



COOP-CT-2004-513045
Stepwise EPD



Stepwise EPD

Final report

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1 Management report

1.1 Justification of major cost items

Below follows brief descriptions of the work carried out in each work program by respective partner during the period. Major cost items (excluding working costs) are highlighted. Large deviations from the budget are explained.

1.1.1 WP 1

The work carried out in work package 1 has followed the plan quite well as described in the table below. Work package 1 concerns IVF, Mercatus, Etac and Huskvarna. There are some major deviations between incurred costs and budgeted costs for the three SMEs, however it was expected that some companies would spend much more time and energy on project activities than others, see for example Section 5 in the Description of work.

IVF has, in total, spent 104% of budget for WP 1. The work achieved matches the working costs. Major cost items 2 except salaries are 5500 Euro for travels, 2200 Euro meeting costs and 2100 Euro for data and software license. Note that WP 1 contains managerial activities for the Coordinator IVF. The overspending is mainly due to a change in the workplan, described in amendment 3, and is balanced by less spending in WP 5.

Mercatus has, in total, spent 188% of their budget for WP1. Major cost items except salaries are 3500 Euro for travels. Mercatus participated in both the midterm meeting, the Swedish national EPD conference and in the concluding international Riga meeting. The enthusiasm for EPDs in the first period was followed up by mainly market related EPD activities in period 2. Mercatus also implemented, in new orders, many of the design options found.

Etac has, in total, spent 86% of their budget. There are no major cost items except salaries.

Huskvarna has, in total, spent 85% of their budget. There are no major cost items except salaries.

Table 1 Work carried out in WP1 during 2004-10-01 to 2006-12-31

WP 1 Planned month	WP1 Activity	WP 1 Date completed
Nov 04-Dec 04	Scoping discussion between IVF and Mercatus, Huskvarna and Etac respectively	Nov 04
Nov 04-Jan 05	Inventory by Mercatus, Huskvarna and Etac respectively with the aid of a template for that purpose including Mercatus, Huskvarna and Etac respectively inputs for the non-quantitative parts of the EPD	April 05
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by IVF	May 05
Mar 05-Apr 05	IVF and Mercatus, Huskvarna and Etac respectively examines preliminary EPD and LCA together. IVF finalizes draft EPD.	June 05
Apr 05-May 05	Review of draft EPD by Mercatus, Huskvarna and Etac respectively	June 05

WP 1 Planned month	WP1 Activity	WP 1 Date completed
May 05	Review of EPD by other project RTD.	Sep 05
May 05-Jun 05	Revision of EPD, if necessary, by Mercatus, Huskvarna and Etac respectively and IVF together.	Sep 05
Jun 05-jul 05	IVF finalizes camera-ready-copy of EPD and delivers to Mercatus, Huskvarna and Etac respectively, project management and the Swedish Environmental Mangement Council	Sep 05
Jul 05-Aug 05	IVF documents the LCA-information in Sirii Environmental Data Network	At the mid-term meeting it was decided no to carry out this activity
Sep 05	Eco-design options workshop at Mercatus, Huskvarna and Etac respectively. Mercatus also took part in expert workshop on life cycle cost.	Sep 05 and workshop at Etac 28 Oct. All yielded good results.
Sep 05	Marketing options workshop at Mercatus, Huskvarna and Etac respectively	Various marketing activities carried out, see Impact report D16.
Sep 05- Dec 06	Mercatus, Huskvarna and Etac respectively initiates improvement project(s) based on the eco-design options if found financially viable	December 06, but will carry on after project completion
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.	Took place in November 05
Sep 05- Dec 06	Mercatus, Huskvarna and Etac respectively carries out marketing actions based on the marketing options if found financially viable	Various meetings and events, see Impact report D16.
April 06-Dec 06	Improved EPDs	Dec 2006
Feb 06-Mar 06	Plans for upgrading the "first-step" EPDs to EPDs verified by a third party. One for each company respectively.	Oct 2006
Jun 06- Jul 06	RTD evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 2006, see Impact report D16.
Jul 06-Aug 06	RTD writes scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	Oct 06 first paper Second paper in draft form. D24.
Aug 06	National workshop to promote EPDs and the Stepwise Approach	Sep 06
Oct 05-Dec 06	Project management extra	All period

1.1.2 WP 2

The work carried out in workpackage 2 has followed the plan quite well as described in the table below. Workpackage 2 concerns INETI, Polisport, Cruzinox and Concretope.

INETI has, in total, spent 96% of their budget for WP 2. The work achieved matches the working costs. Major cost items except salaries are 4400 Euro for travels and 7500 Euro other costs which include costs for hosting the midterm meeting, organizing a national EPD conference and training of INETI personnel in life cycle assessment.

Polisport has, in total, spent 187% of their budget for WP 2. Major cost items except salaries are 860 Euro for travels. Polisport participated in both the midterm meeting, the national EPD conference and in the concluding international Riga

meeting. They were the only partner that actively started to work on upgrading the Stepwise EPD to a full EPD. This work is still on-going.

Cruzinox has, in total, spent 79% of their budget for WP 2. Major cost items except salaries are 2600 Euro for travels. Cruzinox participated in the kick-off meeting, the midterm meeting, the national EPD conference and in the concluding international Riga meeting.

Concretepe has, in total, spent 123% of their budget for WP 2, excluding audit certificate costs. Major cost items except salaries are 1600 Euro for travels. Concretepe participated in the kick-off meeting, the midterm meeting, the national EPD conference and in the concluding international Riga meeting.

Table 2 Work carried out in WP2 during 2004-10-01 to 2006-12-31

WP 2 Planned month	WP2 Activity	WP 2 Date completed
Nov 04-Dec 04	Scoping discussion between INETI and Cruzinox, Concretepe and Polisport respectively	November 04
Nov 04-Jan 05	Inventory by Cruzinox, Concretepe and Polisport respectively with the aid of a template for that purpose including Cruzinox, Concretepe and Polisport respectively inputs for the non-quantitative parts of the EPD	Cruzinox – December 04 Concretepe – March 05 Polisport – May 05
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by INETI	Cruzinox – July 05 Concretepe – July 05 Polisport – October 05
Mar 05-Apr 05	INETI and Cruzinox, Concretepe and Polisport respectively examines preliminary EPD and LCA together. INETI finalizes draft EPD.	October 05
Apr 05-May 05	Review of draft EPD by Cruzinox, Concretepe and Polisport respectively	October 05
May 05	Review of EPD by other project RTD.	Cruzinox – October 05 Concretepe – October 05 Polisport – waiting for revision by RTD partner
May 05-Jun 05	Revision of EPD, if necessary, by Cruzinox, Concretepe and Polisport respectively and INETI together.	This activity took place at the same time as the EPD's were presented to Cruzinox, Concretepe and Polisport
Jun 05-jul 05	INETI finalizes camera-ready-copy of EPD and delivers to Cruzinox, Concretepe and Polisport respectively, project management and the Swedish Environmental Mangement Council	November 05 for Cruzinox and Concretepe's EPDs. Polisport's EPD is delayed.
Jul 05-Aug 05	INETI documents the LCA-information in Sirii Environmental Data Network	At the mid-term meeting it was decided no to carry out this activity
Sep 05	Eco-design options workshop at Cruzinox, Concretepe and Polisport respectively.	Cruzinox - February 05, based on previously existing LCA calculations. 39 improvement options for further evaluation. As for Concretepe and Polisport, the workshops I took place in December 05.
Sep 05	Marketing options workshop at Cruzinox, Concretepe and Polisport respectively	Preliminary marketing evaluation undertaken in October on the basis of clients evaluation of the draft stepwise EPDs. Further activities took place in November/ December 05
Sep 05- Dec 06	Cruzinox, Concretepe and Polisport respectively initiates improvement project(s) based on the eco-design options if found financially viable	December 06, but will carry on after project completion

WP 2 Planned month	WP2 Activity	WP 2 Date completed
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.	Took place in November 05
Sep 05- Dec 06	Cruzinox, Concretope and Polisport respectively carries out marketing actions based on the marketing options if found financially viable	Various meetings and events. See Impact report D18
April 06-Dec 06	Improved EPDs	Dec 2006
Feb 06-Mar 06	Plans for upgrading the "first-step" EPDs to EPDs verified by a third party. One for each company respectively.	Completed June 2006 for Polisport
Jun 06- Jul 06	RTD evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 2006. See Impact report D18
Jul 06-Aug 06	RTD writes scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	Oct 06 first paper Second paper in draft form
Aug 06	National workshop to promote EPDs and the Stepwise Approach	Oct 05 and Oct 06. See Impact report D18

1.1.3 WP 3

The work carried out in workpackage 3 has followed the plan quite well as described in the table below. Workpackage 3 concerns IVL, SSER and Konto.

IVL has, in total spent 97% of their budget for WP 3. The work achieved matches the working costs. Major cost items except salaries are 6500 Euro for travels.

SSER has, in total spent 105% of their budget for WP 3. The work achieved matches the working costs. Major cost items except salaries are 2000 Euro for travels.

Konto has spent, in total, 91% of their budget for WP 3. Major cost items except salaries are 2000 Euro for travels.

Table 3 Work carried out in WP3 during 2004-10-01 to 2006-12-31

WP 3 Planned month	WP3 Activity	WP 3 Date completed
Nov 04-Dec 04	Scoping discussion between IVL, SSE in Riga and Konto	Feb 05
		May 05
Nov 04-Jan 05	Inventory by Konto with the aid of a template for that purpose including inputs from Konto for the non-quantitative parts of the EPD	
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by IVL and SSE in Riga	June 05
Mar 05-Apr 05	IVL and SSE in Riga and Konto examines preliminary EPD and LCA together. IVL and SSE in Riga finalizes draft EPD.	June 05
Apr 05-May 05	Review of draft EPD by Konto	Sept 05
May 05	Review of EPD by IVF	Sept 05
		Okt 05
May 05-Jun 05	Revision of EPD, if necessary, by Konto, IVL and SSE in Riga.	
Jun 05-jul 05	IVL finalizes camera-ready-copy of EPD and delivers to Konto, and to the Swedish Environmental Management Council	Sep 06. Draft ready since October 05
Jul 05-Aug 05	IVL documents the LCA-information in Sirii Environmental Data Network	At the mid-term meeting it was decided no to carry out

WP 3 Planned month	WP3 Activity	WP 3 Date completed
		this activity
Sep 05	Eco-design options workshop at Konto	June 2005
Sep 05	Marketing options workshop at Konto	June 2005
Sep 05- Dec 06	Konto initiates improvement project(s) based on the eco-design options if found financially viable	December 06, but will carry on after project completion
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.	Took place in November 05
Sep 05- Dec 06	Konto carries out marketing actions based on the marketing options if found financially viable	Various meetings and events. See Impact report D19.
April 06-Dec 06	Improved EPDs	Feb 2007
Jun 06- Jul 06	RTD evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 2006. Impact report D19.
Jul 06-Aug 06	RTD writes scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	Oct 06 first paper Second paper in draft form
Aug 06	National workshop to promote EPDs and the Stepwise Approach	Sep 06

1.1.4 WP 4

The work carried out in work package 4 has followed the plan quite well as described in the table below. Work package 4 concerns 2.-0, Melitek, Neba and Newline.

2.-0 has, in total, spent approx 114% of their budget for WP 4. Major cost items except salaries are 3600 Euro for travels. Work with the input/output database is the main reason for 2.-0 spending more than budget.

Melitek has, in total, spent around 93% of their budget for WP 4. Major cost items except salaries are 1600 Euro for travels. Melitek took part in the Riga International conference.

Neba has, in total, spent 81% of their budget for WP 4. No major cost items except salaries. Newline has, in total, spent 41% of their budget for WP 4. No major cost items except salaries. Neither Neba nor Newline took part in any of the international project meetings themselves. They worked largely together and their experience was channeled to the Consortium via the RTD-performer 2.-0.

Table 4 Work carried out in WP4 during 2004-10-01 to 2006-12-31

WP 4 Planned month	WP4 Activity	WP 4 Date completed
Nov 04-Dec 04	Scoping discussion between 2.-0 and Melitek, Neba and Newline respectively	January 2005
Nov 04-Jan 05	Inventory by Melitek, Neba and Newline respectively with the aid of a template for that purpose including Melitek, Neba and Newline respectively inputs for the non-quantitative parts of the EPD	March 2005 (drafts)

WP 4 Planned month	WP4 Activity	WP 4 Date completed
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by 2.-0	April 2005
Mar 05-Apr 05	2.-0 and Melitek, Neba and Newline respectively examines preliminary EPD and LCA together. 2.-0 finalizes draft EPD.	Delayed
Apr 05-May 05	Review of draft EPD by Melitek, Neba and Newline respectively	Delayed
May 05	Review of EPD by other project RTD.	Delayed
May 05-Jun 05	Revision of EPD, if necessary, by Melitek, Neba and Newline respectively and 2.-0 together.	Delayed
Jun 05-Jul 05	2.-0 finalizes camera-ready-copy of EPD and delivers to Melitek, Neba and Newline respectively, project management and the Swedish Environmental Mangement Council	April 06 for Neba and Newline. November 06 for Melitek. Drafts ready since 2005.
Jul 05-Aug 05	2.-0 documents the LCA-information in Sirii Environmental Data Network	At the mid-term meeting it was decided no to carry out this activity as planned. D10 Generalized input-output based database for Stepwise EPD layout 2 used in Denmark replaced in Denmark.
Sep 05	Eco-design options workshop at Melitek, Neba and Newline respectively.	May 2005 Newline; June NEBA; Melitek April
Sep 05	Marketing options workshop at Melitek, Neba and Newline respectively	See Impact reports D17a and D17 b
Sep 05- Dec 06	Melitek, Neba and Newline respectively initiates improvement project(s) based on the eco-design options if found financially viable	No financially viable eco-design options found in Denmark.
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.	Took place in November 05
Sep 05- Dec 06	Melitek, Neba and Newline respectively carries out marketing actions based on the marketing options if found financially viable	Various meetings and events. See Impact reports D17a and D17 b
April 06.Dec 06	Improved input/output database for Stepwise EPD	Nov 06
Jun 06- Jul 06	RTD evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 2006. Impact reports D17a and D17 b
Jul 06-Aug 06	RTD writes scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	Oct 06 first paper Second paper in draft form
Aug 06	National workshop to promote EPDs and the Stepwise Approach	Dec 06.

1.1.5 WP 5

The work carried out in work package 5 has followed the plan as described in the table below. Work package 5 concerns IVF, IVL, INETI, 2.-0, SSER, Vattenfall and SEMC.

IVF has, in total, spent 80% of their budget for WP 5. The work achieved matches the working costs taking into consideration that the goal of developing an harmonized data quality assurance format was abandoned, se amendment 3 to the contract. Major cost items except salaries are 1100 Euro travel costs.

IVL has, in total, spent approx 90% of their budget for WP 5. No major cost items except salaries.

Ineti has, in total, spent approx 90% of their budget for WP 5. No major cost items except salaries.

2.-0 has, in total, spent approx 90% of their budget for WP 5. No major cost items except salaries.

SSER has, in total, spent approx 90% of their budget for WP 5. No major cost items except salaries.

Vattenfall has in total, spent approx 90% of their budget for WP 5. No major cost items except salaries.

SEMC has in total, spent approx 66% of their budget for WP 5. No major cost items except salaries.

Table 5 Work carried out in WP5 during 2004-10-01 to 2006-12-31

WP 5 Planned month	WP5 Activity	WP 5 Date completed
Oct 04- Nov 04	Preparation of workshop on the Stepwise EPD approach and Sirii Environmental Data Network for RTDs in connection with the kick-off meeting based on the tentative Swedish guideline documents. Including translation of tentative guideline documents	Nov 04
Nov 04 – Dec 04	Initial refinement and harmonisation of the draft guideline documents for the Stepwise EPD approach based on feedback from the first workshop with emphasis on the proposed generic stepwise PSR, the tentative inventory guideline, the data documentation and data exchange format, and the proposed EPD format. First draft guideline documents distributed to SME participants	First draft Dec 05. Ongoing work all 12-month period.
Nov 04 – Dec 04	Proposal for harmonised stepwise procedures for third party verification/certification of EPD	June 05. Used for verification of EPDs and included in Stepwise EPD guideline.
Dec 04 – April 05	Develop harmonised criteria for data quality assessment and data quality classification in the Sirii Environmental Data Network model. Revision of data format to full compliance with up-coming ISO 14048	At the mid-term meeting it was decided no to carry out this activity
March 05 – Dec 05	Expand the Sirii Environmental Data Network model to include project participants (LCI data documentation and data exchange). Establish Environmental Data Network	At the mid-term meeting it was decided no to carry out this activity
Oct 04 – Dec 06	Development of Stepwise EPD guideline	Dec 06
Oct 04 – Dec 06	Participation in EC working groups or expert meetings for harmonised LCA/EPD (Construction, EEE, JRC) for dissemination of WP results	Dec 06.

1.1.6 WP 6

The work carried out in work package 6 has followed the plan as described in the table below. Work package 6 concerns SSER, Vattenfall, SEMC, Huskvarna, Mercatus, Etac, Cruzinox, Conretop, Polisport, Konto, Melitek, Neba and Newline. Major cost items except salaries are for travels.

Table 6 Work carried out in WP6 during 2004-10-01 to 2006-12-31

WP 6 Planned month	WP6 Activity	WP 6 Date completed
Oct 05	Workshop on how to create a demand for EPDs in the customer-supplier relationship at midterm	Final plan for using and disseminating knowledge included in this report
Sept 06	European conference on EPD for expert actors.	Carried out 5 December 06 in Riga
Sept 06	Drawing up dissemination and exploitation plan based on conference outcome	Dec 06. See 2.2 in this report.
Oct 04-Sept 06	Participation in international working groups or expert meetings for harmonised LCA/EPD (Construction, EEE, JRC) for dissemination of WP results	Dec 06. Participation by Vattenfall and SEMC in among other, the following events: <ul style="list-style-type: none"> ● ISO TC 207 meeting in Madrid, 12-17 September on ISO 14025 ● the Technical Committee of the Swedish EPD-system every other month ● Gednet 13th meeting in Seoul, Korea ● in the conference to present final results of the Intend project in Bruxelles 22 September 06 (SEMC) ● SETAC EUROPE, 13th LCA Case Study Symposium Environmental Product Declarations (EPD) with focus on the building and construction sector (SEMC)

1.1.7 WP 7

With the exception of audit certificate costs, only IVF is involved in Wp 7.

IVF has, in total spent 100% of their budget for WP 7. The work achieved matches the working costs. Major cost items except salaries are 3300 Euro telephone conferencing costs (22 telephone conferences), 3600 Euro for subcontracting part of the administrative work and 1300 Euro audit certificate costs.

The audit certificate costs for the partners range between 250 Euro to 1800 Euro approximately. See Annex 6.

Table 7 Work carried out in WP7 during 2004-10-01 to 2006-12-31

WP 7 Planned month	WP7 Activity	WP 7 Date completed
Nov 04 – Dec 04	Start meeting including all project participants (including technical workshop)	Jan 05
Oct 05	Mid-term meeting including all project participants (including technical workshops)	Nov 05
Sept 06	Closing meeting including all project participants (including European	Dec 06

WP 7 Planned month	WP7 Activity	WP 7 Date completed
	conference)	
Oct 04 – Sept 06	Project management will include general support to WP1 through WP6, as well as exchange and provision of information with both internal and external project entities. It further includes management and refinement of the work programme and each partner's role in the project during its full duration. Emphasis is put on keeping a highly motivated and dedicated project team.	Dec 06-May 07
Oct 04 – Dec 06	22 Steering committee telephone meetings were held during the period	Dec 06

1.2 Financial statements, Form C and Audit certificates

A financial statement for each partner has been prepared by IVF based on data from each partner. They have been signed by respective partner and used in the issuance of the audit certificates. Form Cs are found in Annex 5 and Audit certificates are found in Annex 6.

The Audit certificates are the sole reason for why this final report was delayed several months. Almost all external auditors have raised various objections against the proposed audit work and many of them have not been capable of following the guidelines for the audits without making mistakes. A typical mistake has been to not include the cost of the audit in the certificate, thus preventing the company from claiming the audit cost

1.3 Summary financial report

There is, in total, a good balance between RTD, SME and Other partners' incurred costs compared to budget. See table 8 and figure 1 below.

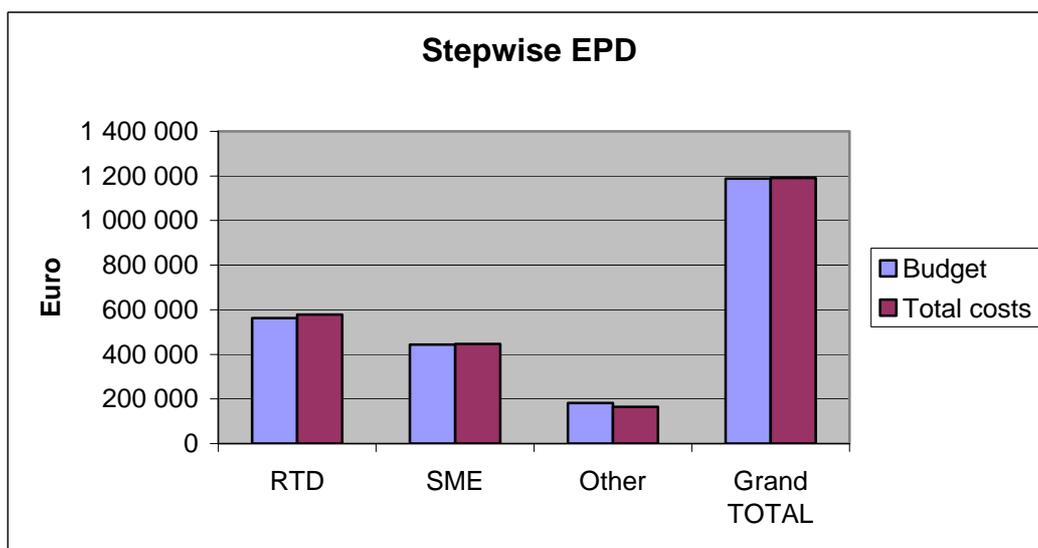


Figure 1 Actual versus budgeted cost at 27 month

Looking at individual figures for incurred versus budgeted costs for the SMEs there are large deviations, see figure 2 below. However it was expected that some companies would spend much more time and energy on project activities than others, see for example Section 5 in the Description of Work. After reimbursement of the RTD-performers' costs¹ and costs for audit certificates, there are enough funds left to reimburse the travel costs for the SMEs and some other costs for the SMEs, like the costs for registration of the EPDs. As a first priority, audit costs will be reimbursed for all partners.

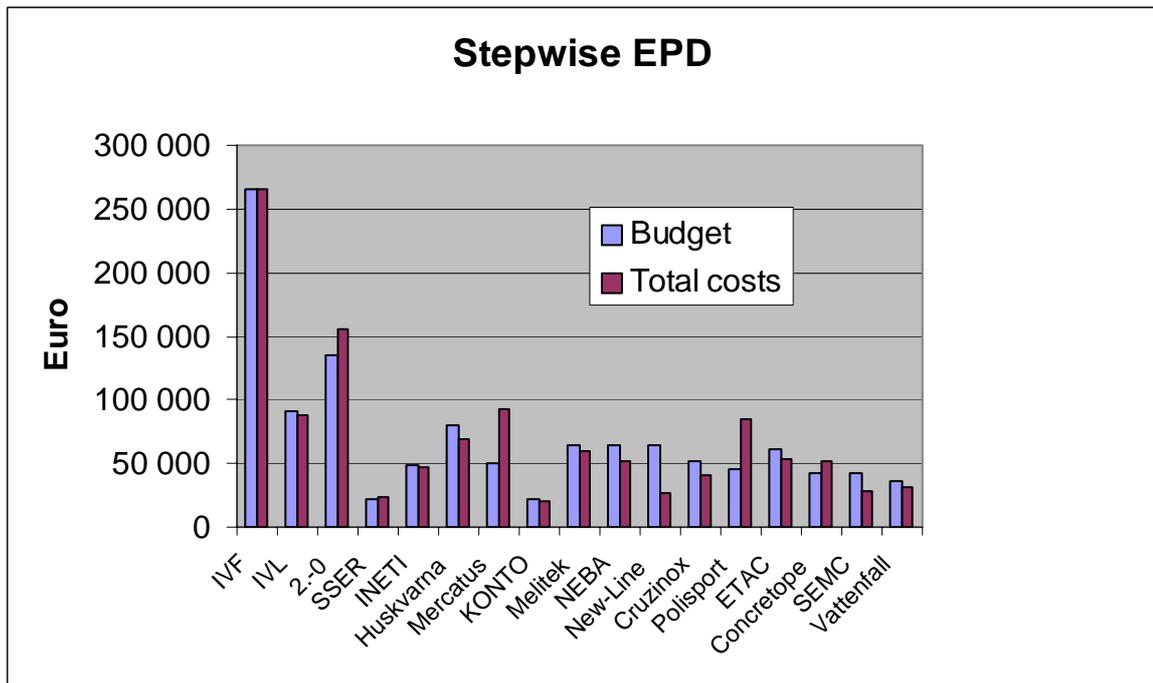


Figure 2 Actual versus budgeted costs for individual partners at 27 month

In the table below, the detailed financial information for each partner is shown.

¹ RTD-performers' costs will only be reimbursed up to 100% of their respective budgets including audit costs.

Table 8 Budgeted versus Actual Costs at 27 month

Cost Budget Follow-up Table									
Contract N°: COOP-CT-2004-613046		Acronym: STEPWISE EPD				Date: 2007-08-29			
PARTICIPANTS	TYPE OF EXPENDITURE (as defined by participants)	BUDGET e	ACTUAL COSTS (EUR)				Pct. spent Total	Remaining Budget (EUR) e-g1	
			Period 1 a1	Period 2 b1	Period 3 c1	Period 4 d1			Total e1
Part. 1	Total Person-month	14,1	6,79	7,77			14,56	103%	0,46
IVF	Personnel costs	122 496,00	66 107,35	77 397,09			143 504,44	117%	21 008,44
	Travel	4 600,00	2 278,50	5 044,71			7 323,21	159%	2 723,21
	Indirect costs	128 832,00	50 468,23	51 642,48			102 110,71	79%	26 721,29
	Other costs ('the rest')	9 376,00	4 667,13	7 212,35			11 879,48	127%	2 503,48
	Total Costs	265 304,00	123 521,21	141 296,63	-	-	264 817,84	100%	486,16
Part. 2	Total Person-month	5,5	3,41	2,00			5,41	98%	0,09
IVL	Personnel costs	33 011,00	18 607,95	13 645,12			32 253,07	98%	757,93
	Travel	4 300,00	2 018,41	4 440,41			6 458,82	150%	2 158,82
	Indirect costs	49 764,00	27 275,53	20 001,01			47 276,54	95%	2 487,46
	Other costs ('the rest')	3 376,50	-	1 890,56			1 890,56	56%	1 485,94
	Total Costs	90 451,50	47 901,89	39 977,10	-	-	87 878,99	97%	2 572,51
Part. 3	Total Person-month	7	4,44	4,23			8,67	124%	1,67
2.-0	Personnel costs	44 978,00	28 620,80	25 069,04			53 689,84	119%	8 711,84
	Travel	6 250,00	1 764,83	1 801,45			3 566,28	57%	2 683,72
	Indirect costs	80 542,00	51 251,20	44 660,00			95 911,20	119%	15 369,20
	Other costs ('the rest')	3 876,50	291,95	1 384,88			1 676,83	43%	2 199,67
	Total Costs	135 646,50	81 928,78	72 915,37	-	-	154 844,15	114%	19 197,65
Part. 4	Total Person-month	2,8	0,13	3,79			3,92	140%	1,12
SSER	Personnel costs	12 894,00	484,50	14 674,53			15 159,03	118%	2 265,03
	Travel	3 550,00	-	1 960,70			1 960,70	55%	1 589,30
	Indirect costs	3 488,00	96,90	3 594,41			3 691,31	106%	203,31
	Other costs ('the rest')	2 376,50	-	2 554,79			2 554,79	108%	178,29
	Total Costs	22 308,50	581,40	22 784,43	-	-	23 365,83	105%	1 057,33
Part. 5	Total Person-month	7,6	3,82	7,84			11,66	153%	4,06
Ineti	Personnel costs	29 007,00	10 925,03	18 983,61			29 908,64	103%	901,64
	Travel	7 600,00	1 991,72	2 422,99			4 414,71	58%	3 185,29
	Indirect costs	5 139,00	1 966,51	3 417,05			5 383,56	105%	244,56
	Other costs ('the rest')	7 376,50	-	7 522,39			7 522,39	102%	145,89
	Total Costs	49 122,50	14 883,26	32 346,04	-	-	47 229,30	96%	1 893,20
Part. 6	Total Person-month	5,2	2,96	2,33			5,29	102%	0,09
Huskvarna	Personnel costs	42 892,00	24 420,00	15 455,00			39 875,00	93%	3 017,00
	Travel	1 900,00	388,00	-			388,00	20%	1 512,00
	Indirect costs	28 548,00	16 250,00	10 285,00			26 535,00	93%	2 013,00
	Other costs ('the rest')	7 476,50	-	1 926,96			1 926,96	26%	5 549,54
	Total Costs	80 816,50	41 058,00	27 666,96	-	-	68 724,96	85%	12 091,54
Part. 7	Total Person-month	5,2	6,50	5,13			11,63	224%	6,43
Mercatus	Personnel costs	24 180,00	30 240,50	22 273,50			52 514,00	217%	28 334,00
	Travel	1 900,00	839,25	2 616,59			3 455,84	182%	1 555,84
	Indirect costs	15 990,00	20 485,50	15 088,50			35 574,00	222%	19 584,00
	Other costs ('the rest')	7 476,50	-	1 595,65			1 595,65	21%	5 880,85
	Total Costs	49 546,50	51 565,25	41 574,24	-	-	93 139,49	188%	43 592,99
Part. 8	Total Person-month	5,5	2,06	3,64			5,70	104%	0,20
Konto	Personnel costs	4 502,00	2 522,81	3 847,17			6 369,98	141%	1 867,98
	Travel	2 850,00	1 385,66	640,18			2 025,84	71%	824,16
	Indirect costs	7 122,00	3 784,21	5 770,76			9 554,97	134%	2 432,97
	Other costs ('the rest')	7 576,50	180,99	2 004,59			2 185,58	29%	5 390,92
	Total Costs	22 050,50	7 873,67	12 262,70	-	-	20 136,37	91%	1 914,13
Part. 9	Total Person-month	5,4	0,29	5,89			6,18	114%	0,78
Mellitek	Personnel costs	32 320,00	1 640,00	32 960,00			34 600,00	107%	2 280,00
	Travel	3 000,00	-	1 577,13			1 577,13	53%	1 422,87
	Indirect costs	21 978,00	1 107,00	22 248,00			23 355,00	106%	1 377,00
	Other costs ('the rest')	7 476,50	-	670,00			670,00	9%	6 806,50
	Total Costs	64 774,50	2 747,00	57 455,13	-	-	60 202,13	93%	4 572,37

Cost Budget Follow-up Table									
Contract N°: COOP-CT-2004-613046		Acronym: STEPWISE EPD				Date: 2007-08-29			
PARTICIPANTS	TYPE OF EXPENDITURE (as defined by participants)	BUDGET	ACTUAL COSTS (EUR)				Pct. spent	Remaining Budget (EUR)	
			Period 1	Period 2	Period 3	Period 4			Total
		a	a1	b1	c1	d1	e1	e-e1	
Part. 10	Total Person-month	5,4	0,83	4,57			5,40	100%	-
Neba	Personnel costs	32 320,00	5 094,25	26 229,75			31 324,00	97%	996,00
	Travel	3 000,00	-	-			-	0%	3 000,00
	Indirect costs	21 978,00	3 230,50	16 633,50			19 864,00	90%	2 114,00
	Other costs (the rest)	7 476,50	-	1 000,00			1 000,00	13%	6 476,50
	Total Costs	64 774,50	8 324,75	43 863,25			52 188,00	81%	12 586,50
Part. 11	Total Person-month	5,4	2,24	1,61			3,85	71%	1,55
New-Line	Personnel costs	32 320,00	12 768,00	8 550,00			21 318,00	66%	11 002,00
	Travel	3 000,00	-	-			-	0%	3 000,00
	Indirect costs	21 978,00	9 744,00	5 480,40			4 263,60	19%	17 714,40
	Other costs (the rest)	7 476,50	-	1 100,00			1 100,00	15%	6 376,50
	Total Costs	64 774,50	22 512,00	4 169,60			26 681,60	41%	38 092,90
Part. 12	Total Person-month	5,7	2,91	7,57			10,48	184%	- 4,78
Cruzinox	Personnel costs	34 848,00	17 004,00	14 435,65			31 439,65	90%	3 408,35
	Travel	2 500,00	659,73	1 952,47			2 612,20	104%	- 112,20
	Indirect costs	7 140,00	3 400,80	3 277,62			6 678,42	94%	461,58
	Other costs (the rest)	7 576,50	-	250,00			250,00	3%	7 326,50
	Total Costs	52 064,50	21 064,53	19 915,74			40 980,27	79%	11 084,23
Part. 13	Total Person-month	5,7	2,72	17,00			19,72	346%	- 14,02
Polisport	Personnel costs	19 956,00	7 478,64	48 264,78			55 743,42	279%	- 35 787,42
	Travel	2 500,00	-	860,60			860,60	34%	- 1 639,40
	Indirect costs	15 642,00	1 876,80	25 033,20			26 910,00	172%	- 11 268,00
	Other costs (the rest)	7 576,50	210,00	1 500,00			1 710,00	23%	- 5 866,50
	Total Costs	45 674,50	9 565,44	75 658,58			85 224,02	187%	- 39 549,52
Part. 14	Total Person-month	5,2	1,34	5,93			7,27	140%	- 2,07
Etac	Personnel costs	31 200,00	5 840,00	24 500,00			30 340,00	97%	860,00
	Travel	1 900,00	386,00	-			386,00	20%	- 1 514,00
	Indirect costs	21 060,00	3 958,00	16 610,00			20 568,00	98%	492,00
	Other costs (the rest)	7 476,50	-	1 540,96			1 540,96	21%	- 5 935,54
	Total Costs	61 636,50	10 184,00	42 650,96			52 834,96	86%	8 801,54
Part. 15	Total Person-month	5,8	1,59	7,96			9,55	165%	- 3,75
Concretepe	Personnel costs	19 314,00	7 387,36	26 793,90			34 181,26	177%	- 14 867,26
	Travel	2 500,00	1 615,80	-			1 615,80	65%	- 884,20
	Indirect costs	12 876,00	1 477,47	13 370,00			14 847,47	115%	- 1 971,47
	Other costs (the rest)	7 576,50	430,00	1 000,00			1 430,00	19%	- 6 146,50
	Total Costs	42 266,50	10 910,63	41 163,90			52 074,53	123%	- 9 808,03
Part. 16	Total Person-month	1,6	0,51	1,11			1,62	101%	- 0,02
SEMC	Personnel costs	19 123,00	5 164,00	12 521,00			17 685,00	92%	1 438,00
	Travel	7 550,00	-	1 113,19			1 113,19	15%	- 6 436,81
	Indirect costs	12 749,00	2 356,00	5 723,00			8 079,00	63%	4 670,00
	Other costs (the rest)	1 376,50	-	1 300,00			1 300,00	94%	76,50
	Total Costs	40 798,50	7 520,00	20 657,19			28 177,19	69%	12 621,31
Part. 17	Total Person-month	1,5	0,28	1,23			1,51	100%	- 0,01
Vattenfall	Personnel costs	-	1 602,63	9 722,20			11 324,83	#Division/0!	- 11 324,83
	Travel	-	173,61	3 630,13			3 803,74	#Referens!	- 3 803,74
	Indirect costs	-	2 403,88	14 583,29			16 987,17	#Division/0!	- 16 987,17
	Other costs (the rest)	35 415,50	-	-			-	0%	35 415,50
	Total Costs	35 415,50	4 180,12	27 935,62			32 115,74	91%	3 299,76
TOTAL	Total Person-month	94,60	42,83	89,59			132,41	140%	- 37,81
	Personnel costs	535 361,00	245 907,82	395 322,34			641 230,16	120%	105 869,16
	Travel	58 900,00	13 501,51	28 060,55			41 562,06	29%	17 337,94
	Indirect costs	454 826,00	201 132,53	266 457,42			467 589,95	103%	12 763,95
	Other costs (the rest)	138 339,00	5 780,07	34 453,13			40 233,20	29%	98 105,80
	Total Costs	1 187 426,00	466 321,93	724 293,44			1 190 615,37	100%	- 3 189,37

2 Scientific and Technical report

2.1 Activity report

2.1.1 Publishable executive summary

Imagine if there was a tool that could tell companies how to make environmentally superior products and at the same time develop the market for such products. Environmental product declarations, EPDs, based on life cycle assessments have the potential to do just that. The Stepwise EPD project, funded by the European Union's Cooperative Research programme, has developed a cost-efficient way for smaller companies to try out the EPD tool. Ten small and medium sized companies, SMEs, in Latvia, Portugal, Denmark and Sweden have tested the concept by making Stepwise EPDs and using them in market communication and for environmental improvements.

The Stepwise environmental product declarations method should be a way to make a first low-cost step into any national or international environmental product declaration programme. Pre-registration of Stepwise EPDs is currently possible in the EPD[®]-system, which has an international applicability, see www.environdec.com.

The results of the project are presented and discussed in the scientific paper *Stepwise Environmental Product Declarations – Ten SME case studies*². The main findings can be summarized as follows:

- EPDs are more suited for *communicating* about products' environmental profiles than for normal *marketing* of products' environmental performance
- An EPD based on life cycle assessment is an excellent basis for eco-design; it shows the environmental hot-spots and provides a communication format

For further information, visit the Stepwise EPD website at [http://ivf.extra/Stepwise EPD](http://ivf.extra/StepwiseEPD) or contact any of the following contact persons:

Mats Zackrisson (coordinator) - mats.zackrisson@ivf.se - IVF, Industrial Research and Development Corporation- Sweden.

²Mats Zackrisson, Cristina Rocha, Kim Christiansen and Anna Jarnehammar. *Stepwise Environmental Product Declarations – Ten SME case studies*. Intended for publication in the Journal of Cleaner Production. This is the scientific paper referred to in this report.

In October 2006, a first preliminary paper about the Stepwise EPD project was submitted to Journal of Cleaner Production. Since full project results were not available at that time this paper is not referred to in this final report. Authors were: Cristina Rocha, Rui Frazão, Mats Zackrisson and Kim Christiansen, and the title of the draft paper was *Stepwise Environmental Product Declarations - Identifying and communicating eco-design opportunities*.

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Kim Christiansen - kc@lca-net.com - 2.-0 LCA Consultants APS - Denmark

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In addition to the organizations listed above, the following companies have been participating in the Stepwise EPD project: Huskvarna Prototyper AB, Mercatus Engineering AB, Etac AB, The Swedish Environmental Management Council and Vattenfall Generation Nordic Countries from Sweden; Melitek A/S, Neba A/S and Newline from Denmark; Konto Ltd from Latvia; and Cruzinox, Polisport Lda and Concretope-Fábrica de Betão Pronto Lda from Portugal.

2.1.2 Project objectives and major achievements

Overall project objectives

The overall objective of the Stepwise EPD project was to develop a method for stepwise environmental product declarations suitable for SMEs, so that also smaller companies can join emerging markets for “environmentally superior” products and services.

Objectives, work performed, contractors involved

A target associated with the overall objective was to use the Stepwise EPD method and produce 10 EPDs on 10 products in 10 SMEs across 4 European countries during the project life-time. Altogether 15 stepwise EPDs have been made within the framework of the project: Two in Latvia, three in Denmark, four in Portugal and six in Sweden. The Stepwise method is documented in the Stepwise EPD guideline and supporting documents, most of which are publically available at the Stepwise website. The work to develop the Stepwise EPD method and use it to produce the EPDs has involved all 17 partners.

Scientific, technical and environmental objectives of the project were to investigate how the EPD-work furthers environmental improvements of the declared product and how the companies can use the EPD in their PR and to measure the effects of such EPD-based PR. Associated economic and environmental targets were:

1. to attract, during the two-year project, at least one new customer per SME thanks to the EPD, with total order prospects exceeding 600000 Euro
2. to identify at least 10 different ways of using the EPD in PR of product and/or company

3. to identify at least two significant environmental improvements options with each declared product, i.e at least 20 significant³ environmental improvements options in total.
4. to start at least 5 product environmental improvement efforts based on above identified options

Target 1 has not been reached within the time frame of the project. In terms of new orders, customers' responses on the stepwise EPDs were disappointing. Only Etac AB claims that they got an order thanks to the stepwise EPD, but cannot quantify it. Quite a few companies Mercatus, Melitek, Etac, Konto, Polisport, Cruzinox mention general strengthening of the image and likely long-term effects on sales thanks to the stepwise EPD. The main motivation for the SMEs to participate in the project was an anticipation of a demand from some key client or client group. In only one case, Melitek, this anticipated demand was confirmed.

Target 2 has been exceeded. In terms of identifying different ways of using the EPD in marketing of product and/or company, project targets were exceeded in quantitative terms. In more qualitative terms, market communications ways that met with a particularly positive customer response were: Meetings or work sessions with clients focusing on some particularly interesting aspect of the EPD/LCA rather than a general presentation of the stepwise EPD; Sending the stepwise EPD with bid; Presenting the EPD at sales meetings.

Target 3 and target 4 have been exceeded. On average, 2.3 environmentally significant ideas were identified per investigated product (ie in total $2.3 \cdot 10 = 23$ significant ideas) and on average 1.5 ideas per product were also implemented (ie in total 15 ideas implemented). There were large difference between companies, the reasons for which are explained in the scientific paper².

The overall objective to develop a method for stepwise environmental product declarations suitable for SMEs was achieved through six development workpackages, each with their own objectives. Results towards these objectives are presented below.

Main achievements/milestones

Overall the project has achieved what is set out to achieve, although some diversions from the original plans have been necessary. Those diversions are elaborated below.

Major problems and corrective action

A major problem was that although the official starting date of the project was 2004-10-01, we did not receive confirmation on that date until March 2005 so

³ Significant in this context is defined as 30% improvement in any of the EPD impact categories.

many partners did not start working full speed until then since we could not distribute the pre-payments. Therefore the project was extended an additional 3 months. This was sufficient time to conclude all planned activities.

Another major complication for the project was that a lot changed, or begun to change, in the EPD-field during the project period: the Danes were setting up a national EPD-system, the EPD[®]-system is still rewriting their rules; and ISO 14025 *Environmental labels and declarations – Type III environmental declarations – Principles and procedures* was finalized. This was of course very positive, but the task of writing common guidelines for Stepwise EPD that could provide a first, preliminary, step into any of these systems seemed initially more difficult than envisaged. However, this was solved by including much less of LCA methodology in the Stepwise guideline than first planned. Instead users must look at the LCA rules of the system they intend to take the next step into.

Deliverables D7 to D10 and D13-D14 all concerns LCA data. These have all been changed including delivery dates. The Danes have, as an example, provided a complete LCA-database for stepwise EPDs that aim to enter the Danish system.

The most serious problem proved to be the final reporting and external auditing after project closure 2006-12-31. After initial problems of explaining to the auditors what they were supposed to audit, a lot of time has been spent on checking certificates and Form Cs, finding faults, returning documents and asking for corrections etc.

Recommendations from previous reviews

The below text relating to recommendations from the 12 month review report was included already in the 18 month report.

The 12-month review report request, in 3b and in 9b, more information on the Stepwise EPD method. The guideline is available on the open website at <http://extra.ivf.se/StepwiseEPD>.

The 12-month review report comments, in 5c, that we do not have a project website. The project has had a project website since the start. Lately it has been transferred to <http://extra.ivf.se/StepwiseEPD>, which has an open part and one password protected part only for partners.

The 12-month review report requests, in 9b, more information on what is inside each EPD so that the EPDs can be evaluated. Firstly, each published EPD has undergone critical review by another RTD partner. The critical review by a partner familiar with the concept is part of the Stepwise concept. Secondly the information needed to perform an evaluation or critical review is classified. Normally, a request to look at this classified information should be directed to the contact person mentioned in the EPD. In this case, the reviewer can direct his request to review *some* of the Stepwise EPDs to the Coordinator Mats.Zackrisson@ivf.se.

The 12-month review report requests, in 9b, details on how SMEs can overcome costs and difficulties related to use of LCA data. The answer is simple and available in the Stepwise EPD guideline page 5: the SME should work closely with an LCA consultant familiar with the Stepwise EPD concept, at least to begin with.

The 12-month review report requests, in 9b, more detailed plans on the elaboration of an LCA information system. This deliverable has, as mentioned above, been abandoned, due to existence of other cost-effective databases. The decision to abandon building another LCA database is also connected to the need for the Stepwise concept to function under the wing of different EPD programmes which all more or less dictates which generic databases to use. Furthermore, the preliminary finding that a tight relationship between SME and LCA consultant is the most cost-efficient way of producing an EPD (for most SMEs) has also some relevance in this context.

2.1.3 Work package progress of the period

3.1.3.1 WPI

The table below shows the planned work in workpackage 1 and how much of it has been completed. IVF, Huskvarna, Mercatus and Etac are involved in this work package.

WP 1 Planned month	WP1 Activity	Wp 1 Relation to work package deliverables and milestones	WP 1 Date completed	Wp 1 Objectives/Deviations/Comments
Nov 04-Dec 04	Scoping discussion between IVF and Mercatus, Huskvarna and Etac respectively		Nov 04	
Nov 04-Jan 05	Inventory by Mercatus, Huskvarna and Etac respectively with the aid of a template for that purpose including inputs from Mercatus, Huskvarna and Etac respectively for the non-quantitative parts of the EPD		April 05	
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by IVF		May 05	
Mar 05-Apr 05	IVF and Mercatus, Huskvarna and Etac respectively examines preliminary EPD and LCA together. IVF finalizes draft EPD.		June 05	
Apr 05-May 05	Review of draft EPD by Mercatus, Huskvarna and Etac respectively		June 05	
May 05	Review of EPD by 2.-0, IVL and INETI		Sep 05	
May 05-Jun 05	Revision of EPD, if necessary, by Mercatus, Huskvarna and Etac respectively and IVF.		Sep 05	
Jun 05-Jul 05	IVF finalizes camera-ready-copy of EPD and delivers to Mercatus, Huskvarna and Etac respectively, and to the Swedish Environmental Mangement Council	D3. Three EPDs in Swedish SMEs corresponding to the first step of the stepwise EPD approach	Sep 05	Completes the wp objective to produce three EPDs in three Swedish SMEs corresponding to the first step towards a verified EPD, so that all participating Swedish SMEs will get an EPD that can and will be used for promotional purposes and as a platform for improvements of product environmental performance.



WP 1 Planned month	WP1 Activity	Wp 1 Relation to work package deliverables and milestones	WP 1 Date completed	Wp 1 Objectives/Deviations/Comments
Jul 05-Aug 05	IVF documents the LCA-information in Sirii Environmental Data Network	D7. Three sets of LCA information (Swedish SMEs) documented in Sirii Environmental Data Network		Pending decision on what format to use
Sep 05	Eco-design options workshop at Mercatus, Huskvarna and Etac respectively		October 06	Workshops carried out at Huskvarna and Mercatus with good results. Etac will have eco-design workshop in October. Mercatus also involved in life cycle cost expert workshop.
Sep 05	Marketing options workshop at Mercatus, Huskvarna and Etac respectively		Dec 06	Various meetings and events. Documented in Impact report D16.
Sep 05- Sep 06	Mercatus, Huskvarna and Etac respectively initiates improvement project(s) based on the eco-design options if found financially viable	M1.1 Decision by Mercatus, Huskvarna and Etac respectively on which identified improvement project(s) to implement. It is expected that on average every second SME will start at least one significant environmental improvement project.	Dec 06	Mercatus and Etac has done some implementation of design options. Huskvarna have not had the chance yet due to long product cycle. Implementation will carry on after Dec 06.
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.		Nov 05	Took place in November 05. See annex 1
Sep 05- Sep 06	Mercatus, Huskvarna and Etac respectively carries out marketing actions based on the marketing options if found financially viable	M1.2 Decision by Mercatus, Huskvarna and Etac respectively on which identified marketing actions to carry out. It is expected that these marketing actions will result in at least one new customer per SME thanks to the EPD, with total new order prospects exceeding 600000 Euro	Dec 06	Various meetings and events. Documented in Impact report D16. Maybe some new orders/customers.
April 06-Dec 06	Improved EPDs	New deliverable as decided in amendment 3	Dec 06	Etac and Mercatus ready June 2006. Huskvarna's ready Dec 2006
Feb 06- Mar 06	IVF and Mercatus, Huskvarna and Etac respectively together make a plan for upgrading the "first-step" EPD to a third party verified EPD.		Oct 06	In Impact reports. Oct 2006
Jun 06- Jul 06	IVF evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	D16 One report documenting the impact of the EPD work in the three Swedish SMEs in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 06	Dec 2006



WP 1 Planned month	WP1 Activity	WP 1 Relation to work package deliverables and milestones	WP 1 Date completed	Wp 1 Objectives/Deviations/Comments
Jul 06-Aug 06	IVF writes scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	D24 One scientific paper on EPD barriers and motives for SMEs based on all ten case studies.		Oct 06 first paper Second paper submitted to the Journal of Cleaner Production in July 07
Aug 06	National workshop to promote EPDs and the Stepwise Approach	D20 One national workshop in Sweden to promote EPD	Sep 06	Sep 06 in Stockholm. Documented in Impact report D16.
Oct 04-Sept 06	Project management extra		Dec 06	All period

3.1.3.2 WP2

The table below shows the planned work in workpackage 2 and how much of it has been completed. INETI, Cruzinox, Concretepe and Polisport are involved in this work package.

WP 2 Planned month	WP2 Activity	WP 2 Relation to work package deliverables and milestones	WP 2 Date completed	Wp 2 Objectives/Deviations/Comments
Nov 04-Dec 04	Scoping discussion between INETI and Cruzinox, Concretepe and Polisport respectively		November 04	
Nov 04-Jan 05	Inventory by Cruzinox, Concretepe and Polisport respectively with the aid of a template for that purpose including inputs from Cruzinox, Concretepe and Polisport respectively for the non-quantitative parts of the EPD		May 05	Cruzinox December 04 Concretepe March 05 Polisport May 05
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by INETI		October 05	Cruzinox July 05 Concretepe July 05 Polisport October 05
Mar 05-Apr 05	INETI and Cruzinox, Concretepe and Polisport respectively examines preliminary EPD and LCA together. INETI finalizes draft EPD.		October 05	
Apr 05-May 05	Review of draft EPD by Cruzinox, Concretepe and Polisport respectively		October 05	
May 05	Review of EPD by 2.-0 and IVF			Cruzinox October 05 Concretepe October 05 Polisport waiting for revision by RTD partner



WP 2 Planned month	WP2 Activity	Wp 2 Relation to work package deliverables and milestones	WP 2 Date completed	Wp 2 Objectives/Deviations/Comments
May 05-Jun 05	Revision of EPD, if necessary, by Cruzinox, Concretope and Polisport respectively and INETI.			Planned for November 05
Jun 05-Jul 05	INETI finalizes camera-ready-copy of EPD and delivers to Cruzinox, Concretope and Polisport respectively, and to the Portuguese Environmental Mangement Council	D4. Three EPDs in Portuguese SMEs corresponding to the first step of the stepwise EPD approach	March 2006	November 05 for Cruzinox and Concretope. Polisport's EPD is delayed further. Completes the wp objective to produce three EPDs in three Portuguese SMEs corresponding to the first step towards a verified EPD, so that all participating Portuguese SMEs will get an EPD that can and will be used for promotional purposes and as a platform for improvements of product environmental performance.
Jul 05-Aug 05	INETI documents the LCA-information in Sirii Environmental Data Network	D8. Three sets of LCA information (Portuguese SMEs) documented in Sirii Environmental Data Network		Pending decision on what format to use
Sep 05	Eco-design options workshop at Cruzinox, Concretope and Polisport respectively		Dec 05	Cruzinox - February 05, based on previously existing LCA calculations. 39 improvement options for further evaluation. As for Concretope and Polisport, the workshops will take place in December 05. Concretope's will focus on green purchasing and supply chain management.
Sep 05	Marketing options workshop at Cruzinox, Concretope and Polisport respectively		Dec 05	Preliminary marketing evaluation undertaken in October on the basis of clients evaluation of the draft stepwise EPDs. Further activities will take place in November/ December 05
Sep 05- Sep 06	Cruzinox, Concretope and Polisport respectively initiates improvement project(s) based on the eco-design options if found financially viable	M2.1 Decision by Cruzinox, Concretope and Polisport respectively on which identified improvement project(s) to implement. It is expected that on average every second SME will start at least one significant environmental improvement project.	Dec 06	Cruzinox and Polisport will implement design options in new product. Cruzinox did not identify many options. Will carry on after Dec 06
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.		Now 05	Took place in November 05.



WP 2 Planned month	WP2 Activity	WP 2 Relation to work package deliverables and milestones	WP 2 Date completed	Wp 2 Objectives/Deviations/Comments
April 06-Dec 06	Improved EPDs	New deliverable as decided in amendment 3	Dec 06	Dec 2006 One for Concretepe and Prodcut Category Rules for Polisport. Cruzinox hesitated between improving stepwise or doing a real EPD and finally decided on neither.
Sep 05- Dec 06	Cruzinox, Concretepe and Polisport respectively carries out marketing actions based on the marketing options if found financially viable	M2.2 Decision by Cruzinox, Concretepe and Polisport respectively on which identified marketing actions to carry out. It is expected that these marketing actions will result in at least one new customer per SME thanks to the EPD, with total new order prospects exceeding 600000 Euro	Dec 06	Various meetings and events. Documented in Impact report D18. Maybe some new orders/customers.
Feb 06- Mar 06	INETI and Cruzinox, Concretepe and Polisport respectively together make a plan for upgrading the "first-step" EPD to a third party verified EPD.			Polisport June 2006
Jun 06- Jul 06	INETI evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	D18 One report documenting the impact of the EPD work in the three Portuguese SMEs in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 06	Dec 2006
Jul 06-Aug 06	INETI contributes to scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	D24 One scientific paper on EPD barriers and motives for SMEs based on all ten case studies.		Oct 06 first paper Second paper submitted to the Journal of Cleaner Production in July 07
Aug 06	National workshops to promote EPDs and the Stepwise Approach	D21 Ntional workshop in Portugal to promote EPD	Nov 05	Took place in November 05

3.1.3.3 WP3

The table below shows the progress in workpackage 3 and how much of it has been completed. IVL, SSER and Konto are involved in this work package.

WP 3 Planned month	WP3 Activity	Wp 3 Relation to work package deliverables and milestones	WP 3 Date completed	Wp 3 Objectives/Deviations/Comments
Nov 04-Dec 04	Scoping discussion between IVL, SSE in Riga and Konto		Feb 05	
Nov 04-Jan 05	Inventory by Konto with the aid of a template for that purpose including inputs from Konto for the non-quantitative parts of the EPD		May 05	
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by IVL and SSE in Riga		June 05	
Mar 05-Apr 05	IVL and SSE in Riga and Konto examines preliminary EPD and LCA together. IVL and SSE in Riga finalizes draft EPD.		June 05	
Apr 05-May 05	Review of draft EPD by Konto		Sept 05	
May 05	Review of EPD by IVF		Sept 05	
May 05-Jun 05	Revision of EPD, if necessary, by Konto, IVL and SSE in Riga.		Okt 05	
Jun 05-Jul 05	IVL finalizes camera-ready-copy of EPD and delivers to Konto, and to the Swedish Environmental Mangement Council	D5. One EPD in Latvian SME corresponding to the first step of the stepwise EPD approach	Nov 05	Completes the wp objective to produce one EPD in one Latvian SME corresponding to the first step towards a verified EPD, so that the participating SMEs will get an EPD that can and will be used for promotional purposes and as a platform for improvements of product environmental performance.
Jul 05-Aug 05	IVL documents the LCA-information in Sirii Environmental Data Network	D8. One set of LCA information documented in Sirii Environmental Data Network	Okt 05	One data set has been documented in the Sirii format. But since this is not yet decided upon it is only an example that will be discussed at the midterm meeting.
Sep 05	Eco-design options workshop at Konto		June 05	The eco-design options workshop was done when the LCA-report was ready..
Sep 05	Marketing options workshop at Konto		June 05	The marketing options workshop has also already been done at Konto. Here different ways to use the EPD where discussed as well as obstacels



WP 3 Planned month	WP3 Activity	Wp 3 Relation to work package deliverables and milestones	WP 3 Date completed	Wp 3 Objectives/Deviations/Comments
				connected to the marketing options.
Sep 05- Sep 06	Konto initiates improvement project(s) based on the eco-design options if found financially viable	M3.1 Decision by Konto on which identified improvement project(s) to implement. It is expected that on average every second SME will start at least one significant environmental improvement project.	June 06	New boiler installed partly due to the project.
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.		Nov 05	Took place in November 05.
April 06	Improved EPD	New deliverable as decided in amendment 3	Dec 06	Dec 06
Sep 05- Sep 06	Konto carries out marketing actions based on the marketing options if found financially viable	M3.2 Decision by Konto on which identified marketing actions to carry out. It is expected that these marketing actions will result in at least one new customer per SME thanks to the EPD, with total new order prospects exceeding 600000 Euro	Dec 06	Various meetings and events. Documented in Impact report D19. No new orders/customers.
Feb 06- Mar 06	IVL and SSE in Riga and Konto together make a plan for upgrading the "first-step" EPD to a third party verified EPD.		Dec 06	Dec 06. Documented in Impact report D19
Jun 06- Jul 06	IVL and SSE in Riga evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	D19 One report documenting the impact of the EPD work in the Latvian SME in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 06	Dec 06
Jul 06-Aug 06	IVL and SSE in Riga contributes to scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	D24 One scientific paper on EPD barriers and motives for SMEs based on all ten case studies.		Oct 06 first paper Second paper submitted to the Journal of Cleaner Production in July 07

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WP 3 Planned month	WP3 Activity	Wp 3 Relation to work package deliverables and milestones	WP 3 Date completed	Wp 3 Objectives/Deviations/Comments
Aug 06	National workshop to promote EPDs and the Stepwise Approach	D22 One national workshop in Latvia to promote EPD	Sep 06	Sep 06. Documented in Impact report D19

3.1.3.4 WP4

The table below shows the planned work in workpackage 4 and how much of it has been completed. 2.-0, Melitek, Neba and Newline are involved in this work package.

WP 4 Planned month	WP4 Activity	Wp 4 Relation to work package deliverables and milestones	WP 4 Date completed	Wp 4 Objectives/Deviations/Comments
Nov 04-Dec 04	Scoping discussion between 2.-0 and Melitek, Neba, Newline respectively		Jan 2005	
Nov 04-Jan 05	Inventory by Melitek, Neba, Newline respectively with the aid of a template for that purpose including inputs from Melitek, Neba, Newline respectively for the non-quantitative parts of the EPD		March 2005	First drafts were finished in March. Changes in LCA database and methodology revisions in summer have delayed a second version. Expected before end of 2005.
Jan 05-Feb 05	LCA calculations and draft of preliminary EPD by 2.-0		April 2005	As above
Mar 05-Apr 05	2.-0 and Melitek, Neba, Newline respectively examines preliminary EPD and LCA together. 2.-0 finalizes draft EPD.		Oct 06	Delayed; se above
Apr 05-May 05	Review of draft EPD by Melitek, Neba, Newline respectively		Oct 06	Delayed; se above
May 05	Review of EPD by 2.-0, IVL and IVF		Oct 06	Delayed
May 05-Jun 05	Revision of EPD, if necessary, by Melitek, Neba, Newline respectively and 2.-0.		Oct 06	Delayed
Jun 05-Jul 05	2.-0 finalizes camera-ready-copy of EPD and delivers to Melitek, Neba, Newline respectively, and to the Swedish Environmental Management Council	D6. Three EPDs in Danish SMEs corresponding to the first step of the stepwise EPD approach	Oct 06	Completes the wp objective to produce three EPDs in three Danish SMEs corresponding to the first step towards a verified EPD, so that all participating Danish SMEs will get an EPD that can and will be used for promotional purposes and as a platform for improvements of product environmental performance.



WP 4 Planned month	WP4 Activity	Wp 4 Relation to work package deliverables and milestones	WP 4 Date completed	Wp 4 Objectives/Deviations/Comments
				The Danes will probably not seek pre-registration with the Swedish EPD-system. Instead they will seek affiliation to the upcoming Danish EPD-system.
Jul 05-Aug 05	2.-0 documents the LCA-information in Sirii Environmental Data Network	D8. Three sets of LCA information documented in Sirii Environmental Data Network	Nov 06	LCA-database fitting to the up-coming Danish EPD-system will be provided. This will replace D8.
Sep 05	Eco-design options workshop at Melitek, Neba, Newline respectively		2005	First round of workshops conducted 2005. Second round being planned for early 2006. See impact reports.
Sep 05	Marketing options workshop at Melitek, Neba, Newline respectively		Dec 06	First round of workshops conducted at NEBA only. Others and second round being planned for early 2006. See impact reports.
Sep 05- Sep 06	Melitek, Neba, Newline respectively initiates improvement project(s) based on the eco-design options if found financially viable	M4.1 Decision by Melitek, Neba, Newline respectively on which identified improvement project(s) to implement. It is expected that on average every second SME will start at least one significant environmental improvement project.	Dec 06	Melitek found some options up the supply chain which they have not implemented. Neba and Newline did not find any options.
Oct 05	Project workshop in connection with midterm review to share experience on the EPD process, eco-design and green marketing. Attendance by all project partners.		Nov 05	Took place in November 05. See annex 1.
April 06 - Dec 06	Improved input/output database for Stepwise EPD		Nov 06	Delivered Nov 06
Sep 05- Sep 06	Melitek, Neba, Newline respectively carries out marketing actions based on the marketing options if found financially viable	M4.2 Decision by Melitek, Neba, Newline respectively on which identified marketing actions to carry out. It is expected that these marketing actions will result in at least one new customer per SME thanks to the EPD, with total new order prospects exceeding 600000 Euro	Dec 06	Various meetings and events. Documented in impact report D17. No new orders/customers.
Feb 06- Mar 06	2.-0 and Melitek, Neba, Newline respectively together make a plan for upgrading the "first-step" EPD to a third party verified EPD.			Not applicable for the Danish EPD system.



WP 4 Planned month	WP4 Activity	Wp 4 Relation to work package deliverables and milestones	WP 4 Date completed	Wp 4 Objectives/Deviations/Comments
Jun 06- Jul 06	2.-0 evaluates the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	D17 One report documenting the impact of the EPD work in the three Danish SMEs in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	Dec 06	Impact reports (two) ready in Dec 06.
Jul 06-Aug 06	2.-0 contributes to scientific paper on the impact of the EPD work in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives comprising all twelve case studies	D24 One scientific paper on EPD barriers and motives for SMEs based on all ten case studies.		Oct 06 first paper Second paper submitted to the Journal of Cleaner Production in July 07
Aug 06	National workshops to promote EPDs and the Stepwise Approach	D23 One national workshop in Denmark to promote EPD	Dec 06	Dec 06 in Copenhagen. Documented in Impact report D17a.

3.1.3.5 WP5

The table below shows the planned work in workpackage 5 and how much of it has been completed. IVF, IVL, INETI, 2.-0, SSER, Vattenfall and SEMC are involved in this work package.

WP 5 Planned month	WP5 Activity	Wp 5 Relation to work package deliverables and milestones	WP 5 Date completed	Wp 5 Objectives/Deviations/Comments
Oct 04- Nov 04	Preparation of workshop on the Stepwise EPD approach and Sirii Environmental Data Network for RTDs in connection with the kick-off meeting based on the tentative Swedish guideline documents. Including translation of tentative guideline documents		Nov 04	Achieved

WP 5 Planned month	WP5 Activity	WP 5 Relation to work package deliverables and milestones	WP 5 Date completed	Wp 5 Objectives/Deviations/Comments
Nov 04 – Dec 04	Initial refinement and harmonisation of the draft guideline documents for the Stepwise EPD approach based on feedback from the first workshop with emphasis on the proposed generic stepwise PSR, the tentative inventory guideline, the data documentation and data exchange format, and the proposed EPD format. First draft guideline documents distributed to SME participants	M5:1 First draft guideline documents distributed to all participants to be used in the case studies	Dec 05	Achieved
Nov 04 – Dec 04	Proposal for harmonised stepwise procedures for third party verification/certification of EPD		June 05	Achieved
Dec 04 – April 05	Develop harmonised criteria for data quality assessment and data quality classification in the Sirii Environmental Data Network model. Revision of data format to full compliance with up-coming ISO 14048	D13 Harmonised format for data documentation and data exchange including criteria for data quality assessment and classification	Dec 06	A proposal for data quality has been developed and will now be discussed at the midterm meeting. Part of Stepwise guideline
March 05 – Dec 05	Expand the Sirii Environmental Data Network model to include project participants (LCI data documentation and data exchange). Establish Environmental Data Network	M5:2 Environmental Data Network initiated D14 Established Environmental Data Network		This deliverable was abandoned, except for WP 4 (the input/output database). Replaced by making improved EPDs.
Sep 05 – Oct 05	Preparation of midterm workshop for feedback on guideline documents as listed in activity 2 with amendments from activity 3 and 4.		Dec 06	The guideline document has been discussed at almost every project meeting and new version issued when appropriate. Final version dated 2006-12-15.
June 06 –Aug 06	Preparation of final draft guideline documents			See above
Jul 06 – Aug 06	Preparation of final workshop on guideline documents			See above
Sept-06	Preparation of final Guidelines to Type III Environmental Declarations "On the road to EPD" for Small and Medium sized Enterprises	D25 Guidelines to Type III Environmental Declarations "On the road to EPD" for Small and Medium sized Enterprises		See above
Oct 04 – Sept 06	Participation in EC working groups or expert meetings for harmonised LCA/EPD (Construction, EEE, JRC) for dissemination of WP results		Dec 06	Participation by Vattenfall, SEMC and other partners in among other, the following events: <ul style="list-style-type: none"> the Technical Committee of the Swedish EPD-system every other month Gednet 13th meeting in Soeul, Korea

WP 5 Planned month	WP5 Activity	Wp 5 Relation to work package deliverables and milestones	WP 5 Date completed	Wp 5 Objectives/Deviations/Comments
				<ul style="list-style-type: none"> • Intend project meetings • Various conferences <p>Will continue after project closure.</p>

3.1.3.6 WP6

The table below shows the planned work in workpackage 6 and how much of it has been completed. SSER, Vattenfall, SEMC, Huskvarna, Mercatus, Etac, Cruzinox, Conretop, Polisport, Konto, Melitek, Neba and Newline are involved in this work package.

WP 6 Planned month	WP6 Activity	Wp 6 Relation to work package deliverables and milestones	WP 6 Date completed	Wp 6 Objectives/Deviations/Comments
Oct 05	Workshop on how to create a demand for EPDs in the customer-supplier relationship at midterm	D11 Draft Plan for using and disseminating knowledge. M6.1 – Set up of Exploitation Management Structure	Nov 05	Draft Plan for using and disseminating knowledge included in 12 month report
April-June 06	Develop explanatory material about the Stepwise EPD concept aimed at purchasers	Considered necessary for understanding the Stepwise EPDs	Aug 06	Completed August 06. Available at Stepwise website http://extra.ivf.se/stepwiseEPD .
Sept 06	European conference on EPD for expert actors. Conference will be focussed on the demand side of EPD.	M6.2 – Decision on recommendations to be brought forward at the European STEPWISE EPD Conference	Dec 06	Carried out in Riga in December 06. See annex 3.
Sept 06	Drawing up dissemination and exploitation plan based on conference outcome	D26 Final Plan for using and disseminating knowledge	Dec 06	Final Plan for using and disseminating knowledge included in this final report
Oct 04-Sept 06	Participation in international working groups or expert meetings for harmonised LCA/EPD (Construction, EEE, JRC) for dissemination of WP results		Dec 06	<p>Participation in the following events:</p> <ul style="list-style-type: none"> • Participation by Vattenfall and SEMC in ISO TC 207 meeting in Madrid, 12-17 September on ISO 14025. • Participation by Vattenfall and SEMC in the Technical Committee of the Swedish EPD-

WP 6 Planned month	WP6 Activity	WP 6 Relation to work package deliverables and milestones	WP 6 Date completed	Wp 6 Objectives/Deviations/Comments
				<p>system every other month, discussing among other the Intend⁴ project.</p> <ul style="list-style-type: none"> Participation by SEMC in the conference to present final results of the Intend project in Bruxelles 22 September.

3.1.3.7 WP7

The table below shows the planned work in workpackage 7 and how much of it has been completed.

WP 7 Planned month	WP7 Activity	WP 7 Relation to work package deliverables and milestones	WP 7 Date completed	Wp 7 Objectives/Deviations/Comments
Nov 04 – Dec 04	Start meeting including all project participants (including technical workshop)	M7.1 Kick-off Meeting with all partners M7.2 Set up of Project Management Structure	Jan 05	Kick-off meeting carried out 1-2 November. The management infrastructure consists of the Project Coordinator and the Steering Committee, SC. All partners are invited to the SC-meetings, but it is OK for all but the RTD-performers to be represented. SC meetings have been carried out monthly by telephone.
Oct 05	Mid-term meeting including all project participants (including technical workshops)	M7.3 Project Meeting with Mid-term Assessment (including technical workshop) with all partners – Month 13	Nov 05	Carried out 2-4 November 05
Sept 06	Closing meeting including all project participants (including European conference)	M7.5 Final Project Meeting with all partners, including a European STEPWISE EPD Conference	Dec 06	Carried out Dec 06, see annex 2
Oct 04 – Sept 06	Project management will include general support to WP1 through WP6, as well as exchange and provision of information with both internal and external project entities. It further includes management and refinement of the work programme	D1 Project presentation and project website D2 6-month Management Report D12 12-month Midterm report – including draft exploitation plan. D15 18-month Management Report	June 07	See list of deliverables for dates

⁴ The EU LIFE-funded Intend project is a joint Italian-Swedish activity aiming to define an Environmental Product Declaration system that can be applied at the international level.

WP 7 Planned month	WP7 Activity	Wp 7 Relation to work package deliverables and milestones	WP 7 Date completed	Wp 7 Objectives/Deviations/Comments
	and each partner's role in the project during its full duration. Emphasis is put on keeping a highly motivated and dedicated project team.	D27 24-month (final) Report – Summary Report – All project aspects		
April 05 and April 06	Steering committee telephone meetings will take place on both sides of mid-term meeting	M7.4 18-month Project Meeting – Project month 19	January 07	SC-meetings have been carried out on a need basis (22 during the whole project).

3.1.3.8 Deliverables

The table below gives planned and actual date of submission for all project deliverables.

Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D1	Project presentation and project website	7	IVF	0,2	R	PU	2	0 and 8	Website was launched in September 2004 and the Start Page includes a project presentation

⁵ Nature of the deliverable:

R = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

⁶ Dissemination level:

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).

CO = Confidential, only for members of the consortium (including the Commission Services).

⁷ Delivery date to the Commission. Planned delivery date shows plan since last notification of changes in deliverables.

Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D2	6-month Management Report	7	IVF	0,1	R	CO	6	8	According to the Contract and the PO only required at 12 and 24 months
D3	Three EPDs in Swedish SMEs corresponding to the first step of the stepwise EPD approach	1	IVF	8,5	O ⁸	PU	10	11 November	New delivery date month 12, ie 1 October. EU informed.
D4	Three EPDs in Portuguese SMEs corresponding to the first step of the stepwise EPD approach	2	INET I	8,5	O ⁸	PU	12	13	Two of three EPDs delivered in November 05. Polisport EPD ready in April. Redelivered complete in May 06.
D5	One EPD in Latvian SME corresponding to the first step of the stepwise EPD approach	3	IVL	3,2	O ⁸	PU	15	23	Delivered 26 September 06. Draft ready since before midterm meeting
D6	Three EPDs in Danish SMEs corresponding to the first step of the stepwise EPD approach	4	2.0	8,5	O ⁸	PU	19	25	Delivered 16 November. EPDs for Neba and Newline finalized in April and delivered in May.
D7	Improved Swedish EPDs	1	IVF	0,4	O	RE	18	27	Two of three ready in June 2006. EC informed that December is new delivery date.

⁸ Published on the internet at www.environdec.com in pdf-format and possibly also used in marketing actions all aimed at interested purchasers of respective product.

Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D8	Improved Portuguese EPDs	2	INET I	0,4	O	RE	18	29	EC informed that February 2007 is new delivery date and that D18 will probably consist of one full EPD for Concrete and Product Category Rules, PCR, for childrens bike seats.
D9	Improved Latvian EPD	3	IVL	0,2	O	RE	18	29	EC not informed that February 2007 is new date
D10	Improved Danish EPDs	4	2.0	0,4	O	RE	18	25	Delivered 16 November as D10 <i>Generalized input/output based database for Stepwise EPD layout 2 used in Denmark</i>
D11	Draft Plan for using and disseminating knowledge	6	SSER	0,9	R	CO	12	14 Nov	In 12-month report
D12	12-month (yearly/mid-term) Report – Technical, financial and management	7	IVF	3	R	CO	12	14 Nov	
D13	<i>Replaced by more efforts into D25. All resources moved there.</i>								
D14	Open website for Stepwise EPD established	5	IVL	1	O	PU	24	12 May	In operation since April 06. A more permanent home at Gednet will be sought.



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Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D15	18-month Management Report	7	IVF	1	R	CO	18	15 May	Only informal report required
D16	One report documenting the impact of the EPD work in the three Swedish SMEs in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	1	IVF	10,4	R	CO	27	27	EC informed about delay until December 2006
D17	One report documenting the impact of the EPD work in the three Danish SMEs in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	4	2.0	10,4	R	CO	24	29	EC informed about delay until February 2007

Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D18	One report documenting the impact of the EPD work in the two Portuguese SMEs in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	2	INET I	10,4	R	CO	24	27	EC informed about delay until December 2006
D19	One report documenting the impact of the EPD work in the Latvian SME in terms of new customers, new orders, product environmental performance improvements as well as barriers and motives for upgrading to third party verified EPD	3	IVL	4	R	CO	24	27	EC informed about delay until December 2006
D20	One national workshop in Sweden to promote EPD documented in workshop proceedings	1	IVF	1	O	PU ⁹	24	23	Carried out 21 September 2006. Delivered 25 September 2006.

⁹ Proceedings in respective national language targeted at environmental coordinators in industry and commerce, environmental policy professionals and LCA researchers.

Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D21	One national workshops in Portugal to promote EPD	2	INET I	2	O	PU ⁹	24	25	Delivered 16 November
D22	One national workshop in Latvia to promote EPD	3	IVL	1	O	PU ⁹	24	23	Carried out 13 September 2006. Delivered 25 September 2006.
D23	One national workshop in Denmark to promote EPD	4	2.0	1	O	PU ⁹	27	29	Included in D17. New delivery date February 2007.
D24	One scientific paper on EPD barriers and motives for SMEs based on all nine case studies	1,2,3,4	IVF	3	R	PU ¹⁰	29	34	Two papers. Latest version delivered July 2007.
D25	Guidelines to Type III Environmental Declarations "On the road to EPD" for Small and Medium sized Enterprises	5	IVL	4,9	R	PU ¹¹	29	29	New delivery date February 2007
D26	Final Plan for using and disseminating knowledge	6	SSER	4	R	CO	29	29	Included in D27. New delivery date February 2007

¹⁰ Paper submitted for publication in academic journal targeted at environmental policy professionals, LCA researchers and environmental coordinators in industry and commerce.

¹¹ Published at open part of project website <http://extra.ivf.se/stepwiseEPD> as a downloadable pdf-report primarily targeted at LCA researchers and consultants that would like to join the environmental data network.



Mats Zackrisson

FINAL REPORT

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Deliverable No	Deliverable name	WP number	Lead participant	Estimated person-months	Nature ⁵	Dissemination level ⁶	Planned delivery date ⁷	Actual delivery date	Comments on modifications etc
D27	24-month (final) Reports – All project aspects, one full confidential version and one public version	7	IVF	1,9	R	PU, CO	30	35	Periodic report P2 delivered February 2007. Final report delivered in August 2007.
Total				95,3					

2.1.4 Consortium management

Structure, tasks and achievements

The project coordinator IVF has been responsible for managing the project and acting as the main interface between the Consortium and the European Commission. The Steering committee, formed at the kick-off meeting, has represented the Consortium and acted as the coordinator's speaking partner in operative decision-making and the more long-term exploitation of project results. All partners were members of the Steering Committee, but many, especially the SME partners were usually represented by their respective RTD-performer.

Changes in partners' activities or in the consortium itself

Amendment 1 was filed 3 November 2004. JSL - Material Electrico Lda from Portugal left the project at their own wish.

Amendment 2 was filed in April 2005, after the project at last had gotten the official starting date approved. With the second amendment Polisport took JSL's place, IKEA left the project and Swedepower AB was added as a subcontractor to Vattenfall. SEMC took over IKEA's activities and budget. All these changes took place before any serious project activities had started. Thus the damage was very limited if any.

The third and last amendment was filed 6 February 2006. The amendment encompassed the following issues:

- Extension of project duration with three months. The main reason being the delay in the beginning of the project, see Major problem and corrective action.
- Change of deliverables related to building of database. These deliverables were deemed not so relevant anymore due to emergence of other cost-effective databases, eg Ecoinvent and the European Platform on Life Cycle Assessment. Most of the funds thus saved were suggested to be used on making the EPDs more marketable as strongly expressed by the SMEs at the midterm meeting.
- Transfer of budget (small amount) from former partner IKEA to partner Mercatus.
- Subcontract budgets needed for IVF and INETI

Project time table and status including updates and changes

See amendments above.

Communication within the consortium

The Kick-off meeting was held in Stockholm 1-2 November 2004.

One Technical Meeting was held during 10-12 March in Copenhagen.

22 telephone Steering Committee Meetings has been held and documented during the project.

The Mid-term meeting took place 2-4 November 2005 in Lisbon, Portugal.

The Stepwise EPD website has been in use for project internal communication during the whole project. It was moved to an SQL-based platform in December 2006 in order to improve the stability. The website is also used for external communication.

The project closing meeting was carried out in Riga 6 December 2006, in connection to the international conference for expert actors *Communicating Environment*. The report from the project closing meeting is attached as Annex 2.

2.1.5 Other issues

Contributions of SMEs, RTDs and OTHs

Some SME and OTH partners have done more than expected and some have done less than expected. However, these deviations from the planning were expected, see for example section 5 in the Description of work. The differences reflect the different success rates in using the stepwise EPDs.

RTD-performers have largely contributed according to budget and expectations.

Extent to which work of RTDs has benefited SMEs

All the planned ten EPDs have been produced in cooperation between RTD and SME. Additional, improved EPDs have been produced and Product Category Rules for child bicycle seat. RTDs have supported the SMEs in various market related activities, eg by producing an information brochure about stepwise EPD aimed at purchasers.

Balance of work between RTDs & SMEs/OTHs

The contributions of SMEs, RTDs and Other partners were as planned, ie RTDs have done most of the work, followed by the SMEs.

2.2 Plan for using and disseminating knowledge

2.2.1 Exploitable knowledge and its use

The exploitable knowledge produced in the project is shown in the table below.

Exploitable knowledge (description)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable for commercial use	Patents or other IPR protection	Owner & Partner(s) involved
More in-depth knowledge about the environmental profile of membrane technology unit	EPDs on membrane filtration Twelve environmental improvement ideas.	This membrane technology is typically used in power stations burning wet fuels and process industry.	EPDs used in various sales situations and in general marketing of company during and after Stepwise project. 8 improvement ideas implemented in new installations during Stepwise project. Implementation will continue after Stepwise project.	None	Mercatus
More in-depth knowledge about the environmental profiles of metal cover and automotive parts	EPD on metal cover EPD on automotive parts Seven environmental improvement ideas.	BT fork lift truck Automotive industry	EPD used in workshop with BT during Stepwise project. EPDs will be shown on demand after Stepwise project. Some improvement ideas will probably be implemented when cover is redesigned.	None	Huskvarna
More in-depth knowledge about the environmental profile of toilet armrests	EPDs on toilet armrests 23 environmental improvement ideas.	Used in private homes and public toilets	EPDs used in workshop with public procurement body and sent with bids to the building sector during Stepwise project. Planning future use of EPDs. Four environmental improvement ideas implemented in new model during Stepwise project.	None	Etac
More in-depth knowledge about the environmental profile of wheelchair	EPD on wheelchair	Health sector	EPDs will be shown on demand after Stepwise project.	None	Neba
More in-depth knowledge about the environmental profile of household sewage treatment	EPD on household sewage treatment	Building materials sector	EPDs will be shown on demand after Stepwise project.	None	Newline
More in-depth knowledge about the environmental profile of intermediary plastic	EPD on Meliflex, an intermediary plastic. Some environmental improvements ideas.	Pharmaceutical industry	EPD used in discussions with major client during the Stepwise EPD project. These discussions will continue.	None	Melitek
More in-depth knowledge about the environmental profile of a pressure cooker	EPD on a pressure cooker – Evinox simple 6L model. 39 environmental improvement ideas.	Consumer product	Various marketing measures during 2005 and 2006	None	Cruzinox
More in-depth knowledge about the environmental profile of concrete	EPD on 1 m3 of concrete produced in the company	Building materials	Various marketing measures during 2005 and 2006	None	Concretope
More in-depth	EPD on a baby	Consumer	Various marketing measures	None	Polisport

Exploitable knowledge (description)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable for commercial use	Patents or other IPR protection	Owner & Partner(s) involved
knowledge about the environmental profile of a baby seat (accessory for bicycles)	seat for bicycles, Wallaroo model	goods	during 2005 and 2006		
More in-depth knowledge about the environmental profile of wood panel	EPD on wood panel Four areas of environmental improvements identified.	Furniture industry	EPDs used in various sales situations and in general marketing of company during and after Stepwise project. New boiler installed 2006.	None	Konto
How to do a stepwise EPD	Assist companies to do EPDs with the Stepwise EPD method. Use of the knowledge gained in the development and promotion of regular EPD-programmes	In principal applicable for companies in all sectors	Stepwise website used as main platform for marketing of services and cooperation about the Stepwise concept. Stepwise guideline will be sent for open consultation during 2007. Gednet ¹² will be approached about hosting website during 2007. Promote a University course in LCA (part of Masters program) in Riga or other form of education/training; guest course and promote Stepwise EPD in Latvia by demonstration project, articles, approach minister etc 2.-0, IVL, Danish standard plan to offer LCA specialist intensive training 2-5 days. IVF offers two-day course about doing a Stepwise EPD for companies All partners will promote Stepwise EPD at national and international meetings and through follow-on projects, see list in Annex 2 Report from project closing meeting. Two follow-on projects have already been drafted: 1) "A Global Approach for Implementing Stepwise Environmental Product Declaration for SMEs" promoted within the Sustainability of the Planet programme; and 2) "Improved competitiveness for SME associations and their members by comparable	No	RTD-performers of the project

¹² The Global Type III Environmental Product Declarations Network, founded in 1999, is an international non-profit association of Type III Environmental Product Declaration organisations and practitioners. The overall purpose of the network is to foster co-operation and encourage information exchange among its members and other parties operating or developing Type III Environmental Product Declaration programs and to discuss key issues in developing such programs.

Exploitable knowledge (description)	Exploitable product(s) or measure(s)	Sector(s) of application	Timetable for commercial use	Patents or other IPR protection	Owner & Partner(s) involved
			environmental product declarations", which has been approved for stage 2 in the 7 th Framework Programme.		

2.2.2 Dissemination of knowledge

Planned/ actual dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/ involved	Achieved
2004-09-15	Press release in Swedish	Environmental Experts	Sweden. Article in Miljöledaren.	Approx 500	IVF	√
November 2004	Press release in English	Environmental Experts	Europe. Article in Ends Daily	Approx 5000	IVF	√
December 2004	D1. Project presentation and project internal website	EU research community	Europe	Approx 400	IVF	√
May 2005	Cordis	Research	Europe	Approx 500	IVF	√
April 2005	Conference about environmental information in the life cycle	Research	Sweden	100	IVF	√
September 2005	Poster at the LCM2005 conference	LCA Research	Spain	Approx 200	INETI/ 2.-0/IVF	√
September 05	Press release in Swedish about the first EPDs being ready	Environmental Experts	Sweden Article in Miljöledaren.	Approx 500	IVF	√
September 2005	D3. Three published EPDs from Swedish SMEs	Experts	Global. Published at www.envirodec.com	Approx 200	IVF/SEMC/ Huskvarna/ Mercatus/ Etac	√
2005-10-26	Presentation about the Stepwise project	Environmental Coordinators	Sweden	15	IVF	√
2005-10-25	Poster sent to 27 th LCA Discussion Forum	Research	Europe	Approx 50	IVF	√
2005-11-02 and 2005-11-03	Project Midterm meeting	Portuguese stakeholders to EPD-program participated in midterm meeting	Portugal	6-10	INETI and all participating partners (12 of 17)	√
2005-11-09	Distributing poster at EMS conference in Sweden	Swedish industry and organisations	Sweden	Circa 100	IVF	√
2005-11-10	Article in newsletter for IVF's member companies	Swedish manufacturing industry	Sweden	350 ¹³	IVF	√
2005-11-11	Stepwise EPD for	Visitors to	Global	Approx 100		√

¹³ 340 e-mail addresses in the 54 member companies and their subsidiaries plus paper versions to all contact persons.

Planned/ actual dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/ involved	Achieved
	Evinox pressure cooker published on Stepwise website	Stepwise website				
December 2005	Submission of abstract and poster to Conference	2nd International Conference on Quantified Eco-Efficiency Analysis for Sustainability 28 - 30 June, 2006 in Leiden in the Netherlands.	Europe	Approx 100	IVF	√
December 2006	The three Swedish Stepwise EPDs, published before midterm, preregistered with the EPD®-system	Visitors to environdec.com		Approx 200		√
2006-03-23 resubmitted June 2006	Questionnaire completed including Stepwise EPD concept	Browsers of the EC LCA directory "Internet Site on LCA Tools and Services"	Europe	Approx 50	IVF	√
2006-03-27	Published Stepwise EPD for ready-mixed concrete from Concretope	Stepwise website visitors		Approx 500		√
2006-04-04	Published Stepwise EPD for children bicycle seat from Polisport	Stepwise website visitors	Global	Approx 100		√
4 April 2006	Notice about at international conference in Riga 5 December on www.environdec.com	Visitors to the website of the EPD®-system	Global	Approx 1000		√
4 April 2006	Abstract submitted. Approved for presentation 9 June.	5th Australian Conference on Life Cycle Assessment	Global	Approx 10		√
25 April 2006	Message to the Eco-indicator mailing list About Stepwise EPD	LCA practioners	Global	Approx 200		√
2006-04-24	Published Stepwise EPD for Wheel chair from Alu Rehab	Stepwise website visitors	Global	Approx 100		√
2006-04-24	Published Stepwise EPD for Wheel chair from Neba	Stepwise website visitors	Global	Approx 100		√
2006-04-24	Published Stepwise EPD for waste water treatment plant from Newline	Stepwise website visitors	Global	Approx 100		√
2006-04-26	Published Stepwise EPD for toilet armrest OptimaL from Etac	Stepwise website visitors	Global	Approx 100		√
28 April 2006.	Providing information about the Stepwise EPD project to a EC survey about Environmental Compliance	DG Environment Industry Unit	EC	Approx 50		√

Planned/ actual dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/ involved	Achieved
	Assistance for SMEs					
2006-05-15	Published Stepwise EPD for wooden panel from Konto	Stepwise website visitors	Global	Approx 100		√
May 2006	Another message to the Eco-indicator mailing list About Stepwise EPD	LCA practioners	Global	Approx 200		√
June 2006	Press release about Swedish national conference	Sent to 120 Swedish magazines 9 June.	At least one small article in Miljöledaren week 25.	Approx 20		√
June 2006	Abstract submitted	NorLCA conference	Nordic countries	Approx 50		√
June 2006	Commenting on draft EC-document Making product information work for the environment		Europe	Approx 20		√
June 2006 August 2006	Invitations to Swedish national conference	E-mail distribution via conference partners IVF, SEMC, NUTEK, Swedish EPA, Vattenfall, Etac, Huskvarna and Mercatus	Sweden	Approx 200		√
June 2006 August 2006	Invitations to Latvian national conference	E-mail distribution by SSE in Riga and Konto	Latvia	Approx 50		√
2006-09-07	PCR for bicycle seat for consultation to interested parties and posted on environdec.com	Interested parties	Europe	Approx 15		√
2006-09-13	Latvian Stepwise EPD national conference	Industry, Government agency, LCA experts	Latvia	36		√
2006-09-18	Published Stepwise EPD on general purpose membrane filtration from Mercatus	Stepwise website visitors	Global	Approx 100		√
2006-09-21	National Stepwise EPD conference in Stockholm	Industry, Government agency, LCA experts	Sweden	34	IVF	√
September 2006	One scientific paper on Stepwise EPD submitted to JCP	Academic	Global	0, Not admitted	INETI, IVF, 2.-0	√
2006-10-26	Published Stepwise EPD on Meliflex compound from Melitek	Stepwise website visitors	Global	Approx 100	2.-0, IVF	√
October 2006	Notice about international conference Stepwise website	Stepwise website visitors	Global	Approx 100	IVF	√
26 October 2006	National workshop in Portugal to promote EPD	Industry, Government agency, LCA experts	Portugal	27		√

Planned/ actual dates	Type	Type of audience	Countries addressed	Size of audience	Partner responsible/ involved	Achieved
2006-11-14	Press release about international conference 5 December in Riga	International press contacts	Global	Approx 10		√
November 2006	E-mail invitations to international conference 5 December in Riga	LCA community EC DG Environment	Europe	Hundreds	All	√
1 December 2006	National workshop in Denmark to promote EPD	Experts	Denmark	5		√
5 December	International conference in Riga	Experts	Europe	36	All except Neba, Newline, Huskvarna, Etac and Vattenfall	√
June 2007	Second scientific paper on Stepwise EPD submitted to JCP		Global	Approx 500	IVF, IVL, INETI, 2.-0, SSE in Riga	√
March 2007	Stepwise EPD guideline sent out for open international consultation	Experts Programme operators	Global	Approx 200	IVF, SEMC	

2.2.3 Publishable results

The Stepwise EPD project has produced and made public the results described below. The various documents are all available at <http://extra.ivf.se/stepwiseEPD>.

Brochure about Stepwise EPD aimed at purchasers

The brochure explains what an EPD and a Stepwise EPD is and how they can be used to stimulate environmental improvements.

Stepwise EPD guideline

The Stepwise EPD guideline contains the rules for making a stepwise EPD. Version 2006-12-15.

Template for product data collection

The template for product data collection helps to find the necessary data from the manufacturing stage. The template is also available in Swedish.

Planning guide

After doing the Stepwise EPD, a plan for upgrading it to a full EPD should be made. The planning guide for upgrading the Stepwise EPD to meet the requirements of the EPD® system is available at <http://extra.ivf.se/stepwiseEPD>.

Two scientific papers

Stepwise Environmental Product Declarations - Identifying and communicating eco-design opportunities, submitted to the Journal of Cleaner Production in October 2006. This paper was not accepted for publication in its original form. The Consortium decided to put all efforts into the other paper, see below.

Stepwise Environmental Product Declarations – Ten SME case studies, was submitted to the Journal of Cleaner Production in June 2007.

15 Stepwise EPDs

The following Stepwise EPDs have been produced by the project:

1. Stepwise EPD for Forming of prototypes in sheet metal. Huskvarna Prototyper AB. January 2007.
2. Stepwise EPD for metal covers for battery pack of fork-lift. Huskvarna Prototyper AB. September 2005.
3. Stepwise EPD for Membrane filtration. Mercatus Engineering AB. May 2006.
4. Stepwise EPD for Membrane filtration of flue gas condensate. March 2006.
5. Stepwise EPD for EVINOX Simple pressure cooker. Cruzinox – Industria Metalúrgica Lda. August 2005.
6. Stepwise EPD for Ready-mixed concrete. Concretope – Fabrica de Betão – Pronto SA. August 2005.
7. Stepwise EPD for “Average” Ready-mixed concrete. Concretope – Fabrica de Betão – Pronto SA. May 2006.
8. Stepwise EPD for Optima toilet armrest. Etac Supply Center AB. April 2006.
9. Stepwise EPD for OptimaL toilet armrest. Etac Supply Center AB. April 2006.
10. Stepwise EPD for Wooden panel for furniture. SIA Konto. November 2005.
11. Improved Stepwise EPD for Wooden panel for furniture. SIA Konto. December 2006.
12. Environmental Product Declaration for a NEW-LINE mini waste water treatment plant. NEW-LINE Faaborg A/S. 2006.03.23.



13. Environmental Product Declaration for a Wheelchair Netti III standard comfort class. Neba A/S. 2006.04.10.
14. Environmental Product Declaration for 1 kg of Meliflex (a polyolefin compound). Melitek A/S. 2006.09.01.
15. Stepwise EPD of Wallaroo QST bicycle seat. Pedro & Paulo Araújo Plásticos SA. March 2006. In English and in Portuguese.

Abbreviations used

2.-0, 2.-0 LCA consultants

EC, European Commission

EMS, Environmental management system

EPD, Environmental product declaration

INETI, Instituto Nacional de Engenharia, Tecnologia e Inovação

IVF, IVF Industrial Research and Development Corporation

IVL, IVL Swedish Environmental Research Institute Ltd.

ISO/DIS, International Organisation for Standardization, Draft International Standard

LCA, Life Cycle Assessment

RTD, Research and Technology Development

SME, Small and medium size enterprise

SEMC, The Swedish Environmental Management Council

SSE in Riga, Stockholm School of Economics in Riga

Annex 1 Report from Midterm meeting

Stepwise EPD Mid-term meeting, Lisbon 2-4 November 2005.

Meeting participants

Mr Peter Hallberg, Mercatus
Mr Jan Kastensson, Mercatus
Mr Mats Zackrisson, IVF
Mr Kim Christiansen, 2.-0
Ms Cristina Rocha, INETI
Mr Paulo Vivas, INETI
Mr David Camocho, INETI,
Mr Jorge Alexandre, INETI
Mr Aivars Timofejevs, SSE in Riga
Mr Gunnar Ljungdahl, SSE in Riga
Ms Liga Krukovska, Konto
Ms Caroline Setterwall, Vattenfall
Mr Sven-Olof Ryding, SEMC
Ms Anna Jarnehammer, IVL
Ms Annsie Kumlin, IVL
Mr. Paulo Freitas, Polisport
Ms Tania Soares, Polisport
Ms Maria João Carvalho, Concretope
Ms Ines Silva, Concretope
Mr Hans-Lennart Norrblom, IVF
Mr Fernando Mendonca, Cruzinox
Ms Carla Almeida, Cruzinox
Mr David Costa, Cruzinox

In addition to the above project partners, the following persons representing stakeholders of a future Portuguese EPD-program attended the first two meeting days:

Ms. Delfina Serpa Pinto - General Directorate of Enterprise, Portugal
Ms. Ester Silva - ibidem
Ms. Isabel Lico - Institute of Environment, Portugal
Ms. Catarina Quintela - ibidem
Mr. Eduardo Santos - Instituto Superior Técnico / Technical University, Lisbon, Portugal

Partners absent

Representative from Etac¹⁴/Represented by Hans-Lennart Norrblom, IVF
Representative from Huskvarna/Represented by Mats Zackrisson, IVF
Representative from Melitek/Represented by Kim Christiansen, 2.0
Representative from Neba/Represented by Kim Christiansen, 2.0
Representative from Newline/Represented by Kim Christiansen, 2.0

Documents sent out before the meeting

- *Detailed midterm program.doc*, to all partners
- *SocialProgramme.doc*, to all partners
- *Presentation guidelines.doc*, to SME partners

All these documents are available at <http://extra.ivf.se/Stepwise>

Documents handed out at the meeting

No documents were handed out at the meeting

Records of the meeting

These minutes only contain summary descriptions of discussions, decisions and other results. Associated Power Point presentations are documented in annex 1 to 22 and can be found at <http://extra.ivf.se/Stepwise>.

For a summary of decisions, read Decisions from the first two days of the midterm meeting in page 9 and Decisions made 5 November in page 13. Page 13 also contains a list of abbreviations used.

Welcome

Cristina Rocha INETI opened the meeting.

Introduction

Mats Zackrisson, IVF, described the Stepwise EPD-project as a EU-financed project in which we do (at least) 10 environmental declarations (based on life cycle assessment) for smaller companies in four countries (Sweden, Denmark, Portugal and Latvia) and investigate if and how an EPD can improve product environmental performance and product sales, and develop and promote the Stepwise method. The overall objective is to develop a method for doing EPDs suitable also for smaller companies, which implies a method that already at early steps and at low cost can be used in marketing and eco-design.

¹⁴ Lars-Eric Gårdeskog from Etac had booked to come to Lisbon but had to cancel because a product accident investigation. His general message to the meeting was that his company is very happy with the project and foresees great market potential with the EPDs.

The main remaining activities in the project are:

- Seven more EPDs to be finalized (at least)
- Establish Environmental Data Network(s) and delivery of data to those networks
- Marketing workshops at each company – meeting the customers
- Companies implementing some marketing measures
- Companies implementing some product environmental improvement options
- Plans for up-grading to "full" EPDs
- Reports about impacts
- National workshops
- Scientific paper on EPD barriers and motives for smaller companies based on above reports
- Stepwise EPD guideline finalised
- European conference on EPD for expert actors

Financially, the project is more or less on target. As expected, there are large variations between partners. For more details see *Annex 1 Introduction to midterm meeting*.

Ecodesign workshop, moderated by Cristina Rocha and Kim Christiansen

The Ecodesign workshop was started with company presentations.

Mercatus

Peter Hallberg and Jan Kastensson from Mercatus presented the redesign of the membrane filtration unit. The redesign was mainly driven by working environment consideration, but it gives also environmental advantages since a more uniform pressure over the membranes are achieved, which in turn reduces electricity consumption for pumping. Electricity consumption during use is the main environmental aspect of the membrane unit according to the LCA and the EPD.

Vattenfall

Caroline Settervall from Vattenfall emphasized the connection between the EMS and the EPD. Since the data is drawn from the EMS, the EPD affects the EMS. Thus making an EPD not only give eco-design improvement options but also production improvements.

Polisport

Tania Soares from Polisport presented why Polisport joined the project and key learnings from making LCA and EPD. Among other difficulties in finding data. Polisport also presented some customer feedback from the EPD, eg "too

many pages” and “too difficult language”. See *Annex 2 Polisport on Ecodesign* for more details.

Konto

Liga Krukovska from Konto presented some results from sending the EPD with a questionnaire to 21 partners/customers. Few had seen or heard about LCA and EPD before. Surprisingly, there were more interest from Latvian partners than from partners in western and northern Europe. See *Annex 3 Konto Survey on EPD*.

Cruzinox

Fernando Mendonca from Cruzinox presented the process and results of searching for improvement options. An impressive 39 ideas were considered so good that they will be implemented in the coming “Eco Ergo” pressure cooker. For more details see *Annex 4 Cruzinox on Ecodesign*.

IVL

Annsie Kumlin from IVL presented Konto’s improvement options as a result of the LCA and EPD work. Among other, the installation of a new wood residues boiler are taking place now. Possibilities to use the FSC-label should be investigated. For more details, see *Annex 5 Konto and Ecodesign*.

Anna Jarnehammer from IVL showed examples of product improvements from LCA in connection with pallet manufacturing and parquet flooring. Modern “clie” floor boards owe something to LCA. For more details, see *Annex 6 IVL on Ecodesign*.

IVF

Mats Zackrisson from IVF presented quantitative results from the generation of improvement options based on the LCA and EPD-work and described the process used. For more details see *Annex 7 IVF on Eco-design*.

Hans-Lennart Norrblom from IVF informed that Etac in its new armrest have eliminated brass and aluminium to lower costs, improve the design and high brand image. Interestingly, the LCA and ensuing idea generation carried out in the Stepwise EPD project proposes that the avoidance of these materials decreases the product environmental impact significantly.

2.-0

Kim Christiansen from 2.-0 explained that one of the experiences from Denmark was that ecodesign and marketing have to be integrated. He also covered safety data sheets and the process used to prepare LCA and EPD. See *Annex 8 2.0 on*

Ecodesign for more details. Another issue brought forward by Kim (and others) was the need to compare or relate the figures in the EPD to something.

INETI

Paulo Vivas from INETI stressed the need to use some form of weighting and get down to process level when identifying improvement options. For more details see *Annex 9 INETI on Eco-design*.

Ecodesign workshop group discussions

Below follows an account of discussions in smaller groups of the following issues:

1. How did the Stepwise EPD project trigger ecodesign in your company? – barriers and opportunities...
2. How useful is the information in the EPD for designers and ecodesign? How can it be improved and which is the most cost effective way of working with EPD's in product development (procedure)?
3. Comparison of performance
 - What to compare?
 - How to do it?
 - Within the EPD? Outside? Concerns?

1. How did the Stepwise EPD project trigger ecodesign in your company? – barriers and opportunities...

There were two companies in this group, Mercatus and Cruzinox. It was concluded that both these companies had already before the project a quite active environmental work. The primary reason for joining the project was to turn that work into market benefit, not to look for ecodesign improvement opportunities. Nevertheless, the LCA and ensuing idea-generation highlighted improvement opportunities, many of which will be implemented. The discussion focussed mostly on market related issues. Some thoughts:

- An EPD can also trigger the customer to implement environmental improvement opportunities.
- For Mercatus clients life cycle cost data (LCC) is more interesting. We will use the EPD more as a background document where we have verified data that can be used for the LCC-calculations. Preferably, the customer does the LCC-calculations himself.
- We need to create a pull, a demand from clients, for EPDs. It is not there yet.
- One way of presenting the EPD for a client could be to hand it over and say “Look here, we know how our product perform environmentally” and then maybe not say much more about it unless the client has specific questions.

2. How useful is the information in the EPD for designers and ecodesign? How can it be improved, and which is the most cost effective way of working with EPDs in product development (procedure)?

The best opportunity to do LCA-based improvement work is when redesigning, because of good access to data. The LCA, not the EPD, should be used, because one needs to identify significant impacts at process level.

The discussions concluded that often other aspects like price and function are more important than ecological aspects in design work. Concurrent engineering or integrated design should be able to handle multiple aspects. There is a need for very easy to use tools, something like a red and green light for environmental aspects were discussed.

3. Comparison of performance

Compare with, or rather relate to:

- Not with competing products, because of high cost, legal risks etc
- Yourself, for example previous EPD
- National average information, often referred to as normalization
- Product development options, eg different materials
- Product usage scenarios/options
- Goals in ISO 14001

The conclusion was to put some text on how to compare (or rather relate the figures to) in the Stepwise EPD Guideline. This should also include text on careful wording with reference to ISO 14021.

Meeting with stakeholders of a future Portuguese EPD-program

Not all Stepwise EPD project partners attended this meeting.

Sven-Olof Ryding from SEMC gave the historic background to the development of the Swedish and the international EPD-system and explained some key features of how it functions today. He also referred to the Intend project and its continuation in the Extend project. Some questions, among other about the fee structure, was asked and answered. The main hurdle and way forward is to set up a Portuguese panel that can review Product Category Rules.

Marketing workshop, 3 November, moderator Aivar Timofejevs

The marketing workshop was started with some presentations. SME presentations were based on questions asked in the document *Presentation guidelines.doc*.

IVF

Mats Zackrisson from IVF presented some responses to the EPD of Huskvarna from a network meeting for green designers. For more information see *Annex 10 IVF on marketing*.

Polisport

Jorge Henriques from Polisport presented their views on EPD in relation to marketing. For more information see *Annex 11 Polisport on marketing*.

Konto

Liga Krukovska from Konto presented their views on EPD in relation to marketing. For more information see *Annex 12 Konto on marketing*.

Mercatus

Jan Kastensson and Peter Hallberg from Mercatus explained, among other, that they have three categories of clients:

1. Good customers with an environmental policy
2. Legislation driven customers
3. Reality driven customers

Price, water (cost) and energy (cost) are the three most important parameters for all their customers. Their EPD contains LCC relevant information and can be used, preferably by the customer, to do a life cycle cost calculation as a basis for an investment decision.

2.-0

Kim Christiansen from 2.-0 presented the Danish experiences on EPD in relation to marketing. For more information see *Annex 13 2.-0 on Marketing*.

Concretepe

Maria João Carvalho from Concretepe presented their views on EPD in relation to marketing. For more information see *Annex 14 Concretepe on marketing*.

Cruzinox

Fernado Mendonca from Cruzinox presented their views on EPD in relation to marketing. For more information see *Annex 15 Cruzinox on marketing*.

Ways of using EPD in marketing

This list below is compiled from the respective SME presentations above.

1. Include this information in the catalogue and website
2. Add the EPD logo on the individual baby seat packaging
3. Inform our clients during the international shows and visits
4. Create a newsletter to send to our contacts (clients, prospects and involved suppliers)
5. Information from Cruzinox is missing

Marketing workshop group discussions

Below follows an account of discussions in smaller groups of the following issues:

- How can the companies use the EPDs in marketing?
- What can the project do to market the Stepwise EPD concept?

1. How can the companies use the EPDs in marketing?

All SMEs participated in this group. For a detailed account of the discussions please refer to *Annex 16 How can EPDs be used in marketing*.

Customer attitude or awareness towards the environmental issue, EPD brand recognition and customer confidence in the EPD-brand were identified as three barriers for EPDs as a marketing tool. All these factors are influenced by information. Currently the information about EPD distributed by each company has not been co-ordinated. Thus creating the risk that different messages are attached or perceived with the EPD brand. In order to ensure the development of EPD as a brand it is necessary to start immediate co-ordination of the distributed information. As a first step a client friendly definition of EPD and Stepwise EPD has to be developed. An attempt to draft such a definition followed. The ISO 14025 definitions of EPD and products were taken as a starting point. How to continue this work will be decided in the next Steering Committee meeting. See *Annex 17 Draft explanation of EPD* for more information.

2. What can the project do to market the Stepwise EPD concept?

The discussions in this group focussed on planning for the national workshops. First a brain-storm on possible target audiences resulted in the following list:

- Public body purchasers, green public purchasing
- Latvian and Portuguese potential EPD-system makers
 - Public body co-sponsoring of EPDs was mentioned in this context
- EC
- Business associations in general and in particular those representing companies in the project
- Networks for sustainability design and similar organisations
- Technology transfer organisations
 - Swentec, a Swedish environmental technology transfer organisation are considering using EPDs as a quality assurance

requirement. The CEO of Mercatus sits in the board of Swentec and will be approached about these possibilities

- The LCA-world
- The education system
- Large retailers
- National standardisation mirror groups to ISO/TC 207
- Companies affected by Weee, RoHS and EuP

The meeting was of the opinion that the broadest possible target audience, depicted by the listing above, is preferred. It was also concluded that an ideal programme for a National workshop would contain, among other:

- Several customer/clients demanding EPDs, or at least testifying to the great value of EPDs, from their suppliers
- Project companies to tell their stories about EPD-making and the resulting benefits
- Blessing from the authorities/public bodies (NUTEK a possibility in Sweden)

The National workshops should feed the European level conference with speakers and conclusions. They should therefore be carried out in September-October 2006 (if project is extended to 1 January 2007).

Since the above list suggest quite large scale workshops of conference size, Portugal will probably only do two national workshops, not three, as previously planned.

We also discussed how the Stepwise EPD concept would live on after the Stepwise project is finished. It was decided to approach Gednet¹⁵ and ask them if they are willing to house Stepwise materials on their website www.gednet.org after project completion.

Decisions from the first two days of the midterm meeting

The following decisions and conclusions visavi the remaining planned activities in the project was confirmed by the meeting:

- Eco-design workshops at each company – meeting the customers
 - Will be done once in every SME, a few remains
 - Those that have been done indicate that project targets will get exceeded
- Companies implementing some (product) environmental improvement options
 - Should be documented by RTD-performer in "Report about impacts"
 - No other project activities planned on eco-design
- Marketing workshops at each company – meeting the customers

¹⁵ The Global Type III Environmental Product Declarations Network, founded in 1999, is an international non-profit association of Type III Environmental Product Declaration organisations and practitioners

- Develop an easy to understand explanation of EPD and Stepwise EPDs
- No standard form or number for these workshops/meetings
- Identify customers requiring EPDs to national workshops
- Plans for up-grading to "full" EPDs
 - Put something in guideline annexes
- National workshops
 - September-October 2006
 - Results to be fed into European level conference
 - For all users/stakeholders
 - Purchaser to explain why they want/demand
 - Project companies to give their stories
 - Blessings from public authorities
- Gednet website as possible home for the Stepwise project after project completion
- Stepwise EPD guideline finalised
 - Need to complement layout with material that explains the environmental impact categories
 - Need to relate to something and how to do it – Anna J will develop text
 - Write Stepwise "procedure" in guidelines and include improvement (eco-design, EMS etc) options workshops
- Ask the EC to move project closure forward 3 months to 1 January 2007

Friday 4 November

The meeting on Friday was primarily for RTD-performers and those especially interested in developing the Stepwise EPD method. Fernando Mendonca from Cruzinox was the only SME participant on Friday. No stakeholders of a future Portuguese EPD-program were present on Friday either.

European conference for expert actors

Sven-Olof Ryding and Caroline Setterwall led the discussion. The offer from SSE in Riga to host the conference was gratefully accepted by the meeting. The conference should take place in late November or early December 2006 on a Wednesday or a Thursday. Early start (ie fly in the day before the meeting) and early end (ie fly out the same day as the meeting) was preferred.

The messages that we want to convey at the conference are, among other:

- Industry can organise this better than governments can
- Governments can do something to help, eg sponsoring pilot projects like the Stepwise EPD project and follow-ups

Possible invitees are among other:

- Industry
- Government representatives
- The EC

- Margot Wallström, DG Enterprise, DG Energy, DG Environment (Bengt Davidsson, Manfred Fuchs), IPP group (Klaus Kögler), DG Research
- SETAC
- Green purchasing bodies/projects
- Consumer organisations

The appropriateness of following more or less the same programme structure as in the national workshops was discussed. A programme committee consisting of the following persons was appointed to produce a draft program this year:

- Cristina Rocha
- Gunnar Ljungdahl
- Kim Christiansen
- Mats Zackrisson

Anna Jarnehammer and Sven-Olof Ryding are willing to assist the programme committee.

Databases

Anna Jarnehammar from IVL led the discussions on databases. See *Annex 18 IVL on databases* for more information. It was concluded that publically available databases, like for example Ecoinvent, today are so affordable that it does not make much sense to invest resources in building a database with EPD-modules as originally planned. However, Anna will check a bit more before we make a final decision to drop these deliverables. If we drop, making PCRs for some companies, and move ahead for a full EPD might be an exchange deliverable.

Kim Christiansen from 2.-0 presented the various impact methods and databases we have used in the project, see *Annex 19 2.-0 on databases* for more details. He also presented the ideas about using normalized and even weighted data in the Danish EPDs. It was concluded these ideas are very interesting from a EPD user perspective but clearly deviates from the international EPD-system as expressed by the Intend project.

The EIPRO₂₅ database and a impact assessment method in four versions were provided for project partners, but only for use in the Stepwise EPD project. Kim will investigate to what extent (under what conditions) these data could be provided to the public.

Layout, logotype and explanatory material

It was decided that layout version 1, the boring one, will be used in Sweden, Portugal and Latvia. It will include the Stepwise logo. In Denmark, layout version 2, the fancy one, will be used, but without the Stepwise logo.

The need of developing explanatory material that is more suitable for customers and clients than the EPD (in particular those EPDs that use the boring layout 1)

was discussed throughout the meeting. In that context, layout 2 might be used also in the other countries.

The Stepwise EPD guidelines - How to step into annexes

Kim gave a presentation of the up-coming Danish EPD-system, see *Annex 20 Danish EPD-system*. Since the rules for the Danish system is not yet finalized, the How to step into the Danish system annex cannot be finalized yet. Kim will however write a small introduction.

The MSR 1999:2 guidelines will not be revised this autumn as previously announced. Instead they will be revised in the Extend project, the continuation of the Intend project. Anna will look at the old Sirii guidelines to see if they can be used as How to step into the Swedish system annex. If not, we can make a reference to MSR 1999:2 for the time being.

It was concluded that there is nothing in the MSR 1999:2 that forbids including working environment information in the EPD. However, ISO 14025 says that “additional environmental information may include, but is not limited to..... human health risk assessment and environmental risk assessment”, but it also says that “Information and instructions on product safety unrelated to the environmental performance of the product shall not be part of a Type III environmental declaration.” This issue will be further discussed.

Verification

Kim gave a presentation about EPD verification in general and in Stepwise EPD in particular, see *Annex 21 Verification*.

We had a small discussion about advantages and disadvantages with having verification for Stepwise EPDs at all. The main disadvantage and advantage is that it makes the Stepwise EPD look too much like a real EPD and it could thereby erode the value of a real EPD, while increasing the attractiveness of the Stepwise EPDs. The right balance between a Stepwise EPD and a real EPD has to be found so that many companies *enter* via a Stepwise and *continues* to a real EPD. It was decided to keep the verification for the Stepwise EPDs for the time being.

With one small change (to skip assessment of legal compliance which is very hard to do especially cross-countries) it was decided to carry on using the established verification procedure that is now in the Stepwise guideline. Mats will also circulate (and post on the Stepwise website) a practical table for communicating verification results that have evolved during the verification work.

Research methodology

Mats presented the interactive research methodology we use in the Stepwise project. We are developing the Stepwise EPD method while we are investigating

the underlying assumptions that EPDs are good for business and good for the environment. The scientific paper we will produce should complement the results documentation in the public domain, ie the Stepwise guideline and the EPDs. A plan for writing the paper was accepted. See *Annex 22 Research Methodology* for details.

Follow-up projects

A few minutes were devoted to brain-storming possible follow-up projects resulting in the following list:

- To create a pull
 - Demonstrations for procurers what EPD can do
 - Requirements from certain purchasers
 - Supply chain demand
- Bridge the gap between marketing people and LCA-people
- Normalization and weighting/interpretation
- SimaPro wizard (mainly to enable companies to easily update EPDs)
- Training programme that could be integrated in normal university level education
- EPDs in the ISO 14000 tool box
- From EPD to SPD (testing Bo's assumption)
- Product-specific EPD push to create a pull

Decisions made 5 November

- EPD EU-level Expert conference Nov-Dec 2006
 - Programme committee
- Databases/networks
 - Kim and Anna to investigate further what can be delivered to the public
 - To do PCR, possible exchange deliverable
- Layout 2 in Denmark without logo, layout 1 for the rest
 - Complimented with flashier explanatory material
- How to step into annexes
 - Kim writes a little very general today
 - Anna look over old Sirii guidelines
- Gednet to be used as platform/website for Stepwise materials after project completion
- Plan for writing scientific paper accepted. Mats to do report structure this year
- Verification

Carry on for now but skip assessment of legal compliance (circulate report format)

Annex 2 Report from the project closing meeting

Stepwise EPD Project Closing meeting, Riga 6 December 2006

Meeting participants

Kim Christiansen, 2.-0
Cristina Rochas, INETI
Paulo Vivas, INETI
Mats Zackrisson, IVF
Anna Jarnehammar, IVL
Gunnar Ljungdahl, SSE in Riga
Aivars Timofejevs, SSE in Riga
Maria Jao, Concretope
Jan Kastensson, Mercatus Engineering AB
Liga Krukovska, Konto Ltd.
Fernando Mendonca, Cruzinox Lda
Yvonne Nyman, IVF
José Saraiva, Polisport - Pedro & Paulo Araújo, Plásticos S.A.

Partners absent

The following partners were not represented at the closing meeting: Neba, Newline, Huskvarna, Etac, Swedish Environmental Management Council and Vattenfall.

Documents sent out before the meeting

- Agenda in e-mail dated 28 November
- First draft of scientific paper by e-mail dated 4 November

Document handed out at the meeting

Template for Audit Certificate.

Records of the meeting

Opening of the meeting

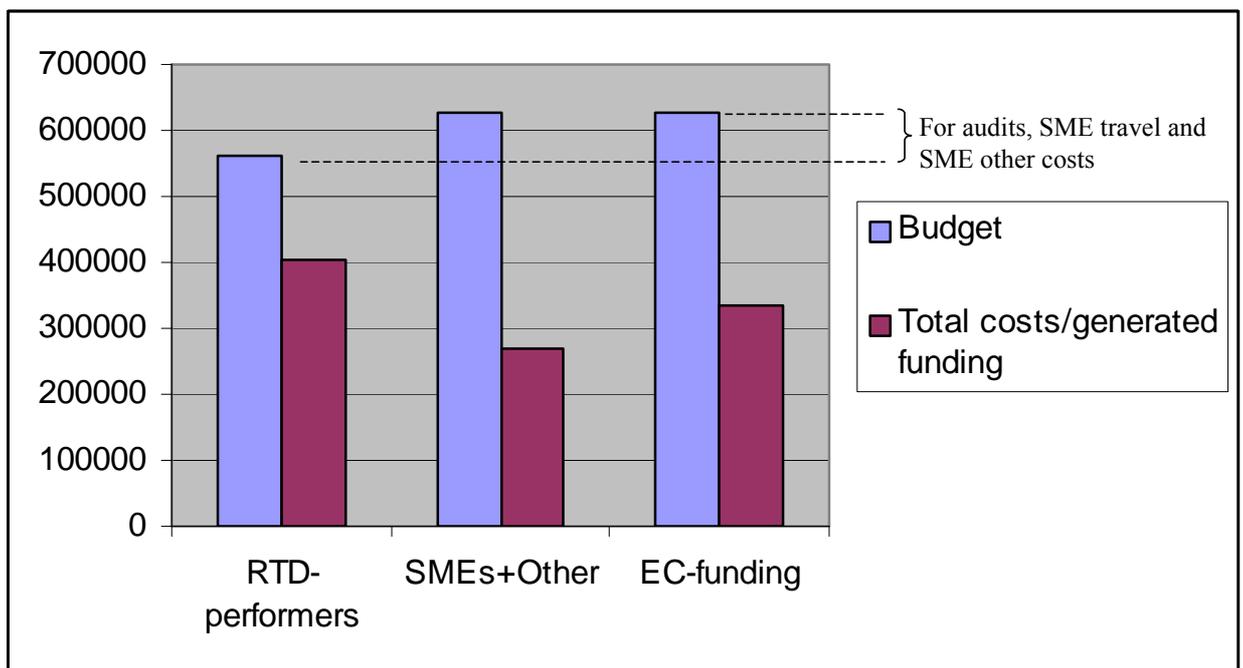
The agenda was set to:

1. Review of administrative and financial situation
2. Final economic reporting

3. Dissemination and exploitation plan
4. Stepwise EPD guideline
5. Scientific paper

Review of administrative and financial situation

The financial situation from 18th months was reiterated and the following graph was shown.



The two columns at the right show that at 18 months, we had in total spent less than half of the budget and thus only generated half the funding needed. There are indications that the RTD-performers (left columns) have already reached their budget ceiling. Thus, the importance (for SMEs and Others) to at least reach their budget, or better, exceed it, was stressed.

The partners were encouraged to use the *Identifying time and costs guideline* document. This will be distributed with the instructions for financial reporting and is available at <http://extra.ivf.se/StepwiseEPD>.

15 February is the deadline for delivering all reports to the EC.

The administrative situation was reviewed by going through the list of deliverables. The following modifications were made:

- D9 Improved Latvian EPD: *New delivery date February 15*
- D16-D19 The impact reports: *Include presentations from Riga and conclude as soon as possible*

Final economic reporting

Yvonne Nyman IVF explained how the final economic reporting and auditing should be carried out. An audit certificate template was distributed. Detailed instructions about how the reporting and auditing should be carried out will be sent in week 50. The timetable for the reporting is the following:

- Mid December: E-mail to all partners with instructions how to prepare the data and the Audit Certificate
- 31 December: End of project
- 1 January: All partners start preparing for the Audit Certificate. This means contacting your accountant and booking him/her for an audit of the project around 20 January.
- 10 January: Financial data sent to Yvonne who will calculate the complete spending and resulting budget. If we have not reached the budgeted spending, SME and Other partners will be asked to revisit their time and spending records.
- 19 January: Form C filled out by Yvonne and sent out to all partners
- 24 January: Very last modifications to Form C
- 3 February: Signed Form C and Audit Certificate sent back to Yvonne
- 8 February: Final report prepared by Mats & Yvonne
- 15 February: Reporting deadline to EC

Note that no costs occurring after 1 January will be accepted by EC although you may spend some time on the reporting after that date.

Please contact your audit firm well in advance, see above. It is OK to use the same audit firm that usually does the audit at your organisation – no internal personnel are accepted. The special audit certificate template distributed by Yvonne must be used. Form C and all underlying data should be presented to your auditor. This means that you cannot do the audit before 20 January.

Dissemination and exploitation plan for the Stepwise EPD concept

The meeting concluded that the dissemination and exploitation plan for the Stepwise EPD concept should include:

1. We will keep the website: <http://extra.ivf.se/StepwiseEPD>. Gednet will be approached in the summer of 2007 and asked to house the website.
2. We will publish the guideline for open consultation. We will do this by notifying to concerned parties by e-mail that the guideline is now ready and available on the current website. We will make a list of concerned parties, eg: ISO-group on 14025, participants to CSS in Stuttgart, Gednet

3. Publish Scientific article in Journal of Cleaner Production. The first paper is already submitted for publishing. The second paper will be submitted in February 2007.
4. University course in LCA (part of Masters program) in Riga or other form of education/training; guest course
5. Promote Stepwise EPD in Latvia by demonstration project, articles, approach minister etc
6. Offer LCA specialist intensive training (2.-0, IVL, Danish standard) 2-5 days
7. Offer two-day course about doing a Stepwise EPD for companies, IVF
8. Promote Stepwise EPD at national and international meetings by all partners
9. There will be a second national workshop in Portugal in January 2007
10. The following ideas for follow-on projects were proposed:
 - Marry Stepwise EPD with green public purchasing in national and/or international projects
 - EPD in the supply chain project
 - Improved understandability of EPDs
 - Use of EPDs in finance sector environmental evaluations
 - How to make comparisons from/in EPDs
 - Bridging the gap between EPD and marketing needs/ eco-design
 - Personalized interface to standard EPD for users of EPDs
 - How to cover your whole product range with EPDs
 - Marry EPDs to type 1 labelling and/or other IPP tools. Role of EPDs in ISO 14001 and EMAS and?
 - Promote EPDs to retailers
 - Promote EPDs to other LCA consultancies
 - Stepwise EPD pilot project in the building sector

Stepwise EPD guideline

Anna Jarnehammar had gone through the document and had several suggestions for changes that were discussed. The revised guideline was sent out for approval on 12 December.

2007-08-29

Regarding the issue of validity of the Stepwise EPDs, it was pointed out they are not valid after completion of the Stepwise EPD project unless pre-registered in an existing system. The Swedish EPD-system offers pre-registration of Stepwise EPDs for registration cost 5000 SEK and 3000 SEK annual cost (about 560 Euro registration cost and 340 Euro annually). For annual fee 560 Euro, more than one Stepwise EPD may be pre-registered. This pre-registration is open for those Stepwise EPDs aiming to take the next step into the Swedish system. See <http://www.environdec.com/page.asp?id=153&menu=3,9,63>. Contact Sven-Olof Ryding for details.

The registration cost is a legible cost in the Stepwise EPD project (before 2007!) and should be booked on the project. This cost will be reimbursed if there are enough funds available after RTD performers have been reimbursed for their total costs and the SMEs have been reimbursed for their travel costs.

Scientific paper

The outline was discussed and the company descriptions were discussed. It was decided that the outline was OK but that tables were preferred for the company descriptions.

Noted down 2006-12-13 by Mats Zackrisson

Annex 3 Report from the international conference on Stepwise EPD

Communicating Environment, International Stepwise EPD conference 5 December 2006 in Riga

Meeting participants

Speakers

Raimonds Vejonis	Ministry of Environment
Gunnar Ljungdahl	SSE in Riga
Kim Christiansen	2.-0 Consultants
Anna Jarnehammar	IVL
Jan Kastensson	Mercatus Engineering AB
Cristina Rochas	INETI
Jesper Laursen	Melitek A/S
José Saraiva	Polisport - Pedro & Paulo Araújo, Plásticos S.A.
Fernando Mendonca	Cruzinox Lda
Liga Krukovska	Konto Ltd.
Mats Zackrisson	IVF
Sven-Olof Ryding	Svenska Miljöstyvningsrådet
Inga Belmane	SIA Vides vadības tehnoloģijas
Frederric Biava	Embassy of Belgium
Paulo Vivas	INETI
Sylvestre Njakou Domo	Riga Technical University
Mārtiņš Gedrovics	RTU, Vides aizsardzības un siltuma sistēmu institūts
Andrey Greshnikov	Embassy of the Russian Federation
Göran Håkansson	Embassy of Kingdom of Sweden
Maria Jao	Concretope
Sabīne Jaunbirze	State Environmental Service
Māris Klavins	University of Latvia
Agris Koris	Konto Ltd.
Jānis Malzubris	University of Latvia, Faculty of Economics and Management
Miguel Melo	Cruzinox Lda
Anders Paalzow	
Diāna Pauna	
Margus Pauts	Tallinn University, Environmental Management
Evija Smite	Valsts vides dienests, Jūras un iekšējo ūdeņu pārvalde
Māris Strautmanis	Valsts vides dienesta Lielrīgas reģionālā vides pārvalde
Aivars Timofejevs	
Lubova Tralmaka	Ministry of Agriculture of Latvia
Anna Lisa Trulsson Evidon	Embassy of Kingdom of Sweden
Ilva Zvirbule	Central Statistical Bureau
H.E. Mr. João Luis Niza Pinheiro	Embassy of Portugal
Valdemārs Ščerbaks	

Program

See invitation.

Records of the meeting

The 12 presentations according to the invitation were carried out as planned with two exceptions – Bengt Davidsson from the European Commission DG Environment and Lars-Eric Gårdeskog Etac AB could not attend. Respective presentations are documented separately. Each presentation included some questions and discussions. Some issues that were discussed more than other included:

1. A demand for Environmental Product Declarations, EPDs, has to be created.
2. Marketing and promoting the EPD tool should be done on a sector or product group basis. Ways to accomplish this could be through:
 - a. Creating a demand for EPDs by making public purchasing bodies understand that they can use EPDs to establish requirements for different product groups.
 - b. Energy requirements for buildings in Sweden
 - c. Concentrating on key product groups like: mobility, housing, energy using products etc
 - d. The renewable energy sector
 - e. The environmental technology sector. Mercatus Stepwise EPD is going to be used as the environmental part of an Environmental Technology Verification under the European Commission's Environmental Technology Action Plan
 - f. Large companies in certain sectors taking a supply chain approach, eg by approaching the World Business Council of Sustainable Development
3. The process of doing a (stepwise) Life Cycle Assessment, LCA, and EPD can be more important than the final result, the EPD
4. When making an LCA/EPD you can also find product improvement possibilities, if you look for them. Additional eco-design tools can also be very helpful.

2007-08-29

5. The receiver of the EPD wants as easy to understand information as possible. The Product Category Rules, PCR, can give directions to specify what to be compared with, ranking measures etc
6. EPDs have yet to find its proper role in the Integrated Product Policy toolbox. One possible role/usage is as a tool to use by proactive companies before (to prepare for) mandatory requirements and/or environmental labelling possibilities?
7. All the small and medium sized companies making presentations ie Mercatus, Polisport, Konto, Melitek and Cruzinox declared that they are now considering the future use of EPD. Polisport and Cruzinox have the most definite plans to make a Stepwise EPD for their new bicycle child seat and pressure cooker respectively.
8. Verified environmental information about products based on life cycle assessments is often mentioned as very important in political initiatives. There seem to be a lack of knowledge that an EPD is just that.
9. Future development options for a common EPD database and for the LCA calculations behind the EPD were discussed

Noted down 2006-12-05 by Mats Zackrisson



Mats Zackrisson

FINAL REPORT

Sida 72 (74)

2007-08-29

Annex 4 Report on the distribution of the Community's contribution



Mats Zackrisson

FINAL REPORT

Sida 73 (74)

2007-08-29

Annex 5 Form Cs



Mats Zackrisson

FINAL REPORT

Sida 74 (74)

2007-08-29

Annex 6 Audit certificate