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Introduction

This document presents the compiled feedback from companies obtained thanks to the questionnaires used during presentations to companies.

Technical solutions identified, data base resources and agreements obtained from tasks 1 and 2 in WP3 had been directly presented to companies with the target of offering a practical tool to learn about efficient technologies, locating devices and providers and achieving the best solutions to improve their energy efficiency.

Contact with companies was made by different means, depending on the case.

- Direct presentations: companies contacted thanks to their participation in the IND-ECO project in its different work packages:
 - Sector specific inventories.
 - Energy audits and Benchmarking.
- National workshops
- Others events (sectoral fairs, technical meetings, etc.)

The aim were to take measure of the environmental awareness of footwear and tanneries companies, improve their current knowledge of the available energy efficiency technologies and offer them a practical tool where to find solutions to their energy issues: the database that is the core of WP3.

INESCOP, responsible for the task 3.5 and with the consent of the other partners, especially LEITAT as leader of WP3, developed a questionnaire to collect feedback from companies and to asses the level of satisfaction about results offered by IND-ECO: Technical Support Actions compiled in Data Base and impressions from audited companies as direct actors of working developed in IND-ECO project.

The general structure of the questionnaire is:

- General questions to characterize the company (with different items for footwear and tanneries). Including current environmental awareness.
- Specific questions about the DB:
 - Companies in general: accessibility, user-friendliness, usefulness
 - Audited companies: useful for the implementation of proposals from audit

This document summarizes the data obtained from these questionnaires, offering both overall and broken down by country, in the footwear and tannery sectors

Collection of Questionnaires

In order to simplify the collection of questionnaires, INESCOP developed an EXCEL-based tool, which allows partners to enter responses obtained from each country and then assesses the overall data automatically.

From information gathered, we have conducted a more in-depth analysis of the data, obtaining detailed ratios by sector and country.

Footwear Results

180 questionnaires were collected from footwear companies with a distribution by type of footwear produced:

- Women's: 30%
- Men's: 7%
- Unisex: 2%
- Children's: 7%
- Women and Men's: 20%
- Women and Children's: 2%
- Men and Children's: 2%
- Women, Men and Children's: 8%
- Women, Men and Unisex: 1%
- Women, Men, Children, Unisex: 1%
- Others/Unknown 20%

and a total production of around 24.5 mill. pairs a year.

In general, most companies include the phases of cutting, upper closing and stitching, lasting and finishing, with different incidence of each of them. Quite often, cutting and stitching are performed outside the company and they have a small section to cut or stitch small series: samples, faults, etc.

In all cases the energy consumed is electricity, while Gas and Fuel oil are only present in 7% and 4% respectively and usually for not productive uses.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Important	Yes	Yes	Agree	Accountant D. Middle Management

Around **91%** of the surveyed companies consider 'Important' or 'Fairly **Important**' **environmental issues** and 100% of them are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, **81% affirmed to have learnt more** about the technologies available to improve energy efficiency after the presentation about IND-ECO project and around **54% 'Agree' or 'Strongly agree' on the interest of the Data Base.**

Since the average size of footwear companies is small, they do not have a real Maintenance Department (only 19%), therefore, the database **user profile is mostly not technical staff** with non-technical knowledge about energy or devices.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Moderately user-friendly	Unfriendly	Suppliers Devices	Slightly

59% of the surveyed felt Accessibility ‘Moderately Easy’ and about 72% found the Interface ‘Moderately’ or ‘Slightly user-friendly’.

30% assessed Operations ‘Simple’ but 64% considered them ‘Unfriendly’ or even ‘Complex’.

However, it appears a strong interest in sections offered, mainly ‘Suppliers’ with 78%, and reaching 88% with combined options ‘Suppliers’ and ‘Devices’. Consequently, 84% of surveyed companies hope that Data Base will help them to find solutions to improve their energy efficiency, although 9% of them answered ‘Don’t know’ and said not have an opinion yet.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Maybe (long term)	Slightly

The last section, intended for the **audited companies**, were completed by **36 firms** with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Fairly’, even more up to 25% of surveyed found these conclusions ‘Very Clear’.

In fact, **92% audited companies is planning to implement some of the proposals received**, although due to the economic situation, most them will do it in the medium or long term. Probably for this reason, the majority of them do not have an opinion yet about the identification of suppliers or devices from database.

1 Breakdown by Country

1.2 Bulgaria

LFFLG collected 7 questionnaires from footwear companies with a distribution by type of footwear produced:

- Women’s: 57%
- Men’s: 14%
- Women and Men’s: 14%
- Unknown: 14%

and a total production of around 600,000 pairs a year, although there is not data about production and type from one of the companies.

Five of seven surveyed companies include all phases: cutting, upper closing and stitching, lasting and finishing, and in all cases except one the energy consumed is electricity.

The overall assessment of the DB is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Fairly important	Yes	Yes	Agree	Management Mid. Managem. Mainten. Dept.

About 86% of the surveyed companies consider ‘Important’ or ‘Fairly Important’ environmental issues and 100% of them are aware that improving energy efficiency brings other benefits besides the strictly financial and they affirm to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project.

Likewise, the perception of their interest presents a 57% of ‘Agree’ and a 29% ‘Strongly Agree’.

An important data to take into account is Who would use the database in each company: 100% of cases it would be Management and only 43% involve technical maintenance staff.

In general, questions about Data Base:

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Quite user-friendly	Simple	Suppliers	Fairly

57% of surveyed assessed accessibility ‘Quite Easy’ but until a 29% ‘Don’t know’ about this term; for this reason the result is ‘Slightly easy’. However, 100% of answering found the interface ‘Moderately user friendly’.

The opinions about Operation of database are very shifted to the positive side of the options, obtaining a grade of ‘Simple’ for 71% of respondents.

Likewise, it appears a strong interest on the sections offered, mainly on ‘Suppliers’ with 89%.

Consequently, 100% of surveyed companies expect that Data Base may be ‘Fairly’ or even ‘Very’ useful to find solutions to improve their energy efficiency.

About opinions from audited companies:

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Maybe (long term)	Fairly

This last section was completed by 3 firms with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Fairly clear’.

In fact, 100% audited companies see possible to implement some of the proposals received, although due to the economic situation, they will make it in long term. The 100% declares that Data Base will help them ‘Fairly’ to identify the suppliers or devices that their companies need.

1.2 Portugal

CTCP collected 101 questionnaires from footwear companies with a distribution by type of footwear produced:

- Women’s: 15%
- Men’s: 9%
- Unisex: 2%
- Children’s: 7%
- Women and Men’s: 30%
- Men and Children’s: 3%
- Women, Men and Children’s: 12%
- Unknown: 22%

and a total production of around 17 mill. pairs a year.

In general, most companies include the phases of cutting, upper closing and stitching, lasting and finishing, with different incidence of each them. Also, in all cases, the energy consumed is electricity, while Gas/Fuel oil is only present in 5% and usually for not productive uses.

The overall assessment of the DB is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Important	Yes	Yes	Neither agree nor disagree	Management Accountant D.

About 92% of surveyed companies consider ‘Important’ or ‘Fairly Important’ environmental issues and 100% of them are aware that improving energy efficiency brings other benefits besides the strictly financial.

In addition, 66% affirm to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project, although the perception of their interest presents a 45% of ‘Agree’ against a 55% ‘Neither Agree nor Disagree’.

An important data to take into account is Who would use the database in each company: in over 50% of cases would be the Management and/or Accounting department, that is, non-technical staff.

On general questions about Data Base:

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Moderately user-friendly	Unfriendly	Suppliers	Slightly

78% of surveyed assessed accessibility ‘Moderately Easy’ and about 80% found the interface ‘Moderately easy’ or ‘Slightly user-friendly’.

Opinions about Operations on database are very tight between those who found it ‘Simple’ or ‘Unfriendly’ (about 40% in both cases)

However, it appears a strong interest on the sections offered, mainly on ‘Suppliers’ with 67% or ‘Everything’ with 21%.

Consequently, 99% of surveyed companies expect that Data Base will be useful; 66% think that Data Base will help them ‘Slightly’ to find solutions to improve their energy efficiency and the remaining 66% consider it ‘Fairly’ useful.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Very much	Probably (medium term)	Fairly

The last section, intended for the audited companies, was completed by 7 firms with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Very much’.

In fact, 100% audited companies is planning to implement some of the proposals received, although due to the economic situation most them, until 62%, will make it in medium or long term. 100% declared that Data Base will help ‘Fairly’ to identify the suppliers or devices that their companies need.

1.2 Italy

No data

1.2 Romania

ICPI collected 11 questionnaires form footwear companies with a distribution by type of footwear produced:

- Women’s: 27%
- Men’s: 9%
- Children’s: 18%
- Women and Men’s: 27%
- Women, Men, Unisex 18%

and a total production of around a 1 million of pairs a year.

Moreover, there are 3 additional questionnaires from other companies related with footwear industry: furniture and textile.

All surveyed footwear companies have cutting and upper closing and stitching phases and 81% of them include lasting operations. Only 55% incorporates also Finishing.

In all cases the energy consumed is Electricity, although 71% of the companies also use Natural Gas.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Fairly important	Yes	Yes	Agree	Management Maintenance Dept.

100% of surveyed companies consider important environmental issues and about 71% of them think that is a ‘Very Important’ or ‘Fairly Important’ matter. Moreover, 100% of the companies are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, 100% affirms to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project and about 70% ‘Agree’ on the interest of the Data Base.

An important data to take into account is Who would use the database in each company: in over 50% of cases would be Maintenance Department which is a technical profile, although Management is always present.

On general questions about Data Base:

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Moderately user-friendly	Complex	Suppliers Devices	Slightly

50% of surveyed consider Accessibility ‘Moderately Easy’ and a 58% found Interface ‘Moderately user-friendly’, reaching 29% who felt it ‘Slightly user-friendly’

79% considered Operation ‘Complex’ against 21% who qualified it as ‘Simple’.

However, it appears a strong interest in sections offered, mainly ‘Suppliers’ and ‘Devices’ (79%), although 75% of surveyed companies think that this tool will help them ‘Slightly’.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Maybe (long term)	Slightly

The last section, intended for the audited companies, was completed by 11 firms with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Fairly’ (82%)

In fact, all audited companies is planning to implement some of the proposals received, but due to the economic situation, most will do it in medium (27%) or long term (73%), and a 90% of the companies think that data base would help them to identify suppliers or devices.

1.2 Spain

INESCOP collected a total of 57 questionnaires. Of them, 49 are from footwear companies with a distribution by type of footwear produced:

- Women’s: 66%
- Men’s: 2%
- Unisex: 2%
- Children’s: 6%
- Women and Men’s: 6%
- Men and Children’s: 2%
- Women and Children: 8%
- Women, Men and Children’s: 4%
- Unknown: 4%

and a total production of around 6 mill. pairs a year.

The remaining 8 are from other companies related with footwear industry: soles, furniture, toe-puff, insoles.

In general, most companies include the phases of cutting, upper closing and stitching, lasting and finishing, with different incidence of each them. Quite often cutting and stitching are performed outside the company and they have small sections to cut or stitch short series: samples, faults, etc.

In all cases the energy consumed is electricity, while Gas/Fuel oil is only present in 4% and usually for not productive uses.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Important	Yes	Yes	Agree	Accountant D. Middle Management

About 95% of surveyed companies consider ‘Important’ or ‘Fairly’ Important environmental issues and 100% of them are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, 100% affirm to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project and around 60% ‘Agree’ or ‘Strongly agree’ on the interest of the Data Base.

Since the average size of footwear companies is small, they do not have a real Maintenance Department so, the database user profile is mostly administrative staff (40%) or a middle-manager or foreman (30%) with non-technical knowledge about energy or devices.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Slightly easy	Slightly user friendly	Complex	Suppliers Devices	Slightly

68% of surveyed assessed Accessibility ‘Slightly Easy’ and about 95% found the Interface ‘Moderately’ or ‘Slightly user-friendly’.

60% considered Operations ‘Unfriendly’ or even ‘Complex’.

However, it appears a strong interest in sections offered, mainly ‘Suppliers’ with 65%, and reaching 95% with combined options ‘Suppliers’ and ‘Devices’. Consequently, 58% of surveyed companies hope that Data Base will help them to find solutions to improve their energy efficiency, although 12% do not believe in this possibility and there is 30% that ‘Don’t know’.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Maybe (long term)	Don't know

The last section, intended for the audited companies, was completed by 14 firms with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Fairly’, even more up to 36% of surveyed found these conclusions as ‘Very Clear’.

In fact, 78% audited companies is planning to implement some of the proposals made, although due to the economic situation, most them will make it in medium or long term. Probably for this reason, the majority of them do not have an opinion yet about the identification of suppliers or devices from database

1.2 United Kingdom

Although UKLF focuses its work on tanneries, it got a questionnaire from a footwear company.

It is a men’s shoes manufacturer with an annual production of 28,000 pairs, which includes all phases in its facilities: cutting, upper closing/stitching, lasting and finishing, and whose energy consumption is based on Electricity and Natural Gas.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Very important	Yes	Yes	Agree	Management Maintenance Dep

It shows its awareness on environmental issues and interest to the possibilities offered by the proposal Data Base.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Don't know	Don't Know	Don't know	Suppliers Devices	Not at all

The overall assessment of Data Base was 'Don't know' due to the impossibility to run it during the presentation. However, the targets of database were widely exposed; as result, the audience is looking forward to using it and they expect this tool to be useful in due course.

On the other hand, about audit results, company is very satisfied:

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Very much	Probably (medium term)	Fairly

The company plans to implement some of the proposals in the medium term and it appears convinced that database will help it to identify and / or locate the devices or the providers they need.

Tannery Results

67 questionnaires were collected from Tanneries companies with a distribution by type of production:

- Finished: 55%
- Finished and Crust: 10%
- Finished and Veg. Tanned: 10%
- Finished and Split: 9%
- Wet-Blue/White: 3%
- Others/Unknown 13%

and a total production over 45 mill. m² a year.

In general, most companies (91%) produce Finished, combined or not with other types and the production is mainly destined to footwear and leathersgoods.

In all cases the energy consumed is electricity, but Natural Gas and/or Gas/Fuel oil are present in more than 40% of companies.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Very important	Yes	Yes	Agree	Management Mainten. Dept

Around **90%** of surveyed companies consider **‘Fairly or Very Important’ environmental issues** and more than 99% of them are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, **91% affirm to have learnt more** about the technologies available to improve energy efficiency after the presentation about IND-ECO project and around **50% ‘Agree’ or ‘Strongly agree’ on the interest of the Data Base.**

Nearly 80% of tanneries have Maintenance Department so the database **user profile is mostly technical staff** with knowledge about energy and devices.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Moderately user-friendly	Unfriendly	Suppliers Devices	Slightly

61% of surveyed assessed Accessibility ‘Moderately Easy’ and about 80% found the Interface ‘Moderately’ or ‘Slightly user-friendly’.

46% considered Operation ‘Unfriendly’ and until 30% described it ‘Complex’.

However, it appears a strong interest in sections offered, mainly ‘Suppliers’ with 50%, and reaching 81% with combined options ‘Suppliers’ and ‘Devices’. Consequently,

about 80% of surveyed companies hope that Data Base will help them (at least ‘Slightly’) to find solutions to improve their energy efficiency, although 6% that ‘Don’t know’ and they do not have an opinion yet.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Maybe (long term)	Slightly

The last section, intended for the **audited companies**, was completed by **37 firms** with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Fairly’, even more up to 35% of surveyed found these conclusions as ‘Very Clear’.

In fact, **95% audited companies is planning to implement some of the proposals received**, although due to the economic situation, most them will made it medium or long term. Probably for this reason, the majority of surveyed declare that data base help them ‘Slightly’ on the identification of suppliers or devices.

1 Breakdown by Country

1.2 Bulgaria

LFFLG collected 1 questionnaire from a Tannery company that produce 250 m2 of Finished dedicated to Leathergood and Footwear.

Its only energy consumption is electrical.

The overall assessment of the DB is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Fairly important	Yes	Yes	Agree	Management Account Dept

The company considers ‘Fairly Important’ environmental issues and it is aware that improving energy efficiency brings other benefits besides the strictly financial, affirming to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project. In fact, company ‘Agree’ on interest of this tool.

An important data to take into account is Who would use the database in the company: Management and Account Staff, which provides useful information to adapt the tool to the user profile.

About Data Base in general:

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Quite easy	Extremely user-friendly	Simple	Suppliers	Fairly

The company assessed accessibility ‘Quite Easy’, it found the interface ‘Extremely user friendly’ and Operation ‘Simple’.

Likewise, it appears a special interest on ‘Suppliers’ and consequently, the company expects that Data Base will be ‘Fairly’ useful to find solutions to improve their energy efficiency.

About opinions from audit results:

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Maybe (long term)	Slightly

Its assessment about clarity of the conclusions is ‘Fairly clear’.

In fact, the company sees possible to implement some of the proposals received, but due to economic situation, they will make it long term. In addition it declares that Data Base will help ‘Slightly’ to identify the suppliers or devices that needs.

1.2 Italy

UNIC collected 38 questionnaires from tanneries with a distribution by type of production:

- Finished: 74%
- Wet-Blue/White and Crust: 3%
- Crust and Finished 5%
- Finished and Veg. Tanned: 5%
- Finished and Split: 13%

and a total production of around 36.5 mill. m² a year.

In general, most companies (95%) spend their productions to Footwear and Leathersgood, although 18% of them are also dedicated to upholstery.

In all cases the energy consumed is electricity but also the 89% consumes Natural Gas and until 68% of them consume Gas/Fuel oil, wich is a high incidence of fossil fuels.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data	Who
Very important	Yes	Yes	Agree	Management Mid Manag Manten. Dept

100% of surveyed companies consider ‘Very Important’ environmental issues and they are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, 87% affirm to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project and the 50% ‘Agree’ on the interest of the Data Base.

About the user profile, there has been found that 97% of companies involve Maintenance Department, so the database user profile is mostly technical with knowledge about energy or devices.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Moderately user-friendly	Unfriendly	Suppliers Devices	Slightly

84% of surveyed assessed Accessibility ‘Moderately Easy’ and around 75% found the Interface ‘Moderately user-friendly’, although 100% of respondents considered ‘Unfriendly or even ‘Complex’ the Operations of the Data Base

However, it appears a strong interest in sections offered, mainly ‘Suppliers’ with 84%, and reaching 100% with combined options ‘Suppliers’ and ‘Devices’. Consequently, all of surveyed companies hope that Data Base will help them to find solutions to improve their energy efficiency.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Very much	Maybe (long term)	Slightly

The last section, intended for the audited companies, was completed by 20 firms with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Very much’ (60%, and 40% consider it ‘Fairly’).

In fact, 60% audited companies are planning to implement some of the proposals in the long term and 40% foresee them in the medium term.

1.2 Portugal

CTCP has collected 1 questionnaire from a Tannery company that produce 144,000 m² of wet-Blue/white, crust, finished and veg. tanned dedicated to Footwear production.

Its energy consumption is both electrical and Gas/Fuel oil.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Very important	Yes	Yes	Agree	Management Manten. Dept

The company considers ‘Very Important’ environmental issues and it is aware that improving energy efficiency brings other benefits besides the strictly financial, affirming to have learnt more about the technologies available to improve energy efficiency after the presentation about IND-ECO project. In fact, the company ‘Agree’ on interest of this tool.

As a user of the database profile, the company points to Management and Maintenance Staff.

About Data Base in general:

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Quite easy	Quite user-friendly	Simple	Everthing	Fairly

The company assessed accessibility ‘Quite Easy, it found the interface ‘Quite user friendly’ and Operation ‘Simple’.

Likewise, it appears a strong interest on data offered for this tool and consequently, the company expects that Data Base may be ‘Fairly’ useful to find solutions to improve their energy efficiency.

About opinions from audit results:

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Very much	Probably (medium term)	Slightly

Its assessment about clarity of the conclusions is ‘Very much’ and, in fact, the company sees possible to implement some of the proposals in the medium term, although, by now, it declares that Data Base will help ‘Slightly’ to identify the suppliers or devices that needs.

1.2 Romania

ICPI collected 4 questionnaires from Tannery companies that produce 157,750 m2 of wet-blue/white, crust, finished and veg. tanned or split dedicated mostly to Footwear production.

Its energy consumption is both electrical and Natural Gas mainly.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data	Who
Fairly important	Yes	Yes	Agree	Management Account. Dept Maintain. Dept

The companies consider ‘Fairly Important’ environmental issues and they are aware that improving energy efficiency brings other benefits besides the strictly financial,

affirming to have learnt more about the technologies available to improve energy efficiency after the presentation about IND-ECO project. So, companies ‘Agree’ on interest of this tool.

As profile of the database user, the companies point to Management and Account Staff, mostly administrative staff with non-technical knowledge about energy or devices

About Data Base in general:

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Quite easy	Quite user-friendly	Simple	Everything Suppliers Devices	Fairly

The companies assessed accessibility ‘Quite Easy, they found the interface ‘Quite user friendly’ and Operation ‘Simple’.

Likewise, it appears a strong interest on data offered for this tool and consequently, the companies expect that Data Base will be ‘Fairly’ useful to find solutions to improve their energy efficiency.

About opinions from audit results (only three of four surveyed):

DATABASE (audited)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Probably (medium term)	Fairly

Their assessment about clarity of the conclusions is ‘Fairly’ and, in fact, the companies see possible to implement some of the proposals in the medium term, declaring that Data Base will help them ‘Fairly’ to identify the suppliers or devices that needs.

1.2 Spain

LEITAT collected 16 questionnaires from tanneries with a distribution by type of production:

- Finished: 50%
- Wet-Blue/White and Crust: 12%
- Crust and Finished 25%
- Finished and Veg. Tanned: 12%

and a total production of around 4.5 mill. m² a year.

In general, most companies (95%) spend their productions to footwear and/or leathersgood.

In all cases the energy consumed is electricity but all of them consume also Natural Gas or Gas/Fuel oil, which is a high incidence of fossil fuels.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data	Who
Fairly important	Yes	Yes	Neither agree nor disagree	Management Mid. Managem. Maintenan.Dept

56% of surveyed companies consider ‘Fairly Important’ environmental issues, even 19% of them consider them ‘Very Important’, and 100% are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, 100% affirm to have learnt more about the available technologies to improve energy efficiency after the presentation about IND-ECO project, although the 63% shows ‘Neither Agree nor Disagree’ on the interest of the Data Base.

About the user profile, there has been found that only 50% of companies have Maintenance Department so the database user profile is not necessarily technical with knowledge about energy or devices.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Moderately easy	Moderately user-friendly	Unfriendly	Suppliers Devices	Slightly

56% of surveyed assessed Accessibility ‘Moderately Easy’ and resting 44% qualified it as ‘Slightly Easy’, and 100% found the Interface ‘Moderately user-friendly’, while 69% of respondents consider ‘Unfriendly’ the Operations with the Data Base

However, it appears a strong interest in sections offered, mainly ‘Suppliers’ with 88%, and reaching 100% with combined options ‘Suppliers’ and ‘Devices’. Consequently, all of surveyed companies hope that Data Base will help them to find solutions to improve their energy efficiency.

DATABASE (audited)		
Q15	Q16	Q17
Clear	Impl.	Identify
Fairly	Probably (medium term)	Slightly

The last section, intended for the audited companies, was completed by 5 firms with a positive balance about audit process. The overall assessment about clarity of the conclusions is ‘Fairly’ (60% and 40% consider it ‘Slightly’).

In fact, 60% audited companies is planning to implement some of the proposals in the long term and 40% foresee them in the medium term. 40% of these companies think that data base will help them ‘Fairly’ to identify the suppliers or devices that need.

1.2 United Kingdom

UKLF collected 7 questionnaires from tanneries with a distribution by type of production:

- Wet-Blue/White and Split: 14%
- Crust and Finished: 14%

- Crust, Finished and Split:: 14%
- Finished and Veg. Tanned: 28%
- Finished and Split: 14%
- Split: 14%

and a total production of around 4 mill. m² a year.

In general, most companies (70%) spend their productions to Footwear and/or Leathergood.

In all cases the energy consumed is electricity but all of them consume also Natural Gas or Gas/Fuel oil, which is a high incidence of fossil fuels.

The overall assessment of the Data Base is as follows:

Q5	Q6	Q7	Q8	Q9
Envirom.	Aware	Technol.	Data Base	Who
Very important	Yes	Yes	Agree	Management Maintan. Dept

86% of companies surveyed consider ‘Very Important’ environmental issues and are aware that improving energy efficiency brings other benefits besides the strictly financial.

Likewise, 86% affirm to have learnt more about the technologies available to improve energy efficiency after the presentation about IND-ECO and 62% shows ‘Agree’ (43%) or even ‘Strongly Agree’ (29%) on the interest of the Data Base.

About the user profile, it has been found that the majority of companies have Maintenance Department so the database user profile is mainly technical with knowledge about energy or devices.

DATABASE (General)				
Q10	Q11	Q12	Q13	Q14
Acces.	Interface	Operation	What	Useful
Slightly easy	Slightly user friendly	Complex	Suppliers Devices	Not at all

Although global consideration results ‘Slightly easy’, 71% of surveyed consider do not have an opinion about database accessibility and a similar results has been obtained on the friendliness of interface. Likewise, the general evaluation about Operations with database results ‘Complex’ but until 43% of respondents does not have a real opinion.

It appears a strong interest in sections offered, mainly ‘Suppliers’ with 70%, and reaching 100% with combined options ‘Suppliers’ and ‘Devices’. However, 57% of surveyed companies do not have an opinion about if database will be useful for them.

DATABASE (audited companies)		
Q15	Q16	Q17
Clear	Impl.	Identify
Not at all	Maybe (long term)	Slightly

The last section, intended for the audited companies, has been completed by the 7 firms. The overall assessment about clarity of the conclusions is ‘Not at all’, but this result is due to 43% of surveyed answered ‘Don’t know’ to this question.

In fact, almost 60% audited companies is planning to implement some of the proposals in the long term and 14% foresee them immediately.

Conclusions

Throughout the IND-ECO project execution, there has been a **close relationship with the companies** of the footwear and tanning sectors. From the very project beginning, in order to carry out an inventory that allowed robust benchmarking, up to the last dissemination actions, the contact with the companies' reality enhanced the promotion of their environmental awareness and allowed us to check that energy efficiency is becoming increasingly relevant in the sectors under study.

In the light of the data collected in the questionnaires¹, it is observed that there is a **widespread concern for environmental issues**, as stated by 90% of the surveyed companies, which were also aware of the fact that the improvements in energy efficiency bring about more benefits beyond the merely economic ones.

In this scenario, it is important for the companies to know the **new technologies** that ensure a significant energy efficiency improvement and to have easy access to such technology **suppliers**. For this reason, over 50% of the respondents considered that a database, as the one proposed by the IND-ECO project, would help them find the technological solutions needed to improve their energy efficiency.

It is important to highlight that when designing such a database the intended user should always be taken into account. The analysis of the data compiled shows that there are significant differences between footwear companies and tanneries. The former use smaller machinery and usually have no in-house maintenance department, so the database **user profile** mostly corresponds to **technically unskilled** staff. However, most tanneries have their own maintenance staff that is more technically skilled. In any case, all the respondents agreed that the database accessibility should be improved by implementing a **more user-friendly interface** and **simplified operation**. Up to 80% of the respondents expressed they were very much interested in the "Devices" and "Suppliers" sections.

Among the surveyed **companies**, those that had also been **audited** were really satisfied with the results. Walking through each company helped us detect their weak points in terms of energy efficiency, as well as the possibilities for improvement, not only related to the replacement of outdated equipment, but also to the definition of **low-cost or zero-cost measures** that allow them to find their way towards energy efficiency. In fact, about 90% of the audited companies were planning to undertake some of the proposals for improvement in the medium term.

¹ See annexes I, II and III.

Annex I. Questionnaire for feedback: General questions for footwear companies

1.1 General questions

1. Annual production in number of pairs
2. Type of footwear produced in your company:
 Women's Men's Unisex Children's
3. Production stages performed in your company (multiple answers allowed)
 Cutting Shoe lasting & finishing
 Shoe upper closing stitching Post-Finishing/shoe room
4. Type of energy used in your company (multiple answers allowed)
 Electricity. Natural Gas Gas oil/Fuel oil
 Others (please specify).....

5. Within your company, how important are environmental issues?

Very important	Fairly important	Important	Slightly important	Not at all important
4	3	2	1	0

6. Are you aware that the improvement of the energy efficiency of your company brings about some benefits other than the financial ones?

- Yes No

7. After the presentation about the IND-ECO project, have you learned more about the technologies available to improve energy efficiency?

- Yes No

8. Do you think the database could be interesting?

Strongly agree	Agree	Neither agree nor disagree	Strongly disagree	Don't know
4	3	2	1	0

9. Within your company, who would use this database?

- Management. Middle management (foreman)
 Accounting department. Maintenance department.

Annex II. Questionnaire for feedback: General questions for Tanneries

1.1 General questions

1. Annual production in m2 (others units feet², Tons, please specify)

2. Type of leather article produced in your company (multiple answers allowed)

Wet-Blue/Wet white Crust Finished

Veg tanned Split

3. The leather article is produced for:

Upholstery Automotive Leathergoods

Footwear Others.....

4. Type of energy used in your company (multiple answers allowed)

Electricity. Natural Gas Gas oil/Fuel oil

Others (please specify).....

5. Within your company, how important are environmental issues?

Very important	Fairly important	Important	Slightly important	Not at all important
4	3	2	1	0

6. Are you aware that the improvement of the energy efficiency in your company brings about some benefits other than the financial ones?

Yes No

7. After the presentation about the IND-ECO project, have you learned more about the technologies available to improve energy efficiency?

Yes No

8. Do you think the database could be interesting?

Strongly agree	Agree	Neither agree nor disagree	Strongly disagree	Don't know
4	3	2	1	0

9. Within your company, who would use this database?

Management. Middle management (foreman)

Accounting department. Maintenance department.

Annex III: Questionnaire for feedback: Specific question about the data base (general and audited companies)

1.1 Specific questions about the database

10. How easy was it to register/access to database?

Extremely easy	Quite easy	Moderately easy	Slightly easy	Don't know
4	3	2	1	0

11. How user-friendly is the database interface?

Extremely user-friendly	Quite user-friendly	Moderately user-friendly	Slightly user-friendly	Don't know
4	3	2	1	0

12. How would you describe the operation of the database?

Intuitive	Simple	Unfriendly	Complex	Don't know
4	3	2	1	0

Remarks:

13. Which sections of the tool do you think are most useful?

Everything Suppliers Devices Simulator

14. Do you think this tool has helped you find solutions to improve the energy efficiency of your company?

Very much	Fairly	Slightly	Not at all	Don't know
4	3	2	1	0

Conclusions:

Please add your suggestions for improvement of the tool.

1.3 Specific questions about the database: Audited companies

15. Were the conclusions of the audit clear enough?

Very much	Fairly	Slightly	Not at all	Don't know
4	3	2	1	0

Remarks:

16. Are you planning to implement any of the proposals made?

Yes (please specify)	Probably (medium term)	Maybe (long term)	Not at all	Don't know
4	3	2	1	0

Remarks:

17. Did the database help you identify the suppliers or devices that your company needs?

Very much	Fairly	Slightly	Not at all	Don't know
4	3	2	1	0

Conclusions:

Please add your suggestions for improvement of the tool.