to-face meetings with the public bodies from Taiwan, Japan, Korea and China
- Presentations of the greenXpo platform and its results in the relevant eco-innovation events and conferences
- Articles and newsfeeds about the greenXpo platform and its results in the relevant East Asian websites, portals and virtual communities related to eco-innovation
- Active updates in the website section

NCKU disseminated the content of the greenXpo project and the function of INNOVATIONSEEDS.eu and greenxpo.tw before the face-to-face meetings got started. Most of the audience liked the well-classified libraries, and provided NCKU with plenty of ideas for writing articles. The ten articles written by NCKU were all assisted by the participants in face-to-face meetings, including the information providing, advice on key points in the policies, the latest development of the policies, etc. NCKU, as the only greenXpo member from Asia, disseminated greenXpo project in Japan, S. Korea, China and Taiwan as scheduled, and accompanied its implementation where possible. For the audiences who failed to read traditional Chinese, NCKU encouraged them to make use of INNOVATIONSEEDS.eu instead of greenxpo.tw; however, NCKU plans to have more languages on their website (e.g. Japanese or Korean) for quicker and clearer understanding of first time website visitors.

## Summarising the effort to create efficient interfaces with policy makers

The six sub-tasks of activity 6.2 aimed at establishing and utilising interfaces with the European, national, regional, and municipal eco-innovation policy-makers, professionals and communities. In light of this, the greenXpo partners carried out a number of awareness-raising activities thought the project. These included numerous presentations in front of the EU decision and policy makers, as well as the wider innovation communities and networks, presentation of project's results at different events. Partners have also actively disseminated information about the project to target groups in both Europe and East Asia, using various communication channels. All activities performed enhanced project's visibility, increased understanding of project's scope and results, and allowed engaging key actors and increased partnership opportunities.

In total consortium partners reached a broad range of stakeholders via presentations, including both policy-makers and practitioners directly involved in topics related to eco-innovation. During the presentations, all target groups welcomed the project, and provided positive feedback regarding its results, especially the INNOVATIONSEEDS portal and outcomes of the industry dialogue events on eco-innovation along value chains. It is expected, especially in the case of associations, that the information about the greenXpo project and its results was further communicated to member organisations, ensuring high dissemination impact.

All together it can be estimated that over 5,000 policy makers were reached via the dissemination activities which shows that the impact number targets were reached. The estimation is based on the amount of one-to-one meetings, presentations and policy sessions. The odds that even higher number of policy makers was reached is high.

## Eco-Innovation Market Sessions

In order to support the development of new market-led eco-innovations, the model of eco-innovation market sessions was tested during the project. These market sessions were organised around existing company clusters/networks that aim to find new eco-innovation based market opportunities. To support the ambitious goals of reaching the SMEs close collaboration with GCCA was established in the beginning of the project.

The INNOVATIONSEEDS knowledge portal served as a source of the best practices and case examples to start the dialogue and give success cases to inspire companies to start businesses in a new region and /or the cluster managers to start new operations to support that development.

The specific focus areas of the market sessions were defined during the project and the following sessions were organised:

- Market session focusing on regional/inter-regional cluster collaboration was organised in cooperation with GCCA in **Asia Pacific Cleantech Market place Forum in Singapore on 9th -11th September 2013**
- Market session focusing on the European eco-innovation companies going global, especially on Asian market was organized as a part of **Asia Pacific Cleantech Market Place Forum 2014 on 30th October**
- Market session, focusing on eco-innovation companies and their liaison with corporations was organised in cooperation with GCCA and Later Stage Award nominees as a part of **Cleantech Investment Forum in Lausanne, Switzerland on 4th December 2014**
- Market session focusing on eco-innovation companies and their liaison with corporates was organised as a **Co-Design workshop in Helsinki, Finland on 21st April 2015**
- Market session focusing on training the SMEs **"How to attract investors" was organised in Lahti, Finland on 6th – 7th May 2015**

The greenXpo project and especially INNOVATIONSEEDS platform raised interest during the seminars. The brochures were distributed and the slides with links were submitted to the seminar website for people to download afterwards. Where appropriate, local media took up the topic to wrote about it. Particularly the Asian audiences seemed interested about the European knowledge of eco-innovation policies and how it works. Networking was in all cases very fruitful. Regarding the cooperation with GCCA, the participation in 2013 lead to the bigger role in the planning of the program in 2014 Forum and that way give possibility to present more greenXpo results.

A big variety of existing networks and associations was invited to cooperate with greenXpo and make use of the INNOVATIONSEEDS platform. EcoClup project partners are member clusters of GCCA as that was established during the EcoClup project result so that way this target network was involved. Other target groups like International Association of Science Parks (IASP) / EnviroParks Network, Enterprise Europe Network, European BIC Network EBN, NCP Network for the Eco-Innovation CIP Programme were kept informed via LinkedIn communication and newsletters sent by partners. Cleantech Scandinavia and Cleantech Group address cleantech investors and companies looking for

financing and greenXpo took part in the investor events organised by them during the project. Cleantech Finland's Solved.fi-web platform was planned to be used as a dissemination channel for companies but that was taken out from the public sector as a spinoff company so it could not be utilised as such. Anyhow the connection with CTF network is strong and greenXpo was present in their events during the project (see list of dissemination activities).

It can be estimated that with the market sessions organised during the event in collaboration with GCCA around 10,000 companies were reached, estimated by calculating the multiplier effect of the cluster networks and the cluster managers who participated in the events (altogether 40) and the approximate number of the companies in each cluster (250).

## Electronic Tools and Social Networks as Channel to the wider Eco-Innovation Community

As already reported in the WP2 section as result of the platform development, tools like Twitter helped to engage the wider eco-innovation community. Each new article on the platform was accompanied by tweeting activity. Particularly live coverage of events was successful. The hashtag **#greenXpo** was chosen to aggregate the tweets regarding the dialogue events both to ensure the proper contextualisation of the tweets and to allow the possibility of tracking the activity and its results. For reporting purposes, a number of indicators were chosen, to show the performances achieved, which is illustrated in table 2 (cp. results_May_2015.pdf):

- **First outreach**: the number of users possibly reached by the tweets produced
- **Interactions**: the number of actions produced by the tweets, meaning re-tweets and favorites
- **Extended outreach**: the number of users possibly reached by the re-tweets
- **Total outreach**: the sum of the above outreaches.

**Table 2:** ***Results of the live Twitter coverage activity for Dialogue Events***[13]

| Indicators | Performances |
|---|---|
| Number of tweets | 111 |
| First outreach (people) | 16,586 |
| Interactions | 141 |
| Second outreach (people) | 29,492 |
| **Total outreach** | **45,778** |

The growth of the **LinkedIn group** members has been satisfying showing a steady trend throughout the duration of the whole project. The number of followers by May was 334, with an increment of about 150 new followers from the beginning, and an average of more than 6 new followers per month.

Newsletters, social media posts and blogs online send via different channels during the project reached over 120,000 people (cp. D6.4), and in addition to online visibility all other dissemination

[13] greenXpo_del_6_4_WP6_FINAL.pdf, p.19

activities reached over 97,000 people (see full list of dissemination activities in the end of this report) of which it is difficult to estimate the portions by stakeholders but it can safely be said that the ambitious goals of the impact numbers were reached and the lively eco-innovation community was set a strong basis to grow.

## Conclusion

The work in greenXpo's WPs could be executed as originally planned. Minor adaptations were necessary due to the insights and findings while the work was progressing. They led to higher impact and more focussed results and got therefore agreement by the project officer. Given the effort and enthusiasm the greenXpo Consortium put jointly into the endeavour it is likely that it will pursue the project's outcome in future projects and activities. The ambitious, but realistic time schedule could be kept, and the project did not only reached all envisaged aims, but delivered even some more:

- → communication material on eco-innovation and about greenXpo was developed and disseminated
- → INNOVATIONSEEDS platform was launched and further developed
- → The virtual libraries comprise in May 2015 more than 300 articles on eco-innovation in its five main areas
- → The featured articles are presented using the **Knowledge3**[14] methodology allowing for tailor-made search and easy access per target group
- → The GML scale was developed to estimate market uptake potential for non-technological eco-innovations, including policies and networks
- → In-depth case studies show how to transfer best practice efficiently
- → A policy guidance paper points at Circular Economy implementation
- → Off-line events with relevant stakeholder groups were developed and performed, allowing for valuable feedback
- → The target impact numbers for all stakeholder groups could be reached or exceeded
- → A variety of hands-on instruments – suggestion of event formats, indicators regarding eco-innovation, policy guidelines as well as the best practice examples as such – allow for simplified uptake of eco-innovation aspects for the own area and purpose
- → A huge variety of networking occasion was organised and facilitated
- → Outreach to Asia was put on a broad base
- → On-line activity ensured the outreach into the wider eco-innovation community, using a newsletter, and mailing activities as well as social media formats including live coverage of events
- → By developing a business plan the further uptake of greenXpo results for their sustainable future could be achieved.

As an example how greenXpo could help bringing forward eco-innovation in Europe in an important target group like clusters are, the report closes with a statement by Christian Haeuselmann – GCCA Chairman during one of the industry dialogue events: *"greenXpo helped us to organise cluster meetings and that way start a fruitful dialogue among experienced cluster managers from different*

[14] *The **Knowledge3** methodology is proprietary of TECHNOFI*

*countries. The engaging work sessions allowed for an open, interactive exchange of lessons learned and insights on how to best support eco-innovation. Such events are the platforms needed to share best practices and create concrete impact. I'm looking forward to see the future development of the INNOVATIONSEEDS platform!"* .[15]

[15] greenXpo_del_6_4_WP6_FINAL.pdf, p.27