



Innovation and
ecodesign in the
ceramic industry

Support material for trainers

2011



InEDIC Support Material for Trainers

Ceramic companies are taking their first steps in ecodesign as a milestone for sustainable development.

To increase and support these initiatives the InEDIC project provides a manual and a set of tools. For an easier and improved approach to managers or companies to whom designers are projecting, designers must be familiar with this Manual and set of tools, using them systematically and without ignoring any of the aspects that must be considered.

The InEDIC support material for trainers is a training programme which resulted from the InEDIC project's experience and consists of 30 hours of training divided in 6 sessions using the InEDIC Ecodesign Manual, its tools and other resources available at the project site (www.inedic.net). For each session, the following is proposed: duration, objectives, programme, training resources and methods.

The training programme here presented aims at supporting trainers and should be adapted to each specific case, according to the type of company(ies) and products, the needs of the trainees and the time available.

The methodology allows the development of new skills arising from the analysis and real problems solving, making possible the development of these sessions in a range of different environments: classroom; meetings between teams at companies; seminars, etc;

The training programme is based on active learning methodology, in which after a theoretical presentation of contents trainees are invited to test the application of tools in ongoing projects.

Training session	Proposed duration
Session 1. Introduction to ecodesign and project planning	½ day
Objectives	
The first session is a platform to discuss ecodesign and what does it mean for ceramic products.	
Contents	
<ul style="list-style-type: none"> • Introduction to ecodesign in ceramics • Introduction to the training, objectives, methodology, training sessions, support material, manual and time frame • Ecodesign project step-by-step • Step 1: ecodesign project planning <ul style="list-style-type: none"> — Start up and get top management commitment for the project — Set up project team — Investigate motivation factors for ecodesign — Select the target product — Brief — Project plan 	
Methodology	
In-classroom session consisting of <ul style="list-style-type: none"> • Presentations • Work groups • Examples • Exercises with the tools • Debates 	
Related chapters from the InEDIC Manual	Related tools from the InEDIC manual
<ul style="list-style-type: none"> • Chapter 1 – Introduction • Chapter 2 – Ecodesign project step-by-step • Chapter 3 – Motivating factors for ecodesign 	<ul style="list-style-type: none"> • Tool 1 – Investigation of motivation factors for ecodesign • Tool 2 – Product selection/ecodesign potential
Support	
<ul style="list-style-type: none"> • Slides • InEDIC tools and chapters • InEDIC demo cases • InEDIC resource centre • Training session evaluation questionnaire 	

Training session		Proposed duration
Session 2. Product analysis		1 day
Objectives		
The objective of the session is to provide trainees with knowhow on the types of analysis that should be done to the reference product, how to involve different experts in the company (environment, finances, marketing, quality, etc.) in product analysis and the types of results these studies convey.		
Contents		
<ul style="list-style-type: none"> • Step 2: Product analysis <ul style="list-style-type: none"> — Methodologies and support tools to analyze the reference product — Characterization of the product and definition of the functional unit — Environmental analysis — Cost analysis — Market analysis — Economic analysis — Legal requirements • Ecobenchmarking • Green marketing and communication 		
Methodology		
In-classroom session consisting of <ul style="list-style-type: none"> • Presentations • Work groups • Examples • Exercises with the tools • Debates 		
Related chapters from the InEDIC Manual		Related tools from the InEDIC manual
<ul style="list-style-type: none"> • Chapter 2 – Ecodesign project step-by-step • Chapter 5 – Market analysis • Chapter 6 – Environmental analysis • Chapter 7 – Economic analysis • Chapter 9 – Ecobenchmarking • Chapter 12 – Green marketing and communication 		<ul style="list-style-type: none"> • Tool 3 – Design brief • Tool 4 – Market analysis • Tool 5 – Environmental inputs and outputs worksheet • Tool 6 – MET matrix • Tool 7 – Economic profile • Tool 8 – Product analysis worksheet (synthesis)
Support		
<ul style="list-style-type: none"> • Slides • InEDIC tools and chapters • InEDIC demo cases • InEDIC resource centre • Training session evaluation questionnaire 		

Training session		Proposed duration
Session 3. Ecodesign strategies		1 day
Objectives		
At the end of the session the trainees should be familiar with the ecodesign strategies and principles and be able to explain and apply the method in the company (those involved in demo projects); they should also be aware of what information they need to research in order to apply the tools for their specific product.		
Contents		
<ul style="list-style-type: none"> • Step 3: Ecodesign strategies <ul style="list-style-type: none"> — Ecodesign strategies applied in product development (general) — Ceramic-specific ecodesign strategies – Tool 9 (exercise) 		
Methodology		
In-classroom session consisting of <ul style="list-style-type: none"> • Presentations • Work groups • Examples • Exercises with the tools • Debates 		
Related chapters from the InEDIC Manual	Related tools from the InEDIC manual	
<ul style="list-style-type: none"> • Chapter 2 – Ecodesign project step-by-step • Chapter 8 – Ecodesign strategies 	<ul style="list-style-type: none"> • Tool 9 – Ecodesign strategies for ceramics • Tool 11 – Economic assessment of ecodesign measures • Tool 12 – Improvement option evaluation matrix • InEDIC Materials and Technologies databases 	
Support		
<ul style="list-style-type: none"> • Slides • InEDIC tools and chapters • InEDIC demo cases • InEDIC resource centre • Training session evaluation questionnaire 		

Training session		Proposed duration
Session 4. Creative thinking		1 day
Objectives		
Trainees from companies are used to develop their concepts in the companies. This training session helps to integrate the previous steps in the development and evaluation of new product concepts.		
Contents		
<ul style="list-style-type: none"> • Creative thinking – introduction • Step 4: New product concept <ul style="list-style-type: none"> — Develop concepts for the product — Analysis and evaluation of product concepts to detail — Definition of the final product concept • Step 5: Product detailing <ul style="list-style-type: none"> — Definition of product specifications: technical aspects, quality and safety aspects, environmental aspects, economic aspects, legal and other aspects — Prototyping 		
Methodology		
In-classroom session consisting of <ul style="list-style-type: none"> • Presentations • Work groups • Examples • Exercises with the tools • Debates 		
Related chapters from the InEDIC Manual		Related tools from the InEDIC manual
<ul style="list-style-type: none"> • Chapter 2 – Ecodesign project step-by-step • Chapter 10 – Creative thinking 		<ul style="list-style-type: none"> • Tool 4 – Market analysis • Tool 5 - Environmental inputs and outputs worksheet • Tool 6 – MET matrix • Tool 10 – Brainstorming • Tool 11 – Economic feasibility assessment of ecodesign • Tool 12 - Improvement option evaluation matrix • Tool 13 – Morphological box • InEDIC Materials and Technologies databases
Support		
<ul style="list-style-type: none"> • Slides • InEDIC tools and chapters • InEDIC demo cases • InEDIC resource centre • Training session evaluation questionnaire 		

Training session		Proposed duration
Session 5. Marketing and communication		½ day
Objectives		
<p>This training session provides the basis for internal and external promotion of the ecodesigned product, to support its production and market launch. Labels, environmental product declarations and other communication tools are presented. This session also focus on the development of a marketing strategy, in line with the ecodesign project and the objectives defined in the brief.</p>		
Contents		
<ul style="list-style-type: none"> • Step 6: Production and market launch <ul style="list-style-type: none"> — Production — Internal promotion of the product — Market launch and supply • Green marketing and communication • Development of a marketing strategy 		
Methodology		
<p>In-classroom session consisting of</p> <ul style="list-style-type: none"> • Presentations • Work groups • Examples • Exercises with the tools • Debates 		
Related chapters from InEDIC Manual		Related tools from InEDIC manual
<ul style="list-style-type: none"> • Chapter 2 – Ecodesign project step-by-step • Chapter 12 – Green marketing and communication 		
Support		
<ul style="list-style-type: none"> • Slides • InEDIC tools and chapters • InEDIC demo cases • InEDIC resource centre • Training session evaluation questionnaire 		

Training session		Proposed duration
Session 6. Project evaluation and follow-up		½ day
Objectives		
<p>The conclusion of an ecodesign project requires the evaluation of the project itself and the new product final and should be the starting point for further activities on ecodesign in the company. This process is also an input to the strategic choices of the company for the future. This session aims at building competences for this purpose.</p>		
Contents		
<ul style="list-style-type: none"> • Step 7. Evaluation of the project and product <ul style="list-style-type: none"> — Evaluation of the ecodesign project — Evaluation of the final ecodesigned product — Report • Step 8. Follow-up activities <ul style="list-style-type: none"> — Extending the ecodesign methodology to other products and projects — Integration of ecodesign in company's processes and management systems • Design for sustainability • Final evaluation of the training 		
Methodology		
<p>In-classroom session consisting of</p> <ul style="list-style-type: none"> • Presentations • Work groups • Examples • Exercises with the tools • Debates 		
Related chapters from InEDIC Manual		Related tools from InEDIC manual
<ul style="list-style-type: none"> • Chapter 2 – Ecodesign project step-by-step • Chapter 4 – Innovation • Chapter 11 – Environmental management systems and ecodesign • Chapter 13 – Design for sustainability 		<ul style="list-style-type: none"> • Tool 14 – Ecodesign evaluation questionnaire • Tool 15 – Environmental management systems and ecodesign checklist
Support		
<ul style="list-style-type: none"> • Slides • InEDIC tools and chapters • InEDIC demo cases • InEDIC resource centre • Training session evaluation questionnaire 		