



**Grant Agreement No.:** 280371

**Project Acronym:** G.EN.ESI

**Project Title:** Integrated software platform for Green ENgineering dESIgn and product sustainability

**D. 5.2 REPORT: DISSEMINATION PLAN**

**Collaborative Project**

**Start Date of project:** 01/02/2012

**Duration:** 36 months

**Name of Beneficiary responsible for this deliverable:** UNIVERSITY OF BATH

**Version:** 0.4



*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



<b>Project co-funded by the European Commission within the Seventh Framework Programme</b>		
<b>Dissemination Level</b>		
<b>PU</b>	Public	<b>X</b>
<b>PP</b>	Restricted to other Programme Participants (including the Commission Services)	
<b>RE</b>	Restricted to a group specified by the consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	



*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



<b>Version:</b>	0.4
<b>Date Draft:</b>	29/10/2013
<b>Due Date of Deliverable according to Annex I:</b>	31/10/2013
<b>Editor:</b>	UNIVERSITY OF BATH
<b>Contributors:</b>	ALL PARTNERS
<b>Responsible:</b>	UNIVERSITY OF BATH

<b>CHANGE CONTROL:</b>			
<b>Version</b>	<b>Date</b>	<b>Description</b>	<b>Author</b>
0.1	08/07/2013	First Draft	UBAH
0.2	07/10/2013	Second Draft	UBAH
0.3	22/10/2013	Third Draft	UBAH
0.4	29/10/2013	Final Draft	UBAH

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



## CONTENTS PAGE

1.	INTRODUCTION.....	6
2.	FINAL PROJECT OUTCOMES .....	7
	2.1 The G.EN.ESI Software Platform.....	7
	2.2 The G.EN.ESI Methodology.....	8
	2.3 Eco-design Consultancy Services.....	9
	2.4 General Environmental Design Knowledge.....	9
3.	DISSEMINATION PLAN FOR THE FINAL PROJECT YEAR .....	10
	3.1 Disseminating Existing and Developing Eco-design Knowledge .....	10
	3.1.1 The Eco-design Education Centre.....	10
	3.1.2 Dissemination of Eco-design Knowledge.....	10
	3.2 Key Dissemination Events for Primary G.EN.ESI Outcomes.....	12
	3.2.1 DESIGN 2014 Half Day Workshop.....	12
	3.2.2 Online Methodology and Software Platform Webinars.....	13
	3.2.3 Methodology and Software Platform Workshop at Trade Show.....	13
	3.2.4 Eurocucina – Disseminating Application of Software within Faber.....	14
	3.3 Dissemination of Academic Output.....	14
	3.3.1 Video Presentation of Academic Papers .....	14
	3.3.2 Academic Conferences and Journal Papers.....	15
4.	DISSEMINATION ACTIVITIES TO DATE .....	17
	4.1 The G.EN.ESI Website.....	17
	4.2 The G.EN.ESI LinkedIn Group.....	17
	4.3 Newsletter and Mailing List.....	18
	4.4 Project Business Cards.....	18
	4.5 Project Leaflet.....	19
	4.6 Academic Conference Papers.....	19
	4.7 Presentations to External Audiences.....	20

*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*





4.8 The G.EN.ESI PhD Conference.....	21
4.9 Development of Commercially Sensitive Information Guidelines.....	21
5. APPENDICES.....	23
5.1 Appendix 1 - Identified Project Stakeholders .....	23
5.2 Appendix 2 - Plan for Methodology Workshop at DESIGN 2014.....	25
5.3 Appendix 3 – Timeline for Final Dissemination Events.....	27
5.4 Appendix 4 – Project Leaflet.....	30

*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



# 1 INTRODUCTION

The primary focus of this report is to detail the dissemination activities planned for the final 15 months of the project. This is a vital period for dissemination due to its focus on the key project outputs. To reflect the focus of the G.EN.ESI Project this plan includes dissemination activities targeted at both engineers and designers in research, education and industry, as well as those who influence these disciplines through trade associations and legislation.

This report is divided into three sections. The first section describes the final project outcomes for the G.EN.ESI project. The second section plans the content and activities that will be undertaken to support the launch of the projects final outcomes. The third and final section details the activities to date, describing the dissemination platform we have developed to support the launch of the final project outcomes.

This dissemination plan does not cover the commercial promotion of the methodology, software platform or tools. Please see *Deliverable 5.6: Plan for Business Use and Results Exploitation* for this information.

All dissemination activities are being managed by a 'Dissemination Group' which is run by the University of Bath. This group includes one representative from each partner organisation. The team was formed to streamline the development and organisation of dissemination content and events. The Dissemination Group have regular meetings to ensure sustained dissemination progress. The content of this report has been agreed by this team.



## 2 FINAL PROJECT OUTCOMES

### 2.1 The G.EN.ESI Software Platform

The G.EN.ESI Platform consists of a suite of software tools that enable life cycle assessment, costing and life cycle data management.

The goal of the platform is to inform companies about the environmental and cost impacts of their design decisions and guide them towards solutions that reduce these impacts, whilst maintaining profitability. For the embodiment of the G.EN.ESI platform in this project, two levels of assessment are planned, low and high, as categorised by their data intensity and the available design detail. The low level assessment aims to provide LCA and LCC outputs on low detail models, through application of the Granta Eco-audit tool and embedded databases. The high level assessment involves all additional tools and relies heavily on information input by suppliers (through a supplier web portal) and designers at a later stage of development. This higher level assessment will apply ENEA's EVerde tool. The platform will be accessible via a CAD, PLM or a web based interface supporting access and interaction by design decisions makers throughout an organisation. The current platform architecture and tools are shown in Figure 1.

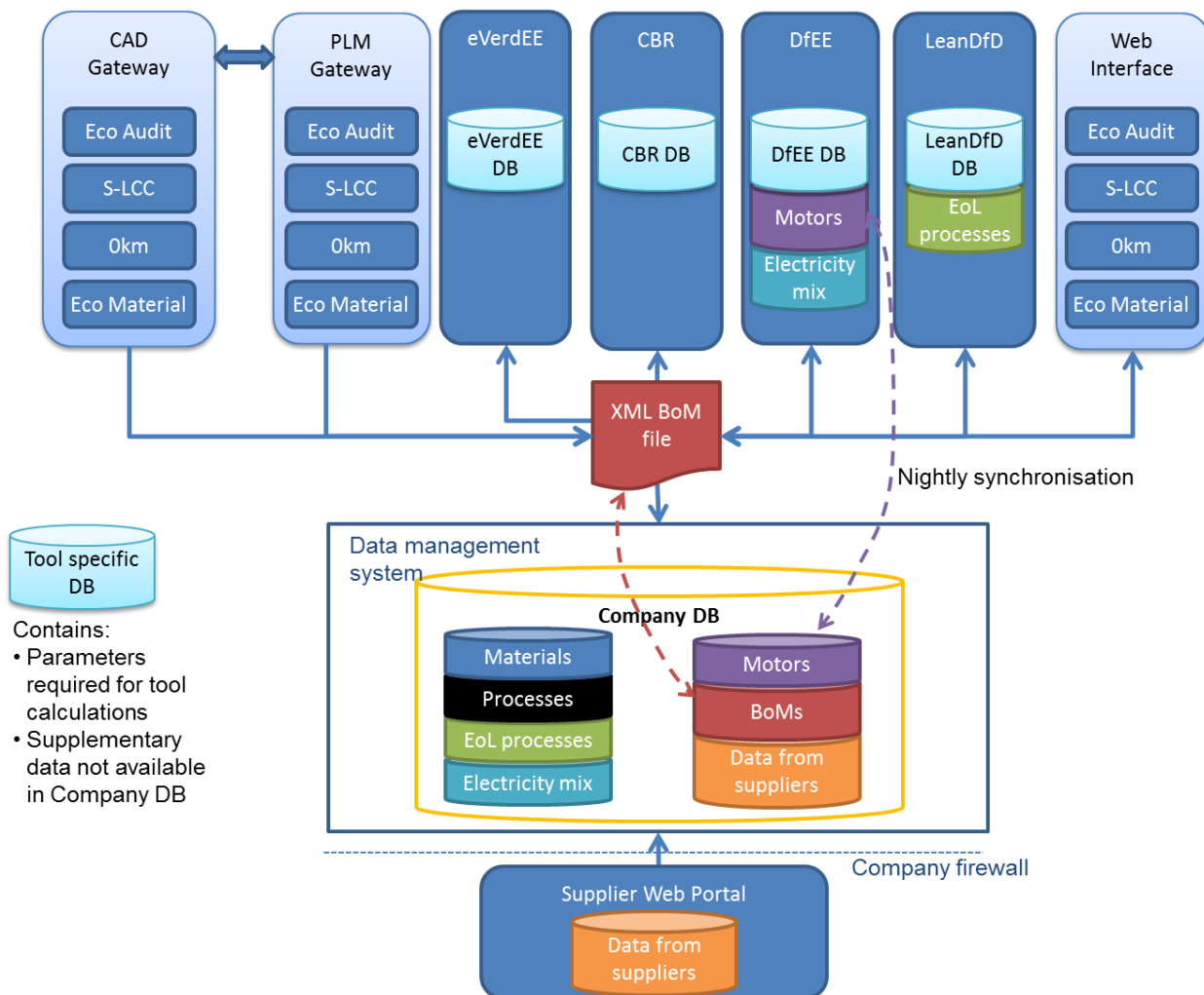


Figure 1: Current G.EN.ESI Platform Tools and Architecture including Information Flows

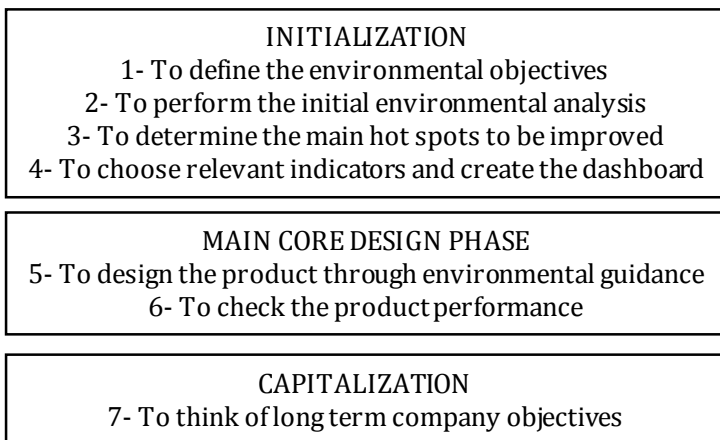
## 2.2 The G.EN.ESI Methodology

The content of the platform has been developed in conjunction with an eco-design methodology that reflects the team’s research and experience. This methodology covers a wide variety of topics from organisational structure, to design management and eco-design decision making. The G.EN.ESI Eco-design Methodology consists of 7 steps that can be grouped into three key stages as shown in Figure 2.

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*







**Figure 2: The seven step of the G.EN.ESI Eco-design Methodology**

The development of this methodology widens the scope of dissemination activities as it provides an output that does not demand economic investment. As a freely available methodology, this allows the team to target commercial companies, students of design and engineering, research institutes and trade associations without a commercial agenda. It should also be noted however, that these activities are likely to have an indirect commercial benefit as increases in eco-design awareness encourage greater interest in eco-design tool use.

The dissemination material can be tailored to match the requirements of the audience by focussing on the methodology as a whole or more specifically on selected methodological features. As with the platform this provides a flexible set of dissemination activities to maximise appeal and relevance.

## 2.3 Eco-design Consultancy Services

Given the projects focus and the partners involved a great deal of eco-design knowledge and experience is being collated. Industry has an increasing interest in this topic highlighting an opportunity for consultancy services which focus on environmental design, management and tools. To meet this need a potential spin-off company has been discussed by ENEA. This idea is still in the early stages of planning and more details will be included within exploitation documentation.

## 2.4 General Environmental Design Knowledge

*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



Within the team there is a great deal of existing and developing eco-design knowledge. In order to help promote the project, methodology and software platform this knowledge will be made available to commercial and academic audiences. Dissemination of this material is taking place through the website, LinkedIn group and project mailing list.

### 3 DISSEMINATION PLAN FOR THE FINAL PROJECT YEAR

At this stage in the project it is vital to have clear plan for the dissemination of the project outcomes detailed above. This section includes a summary and timeline of the key dissemination events being planned. This is followed by the tailored dissemination approach developed for each project outcome.

#### 3.1 Disseminating Existing and Developing Eco-design Knowledge

##### 3.1.1 The Eco-design Education Centre

In order to promote the existing and developing knowledge and experience within the G.EN.ESI team, it is important to collate it and communicate it in an accessible format. To support this dissemination, the new project website includes an Eco-design Education Centre.

The Education Centre has been developed to provide a resource for industrial eco-design learning. This will include downloadable content that showcase's the team's knowledge within key areas of commercial eco-design, links to further eco-design information and learning resources, and specific teaching and training materials for the G.EN.ESI methodology and software platform. The industrial focus for this resource reflects the current needs of eco-design development and the knowledge transfer of the G.EN.ESI project.

The Education Centre can be found at [www.genesi-fp7.eu/education-centre](http://www.genesi-fp7.eu/education-centre).

##### 3.1.2 Dissemination of Eco-design Knowledge

To support the early stage of eco-design learning a series of downloadable industrial learning resources have been planned by the Dissemination Team.

*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



The following list of Eco-design topics has been chosen to provide a solid introduction to the key areas of eco-design, whilst also showcasing the expertise within the G.EN.ESI team. This introduction also supports the application and understanding of the methodology and software platform.

Introductory Eco-design Topics

- Life Cycle Thinking
- Eco-design
- Eco-design and Business
- Eco-design Strategies
- Life Cycle Assessment
- Eco-design Legislation and Regulation
- Eco-design Case Studies

This content will be available as a two page written summary (MS Word Doc), and a PowerPoint presentation to help support varied learning contexts.

The development of this content is being shared throughout the team, with assigned topics reflecting the areas of expertise and experience within the team. A content and timeline for the completion of these documents (doc) and presentations (pre) can be seen in Table 1.

Title	Lead Partner	2 <sup>nd</sup> Partner	Key Topics	Deadline
Life Cycle Thinking	ENEA	UBAH	<ul style="list-style-type: none"> <li>- The Principles of Lifecycle Thinking</li> <li>- The Role of Life Cycle Thinking</li> </ul>	8 <sup>th</sup> Nov – Doc 30 <sup>th</sup> Nov- Pre
Eco-design	UBAH	INPG	<ul style="list-style-type: none"> <li>- Introduction to Eco-design and strategies</li> <li>- Selecting appropriate eco-design strategy</li> <li>- Eco-design tools</li> </ul>	8 <sup>th</sup> Nov – Doc 30 <sup>th</sup> Nov- Pre
Eco-design and Business	UBAH		<ul style="list-style-type: none"> <li>- Strategic management of Eco-design</li> <li>- Challenges of co-design implementation</li> <li>- Eco-design risks and how to avoid them</li> <li>- Case studies</li> </ul>	30 <sup>th</sup> Nov – Doc 15 <sup>th</sup> Dec - Pre
Eco-design Strategies	UBAH	INPG Granta	<ul style="list-style-type: none"> <li>- Strategies for material impact reduction</li> </ul>	30 <sup>th</sup> Nov – Doc

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



			<ul style="list-style-type: none"> <li>- Strategies for reducing transportation impacts</li> <li>- Strategies for reducing production impacts</li> <li>- Strategies for tackling in-use energy consumption</li> <li>- Strategies for improving end-of-life</li> </ul>	15 <sup>th</sup> Dec-Pre
Life Cycle Assessment	ENEA	UNIVPM	<ul style="list-style-type: none"> <li>- LCA Introduction</li> <li>- LCA Methodology</li> <li>- LCA Applications</li> <li>- LCA Users</li> <li>- Procedure to carried out an LCA</li> </ul>	30 <sup>th</sup> Nov – Doc 15 <sup>th</sup> Dec-Pre
Eco-design Regulation and Legislation	INPG		<ul style="list-style-type: none"> <li>- Global regulation context in Europe</li> <li>- Timeline and general description of the different</li> <li>- New regulations on extended producer responsibility</li> <li>- Existing standards related to eco-design</li> <li>- Political pressure</li> </ul>	8 <sup>th</sup> Nov – Doc 30 <sup>th</sup> Nov-Pre
Eco-design Case Studies	UNIVPM	Granta	Collated under themes as agreed by the Dissemination Team.	Ongoing activity

**Table 1: Completion of Education Centre Content; distribution of tasks and deadlines**

These resources will be uploaded to the Education Centre and promoted via the website news section and LinkedIn group.

### 3.2 Key Dissemination Events for Primary G.EN.ESI Outcomes

#### 3.2.1 DESIGN 2014 Half Day Workshop – 19<sup>th</sup> May 2014

##### Partners Involved: INP Grenoble and UBath

The design society’s Design Conference is held in Croatia in May 2014. During this event the G.EN.ESI team are planning a practical, half day workshop that will introduce the G.EN.ESI methodology and software platform to the largely academic audience.

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



This workshop has three primary goals; to introduce the methodology and software platform, enable audience engagement with the methodology and software platform, and collect feedback on the methodology and software platform.

This event will be advertised through all advertising channels and will also be promoted through the Design Society's Eco-Design Special Interest Group LinkedIn group which currently has 638 members.

The plan for this workshop can be seen in Appendix 2.

### **3.2.2 Online Methodology and Software Platform Webinars – October 2014**

#### **Partners Involved – UBath, UNIVPM, INP Grenoble, ENEA, Granta**

To introduce the industrial community to the G.EN.ESI methodology and software platform two online webinars are planned.

The first of these webinars will introduce the methodology, explain how the methodology should be adopted in industry and provide examples of the impact the methodology has on product outcomes. The development of this webinar will be managed by UBath who will work closely with the INP Grenoble team.

The second webinar will show the software platform in use and exemplify its application to the design development of an electro-mechanical appliance. This webinar will move on to discuss how the platform of tools can be integrated into the product development process and exemplify the flexibility of the platform by detailing organisational scenarios of use.

The webinars will be promoted through the website and LinkedIn group. Once these webinars have been completed the recordings will be uploaded to the YouTube channel and will be accessible via the Education Centre. The development of this webinar will again be managed by UBath who will work closely with Granta, ENEA and UNIVPM.

### **3.2.3 Methodology and Software Platform Workshop at Trade Show – Sep-Dec 2014**

In order to ensure that the software platform and methodology are shared with industrial stakeholders, workshops will be held at suitable trade shows. Workshops, as opposed to stands, are seen as a more effective method of communication for the G.EN.ESI project, providing an opportunity for participants to learn more about our eco-design methodology whilst trialling and interacting with the software platform.

*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



The workshop would follow a similar format to the event held at DESIGN but would focus more heavily on the use, application and integration of the software platform.

The events currently being considered for this workshop include:

- Pollutec Horizons – December 2014 – Paris, France
- The Engineering Design Show – 22<sup>nd</sup>-23<sup>rd</sup> October 2014 – Coventry, UK
- CECED 2014 Presentation of the G.EN.ESI methodology and tools at the CECED in order to show the benefits achievable to an industrial audience.
- ECO-Manufacturing Show – 17<sup>th</sup>-19<sup>th</sup> September 2014 – Tokyo, Japan
- Design, Automation and Test in Europe (DATE) – 24-28<sup>th</sup> March 2014 – Dresden, Germany
- SETAC Europe LCA Case Study Symposium – Nov, 2014 - TBC

### **3.2.4 Eurocucina – Disseminating Application of Software within Faber – 8<sup>th</sup>-13<sup>th</sup> April 2014**

The Eurocucina is a key event for industrial partners Faber SPA. The 2014 event takes place in Milan, Italy and Faber are keen to showcase their involvement in the project at this event. This event is currently being planned by UBAH and Faber with support from the relevant software developers.

## **3.3 Dissemination of Academic Output**

### **3.3.1 Video Presentation of Academic Papers – 28<sup>th</sup> February 2014 (1<sup>st</sup> Event)**

The academic output from this project contains an in-depth insight into the thinking behind the G.EN.ESI project and the work completed in producing the G.EN.ESI outputs. This output tends to be shared via conference proceedings and presentation, somewhat limiting its accessibility. To increase the accessibility and audience for our research two recorded presentation events have been planned.

These events will consist of a series of 10 minute presentations documenting chosen academic papers written by the team. Each presentation will be filmed and uploaded to the

*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



G.EN.ESI project YouTube channel, allowing audiences to watch topics of relevance and interest. These video’s will be accessible from the Education Centre and promoted via the project news section and LinkedIn group.

The first event will be held on the 28<sup>th</sup> of February following the next general meeting. This will focus on the early research outcomes of the project and will include the titles and presenters shown in Table 2. These presentation titles have been agreed by the relevant partners.

Paper Title	Author and Presenter
Improving Eco-design Projects through Better Understanding of the Company Characteristics and Business Context	Molly Buckingham UBAH
Supply Chain Eco-information Sharing in the Product Development Process through Computer Aided Design	Mendy Mombeshora UBAH
Integrated Software Platform for Green Engineering Design and Product Sustainability	UNIVPM
A Case-Based Reasoning Approach to Support the Application of the Eco-Design Guidelines	UNIVPM
End-of-life Indices to Manage the De-manufacturing Phase During the Product Design Process	UNIVPM
Integration of eco-design activities into the design process using a methodology and an engineering platform	Maud Dufrene GRENOBLE INP

**Table 2: Recorded Video Conference: List of presentation titles and presenters**

A second event will be held after the final general meeting and will select from the papers written during the second half of the project. The plan is to stream this second event to a live, online audience, allowing questions and answers from those watching. This will be similar to a typical conference and the audience for this event will be developed through online advertising and contacts made throughout the project.

### 3.3.2 Academic Conferences and Journal Papers

Table 3 shows the list of conference and journal papers currently planned for the remaining 15 months of the G.EN.ESI project. The team have over 10 conference papers

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



and two journal papers currently planned for the academic dissemination of the project outcomes and events will be added to this list as the project progresses.

Event Name	Location	Date	Planned Content	Attending Partner(s)
<b>Conferences</b>				
Publish-ED Conference	Grenoble, France	30 <sup>th</sup> -31 <sup>st</sup> January 2014	Supplier Web Portal journal paper preparation	UBAH
International Conference on Sustainable Design and Manufacturing	Cardiff, Wales	28 <sup>th</sup> - 30 <sup>th</sup> April 2014	Publicise UBAH related research outcomes.	UBAH
Design Conference	Dubrovnik, Croatia	19 <sup>th</sup> -22 <sup>nd</sup> May 2014	Papers by UBAH, methodology workshop.	UBAH, INPG
CIRP LCE	Trondheim, Norway	18 <sup>th</sup> -20 <sup>th</sup> June 2014	DfEE: methodology and tool G.EN.ESI Platform Use scenario	UNIVPM
IDMME	Toulouse, France	18 <sup>th</sup> -20 <sup>th</sup> June 2014	G.EN.ESI Platform and its use	UNIVPM
Product Lifecycle Management Conference	Yokohama, Japan	7 <sup>th</sup> -9 <sup>th</sup> July, 2014	Supplier Web Portal	UBAH
ASME IDE TC/CE	Buffalo, NY.	17 <sup>th</sup> -20 <sup>th</sup> , 2014 August	G.EN.ESI Software Platform tools	UNIVPM
Care Innovation Conference	Vienna, Austria	14 <sup>th</sup> -15 <sup>th</sup> Nov 2014	Publicise UBAH related research outcomes.	UBAH
SETAC Europe LCA Case Study Symposium	TBD	TBD	Early results of GENESI	ENEA
CIRP DESIGN	Milan, Italy	TBD	LeanDfD tool and disassembly	UNIVPM

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*





			methodology	
<b>Journals</b>				
Journal of Productivity and Quality Management			G.EN.ESI Methodology and tools	UNIVPM
Journal of Product Innovation Management			Supplier Web Portal research	UBAH

**Table 3: List of Planned Conference and Journal Papers for the Remaining 15 months of the Project**

## 4 DISSEMINATION ACTIVITIES TO DATE

This section summarises the dissemination activities that have taken place to date. These activities have established a platform from upon which the final dissemination activities can be advertised and launched.

### 4.1.1 The G.EN.ESI Website

The updated G.EN.ESI website was published in September 2013 and can be viewed here [www.genesi-fp7.eu](http://www.genesi-fp7.eu). The new website offers a simplified and more aesthetically pleasing layout that enables users to access important information more easily. It also has improved functionality such as news feeds and blogging capabilities that help support dissemination activities. The website also includes the G.EN.ESI Education Centre.

### 4.1.2 The G.EN.ESI LinkedIn Group

The *Green Engineering Design and Product Sustainability Group* LinkedIn group was established in September 2013. This title was chosen to ensure broad appeal and search engine optimisation. To date this group has been used to promote G.EN.ESI dissemination outputs and general eco-design news. This group currently has 46 members from industry, academia and research but we are working to increase this number and have a target of 100 members by the end of 2013.

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



LinkedIn also has several very powerful tools that are being utilised to enable engagement with industrial and academic communities including a discussion board and blogging capabilities. By inviting a wide range of participants to this group and supporting engagement by maintaining activity on the site, the G.EN.ESI team have been able to reach out to stakeholders and interested parties. This activity will be continued throughout the duration of the project.

#### 4.1.3 Newsletter and Mailing List

A series of newsletters are planned for the second half of the project. The first of these was completed in September and sent to a mailing list of potentially interested parties. This list included stakeholders and interested parties identified by the team. The strategy for the distribution of this newsletter was to send a copy of the first version to everyone on the mailing list with an option to opt-in or out of future correspondence. This has led to the development of a much smaller group of interested parties.

Links to the newsletter have been included on the project website home page and interested parties can add themselves to the mailing list by completing the form on the 'Contact' page.

#### 4.1.4 Project Business Cards

Project business cards (Figure 3) have been developed for use when project partners meet relevant people at external events and workshops. This is a one sided card allowing each partner organisation to add their branding and details on the reverse.



*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*



Figure 3: G.EN.ESI Business Cards

#### 4.1.5 Project Leaflet

To support the team with dissemination at the events they attend, a project leaflet was developed. This can be seen in Appendix 4. This leaflet will be updated for use at the 2014 events listed above. The new leaflet will have updated content and aesthetics that are in line with the new website.

#### 4.1.6 Academic Conference Papers

To date the team have presented 11 papers at eight events internationally. Table 4 lists the papers already presented and/or published by the team.

Paper Title	Conference	Date	Partner	Status
How the Integration of Environmental Concerns Modifies the Integrated Design Process	CIRP Annals	11 <sup>th</sup> -13 <sup>th</sup> March 2013	Grenoble INP	Published
A Case-Based Reasoning Approach to Support the Application of the Eco-Design Guidelines	CIRP LCA	17 <sup>th</sup> -19 <sup>th</sup> April 2013	UNIVPM	Published
Integrated Software Platform for Green Engineering and Product Sustainability	CIRP LCE	17 <sup>th</sup> -19 <sup>th</sup> April 2013	UNIVPM/ Grenoble INP	Published
Web-Based Portal for Sharing Information through CAD/PLM Software during the Eco-Product Development Process	PLM	6 <sup>th</sup> -10 <sup>th</sup> July	UBAH	Presented
A Methodology and a Software Platform to Implement an Eco-design Strategy in a Manufacturing Company	ASME 2013 – IDETC/CIE	4 <sup>th</sup> -7 <sup>th</sup> August 2013	UNIVPM/ Grenoble INP	Presented
An Engineering Platform to Support a Practical Integrated Eco-design Methodology	CIRP General Assembly	17 <sup>th</sup> -24 <sup>th</sup> August, 2013	Grenoble INP	Published

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



Improving Eco-Design Projects Through Better Understanding Of The Company Characteristics And Business Context	ICED	19 <sup>th</sup> -22 <sup>nd</sup> Aug 2013	UBAH	Presented
Supply Chain Eco-Information Sharing in the Product Development Process through Computer Aided Design	ICED	19 <sup>th</sup> -22 <sup>nd</sup> Aug 2013	UBAH	Presented
Eco-design guidelines and Eco-Knowledge Integration in Product Development Process	ICED	19 <sup>th</sup> -22 <sup>nd</sup> Aug 2013	UNIVPM	Presented
Design for Disassembly Tool to Encourage End-of-Life Closed-loop Scenarios	XI Convegno Dell'Associazione Italiana Di Tecnologia Meccanica	9 <sup>th</sup> -11 <sup>th</sup> September 2013	UNIVPM	Presented
End-of-life Indices to Manage the Demanufacturing Phase During the Product Design Process	CARV 2013	6 <sup>th</sup> -9 <sup>th</sup> October	UNIVPM/ Grenoble INP	Presented

Table 4: List of Papers Already Presented and/or Published by the G.EN.ESI Team

#### 4.1.7 Presentations to External Audiences

To date the G.EN.ESI project has been presented to four external audiences (see Table 5), and discussions of the content of the project have taken place at all four of these.

Date, Place	Type	Type of Audience	Countries Addressed	Approx. size of Audience	Partner
18 <sup>th</sup> March 2013 Eco-design Centre, Wales	Presentation/ Meeting	Eco-design research	UK	5	UBath
1 <sup>st</sup> May 2013, Design for Environment Working Group, Bristol	Presentation/ Meeting	Aerospace and defence industry	UK	10	UBath
14 <sup>th</sup> March 2013, EMIT	Presentation/	Aerospace and defence industry	UK, France, USA, Puerto Rico	15	Granta

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



Consortium meeting, Marseille	Meeting				
8 <sup>th</sup> October 2013, Integrated Environmental Management Distance Learning Course	Presentation/ Workshop	Environmental Management – varied backgrounds	UK, Africa, America	11	UBath

Table 5: External presentations completed by the G.EN.ESI team

#### 4.1.8 The G.EN.ESI PhD Conference

To help encourage idea and information exchange amongst the academic partners within the G.EN.ESI team, a PhD group has been developed. This group includes research students from each of the academic partners and the group has arranged a series of mini conferences to be held after each general meeting. The first of these conferences took place on the 18<sup>th</sup> of July 2013. During this meeting each of the students presented their PhD topic. The next event will take place after the next technical meeting in February 2014.

#### 4.1.9 Development of Commercially Sensitive Information Guidelines

Due to the potentially commercially sensitive nature of the work completed during the G.EN.ESI project a set of project wide guidelines has been developed. These guidelines establish a protocol for reviewing and approving content before it is released to ensure that commercial sensitivity is addressed. These guidelines can be found in the ‘Private Area’ of the website. Table 4 has been included for reference and it documents the review period that must be given for each type of dissemination material.

<u>Dissemination Content</u>	<u>Release and/or Update</u>	<u>Authoring Partner</u>	<u>Feedback Period</u>
Project Brochure	Quarterly	UBAH	15 days
Project Conference Poster	Quarterly	UBAH	15 days

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



Project Newsletters	Quarterly	UBAH	15 days
Presentation Slides	Quarterly	UBAH	15 days
Project Blog	Monthly	UBAH	7 days
Individual Conference Poster	Intermittently	All Partners	7 days
External Information Requests	Intermittently	All Partners	N/A
Conference Papers	Intermittently	Research Partners	7 days (Exploitation Board)
Journal Papers	Intermittently	Research Partners	15 days (Exploitation Board)
Relevant visits to third parties	Intermittently	All Partners	3 days prior to visit (questions)
Teaching (students), training (industry) and e-learning output	Intermittently	All Partners	15 days
Filming workshops and documenting external input	Intermittently	All Partners With External Parties	N/A

Table 4: Review period agreed for each type of dissemination

*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



## 5 APPENDICES

### 5.1 Appendix 1 – Identified Project Stakeholders

Government Funded Organisations	Energy and Environment Agency (UK/France/Germany)
	Chambers of Commerce (All Partner Countries)
	ASTER-Consortium for Innovation and Technology Transfer
Trade/Professional Organisations	Confindustria – 145,000 Italian manufacturing and service companies
	Les Entrepreneurs de la Filiere Dechet – SMEs working in waste management
	ANIE – 11 Associations uniting Italian electromechanical and electronic companies
	Granta's 'Environmental Materials Information Technology' consortium (EMIT)
	Whitegoods Trade Association – Dedicated to repairers of large domestic appliances in the UK
	IMechE – Institute of Mechanical Engineers UK
	CNA, the National Confederation of the Craft Sector and Small and Medium Enterprises CRIT Research™ technology broker
Research/Environmental Design Promotion	Eco-design Network – run by the EDC UK
	Reseau ECO-SD – France
	The Design Council – UK
	Participating Universities
	Non-Participating Universities
	ENEA
	OREE – Environmental not-for-profit particularly focusing on eco-management
	Eco-systemes – 35 French producers and distributors promoting the collection and process of WEEE
	Rete Italiana di LCA – Italian LCA Network
	Meccano Spa – Marche region's center of technological innovation and enterprise in the engineering sector
	ERP – European Recycling Platform
	EUP – European Energy Network
	European Enterprises Network
	TSB UK – Technology Strategy Board – promoting innovation in business
	BCSD – UK – Business Council for Sustainable Development



*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



Commercial	Household appliance manufacturers – Indesit, Ariston, Philips, Hotpoint etc.
	Manufacturing equipment companies – Biesse Spa etc.
	Industrial automation companies – Luccioni Group, Fiat automobiles
	Granta's customers
	Universities industrial partners



*This project is co-financed by the European Commission and made possible within the VII Framework Programme*





## 5.2 Appendix 2 – Plan for Methodology Workshop at DESIGN

### A short brief of our concept of the workshop

The Workshop will present a methodology and software platform that supports companies integrating ecodesign in their product development process (PDP).

First an introduction will present ecodesign. The second part of the workshop will be dedicated to the presentations of the methodology and the platform aiming at integrating ecodesign in the PDP. The third part will be dedicated to the use of the platform. Finally the last part will be dedicated to feedback and discussion.

The workshop will be half a day long.

### Contents

Session 1 (15mins): Introduction to Eco-design – a video

Session 2 (45mins): Presentation of the G.EN.ESI methodology and the G.EN.ESI software tools.

Exemplify how each tool is included within the design process to support implementation of the methodology (videos of the prototype tool being used). Including time for questions and clarifications for the participants.

Session 3 (15mins): Introduction to the interactive part of the workshop and the 'roles' that the team members must assume – leave teams to decide who takes each role.

This session involves a role play where the participants form a company. This will be as interactive as possible. The participants are divided into groups of 5 people and each group represents a 'company'. Each participant will take on a persona that represents a specific role in the company; a project manager, a designer, an environment expert, a buyer and a supplier.

**Twenty minute break for tea/biscuits or an hours break for lunch dependent on the time of day/structure of the conference.**

Session 4 (1hr 15mins): Implementation of the G.EN.ESI methodology through use of the G.EN.ESI platform.

Each company will be given a report detailing the environmental performance of a cooker hood and a CAD model of a new concept design. They will be asked to use the relevant software tools (Eco-audit and built in LCC, DfEE, CBR) to review the



new design. The aim is for each company to develop and present further design recommendations and their long term business strategy for supporting the environmental development of the product.

Session 5 (30mins): Feedback and discussions

### **Participants' Take-Homes**

Participants will be introduced to the G.EN.ESI project and be given a practical experience of its methodology and platform. They will be introduced to both the practical aspects of eco-design and the wider business considerations needed to address eco-design successfully. They will be able to use this session to reflect on their own experiences of eco-design implementation in industry and contribute this to their teams. By allowing participants to work together in teams, this workshop will enable knowledge transfer and networking amongst the participants.

### **Our Take-Homes**

The use of our methodology and our software platform by different participants will help us to get feedback on this work. Indeed, this workshop will help us identifying the strengths and weaknesses of the methodology and platform. From this we hope to propose some improvements or additional functions to the G.EN.ESI project team.



### 5.3 Appendix 3 – Timeline for Final Dissemination Events

			2013			2014															
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan			
Dissemination Activity	Partners	Key Tasks																			
Academic Paper Presentation 1	UBAH, UNIVPM, INPG	Select paper and prepare presentations	█																		
		Determine location and suitable recording equipment	█																		
		Conduct event	█																		
		Edit videos	█																		
		Upload to website and LinkedIn	█																		
Academic Paper Online Conference	UBAH, UNIVPM, INPG, ENEA	Select papers and prepare presentations												█							
		Prepare advertising strategy and material												█							
		Conduct event	█																		
		Edit videos	█																		
			█																		



*This project is co-financed by the European Commission and made possible within the VII Framework Programme*





<p>Software Platform Webinar</p>	<p>All Partners</p>	<p>Adapt conference workshop material for an industrial audience  Decide location and ensure facilities  Prepare advertising strategy and material for webinar  Disseminate advertising material  Conduct webinar</p>	 <p>The Gantt chart consists of four blue rectangular bars of decreasing length, stacked vertically. A red vertical bar on the right side is labeled 'Deadline' and spans the vertical extent of the bars.</p>
--	-------------------------	---	---





*This project is co-financed by the European Commission  
and made possible within the VII Framework Programme*





## 5.4 Appendix 4 - Project Leaflet

*Commercial Partners*



The commercial partners provide the expertise needed to optimise the full product life cycle within the software environment.











*Research Partners*

The research partners have a wealth of experience in environmental design tools, processes, and business systems.






*Green Engineering Design*

An Integrated Software Platform that Incorporates Life Cycle Assessment and Life Cycle Costing Within the Design Process

[www.genesi-fp7.eu](http://www.genesi-fp7.eu)

This project is co-financed by the European Commission and made possible within the VII Framework Programme



*This project is co-financed by the European Commission and made possible within the VII Framework Programme*



### The Methodology

- The G.EN.ESI methodology is a decision making tool that supports the introduction of environmental considerations during early stage development.
- The methodology encourages business and design practices that enable a company to address environmental issues alongside technical and economic criteria.
- The methodology achieves this by integrating Life Cycle Assessment and eco-design decision making strategies with traditional design tools such as 3D CAD.
- This methodology is aimed at design and engineering businesses who work within the electromechanical sector.

### The Project

- The G.EN.ESI project aims to address the lack of easy to use and robust tools for environmental evaluation at the design stage.
- The project is aimed at the household appliance industry but aims to develop a methodology that can be easily extended to other electro-mechanical products.
- The G.EN.ESI project will address the need for better environmental evaluation during design through the development of a software platform and supporting eco-design methodology.
- These aim to help designers make ecological design choices without losing sight of cost and typical practicalities of industry.

### The Platform

- The G.EN.ESI platform is a CAD integrated software platform that empowers designers and engineers with the information and ability to make environmental design decisions during development.
- The platform offers a robust, dynamic and easy to use assessment tool that works alongside the CAD and PLM tools already in use.
- This streamlines the environmental assessment process by drawing upon knowledge already available within the business and supply chain.
- Use of this tool will allow companies to better understand the environmental impacts of their designs whilst supporting their activities to address them.



*This project is co-financed by the European Commission and made possible within the VII Framework Programme*

