UITIC
INTERNATIONAL UNION OF SHOE INDUSTRY TECHNICIANS
News
uitic@uitic.org | www.uitic.org
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# MEMBERS INFORMATION

## SAVE THE DATE !

The Council for Leather Exports (CLE) India will organize the 19th Congress of the UITIC (International Union of Shoe Industry Technicians) on **3-5 February 2016 in Chennai-India**. Brands, footwear manufacturers and experts will discuss about the "Future Footwear Factory" and innovations in the footwear Industry.

It is for the first time that the UITIC Congress is being organized in India, the second largest footwear manufacturing country in the world.

This congress will bring together experts and decision makers who all play an important role in the worldwide footwear business and manufacturing process. Visits to footwear factories will also be scheduled before the Congress.

During their stay, participants will also be able to visit the IILF 2016 - Indian International Leather Fair which will take place during 31 January - 03 February 2016 in Chennai, India.

The previous UITIC congress was held in November 2013 in Guangzhou and Dongguan Cities in China a and had more than 300 participants.


## Join us on LinkedIn!

UITIC has arrived on LinkedIn. With its arrival on the professional social network, UITIC offers you the possibility to be connected to each other and give you the opportunity to communicate, in a dedicated space, about many technical or scientific issues related to the Footwear industry.

**Come and join us !**

### UITIC Membership Rewards

- A privileged access to UITIC's events (Congress) and financial rewards (-20% on the registration fee – maximum of 2 members/association)
- The UITIC Newsletter
- The access to the UITIC Group on LinkedIn
- The right to use the logo of the association

### UITIC News

Editing

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TECHNICAL INFORMATION



# Sustainability as a priority

**The sustainable development of the Portuguese Footwear Industry is on the top of priorities to the Portuguese Footwear Technological Center (CTCP).**

CTCP has an integrated strategy in the sustainability area, that aims to develop more sustainable products and processes. CTCP main goal is to provide the manufacturing of goods using processes and systems having in attention environmental, economic and social issues, meaning minimizing the negative environmental impacts, conserving energy and natural resources, that are safe and healthy for workers, communities, and consumers and are economically viable.

All over the world, the market for "green shoes" is in expanding development. Portuguese Footwear Industry understood that it is a powerful way of differentiation and wants to embrace it successfully. To support companies on this, CTCP is involved, during the last years, in several projects in order to develop more ecological materials, componentes and devices,machinary, tecnologies, training and production processes.

Recently, into a I&D Project Benature, was developed a disintegrable leather, according to ISO 20200:2004, that reveal good performance and resistance suitable for use in footwear.

Other exemples of recent developments are: more ecological adhesives and solventes, leather free of harmful substances, more biodegradable sole materials and also advanced tecnologies that provides a flexible and efficient manufacturing systems, established under the Newalk project, which involves 29 partners (scientific and technological entities, industrial companies and technology-based companies).

The quality of this new products are tested in the CTCP laboratory. In this área, CTCP laboratory also tests material and footwear, in order to certify ecological shoes with a Biocalce brand (It´s a certification that ensure confort and quality, resistance and durability in footwear that uses only free toxic materiasl for the use rand the environment). www.biocalce.org

On the other hand, CTCP supports the companies to implement more effective and efficient production methods, in order to minimise the impact of time and cost, such as: Lean manufacture.

This method seeks to incoorporate less human effort, less inventory, less time to develop products and less space. In this way manufacturers become highly responsive to customer demand while producing top quality products in the most efficient and aconomical way. The focus is on eliminating non-value added activities while streamlining value-added ones.

Energy and environmental efficiency are also areas that companies are improving with CTCP support.

Portuguese Footwear companies are investing in a sustainable strategy for its business, but they need to develop a multidisciplinary knowledge at technical level, target-oriented, which at moment, doesn't exist. So, CTCP is developing the project STEP to SUSTAINABILITY (www.step2sustainability.eu), that aims to design, develop and piloting a new job qualification profile and correspondent training on the subject of "Footwear Sustainable Manufacturing" able to cope with the visible shortage of vocational skills, potentiating the best use of the outcomes in the field of materials, machinery, processes, developed in the frame of many European Research & Development Projects with sustainable purposes, improving competitiveness in Footwear. A consortium composed by the most representative research and training centres from 9 european contries.

**Since 1986 supporting Portuguese Footwear Industry**

CTCP is an organization founded in 1986, that aims to promote the sustainable development of the Portuguese Footwear Industry.

With its team of experts and infrastructure capabilities CTCP is active in all key areas affecting the competitiveness of footwear and allied companies, such as: tests, analysis and calibrations; technical assistance and industrial consultancy; plant design and investment studies; technology and innovation watch; pre-competitive research; enterprise certification and quality management support; environment; health and safety; training and Information and documentation.

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# TECHNICAL INFORMATION

## Shoe eco-design for greater sustainability

Walking with a pair of shoes is one of the less energy consumption mean of transportation. However, a Life Cycle Analyses (LCA) shows that pairs of shoes do have an environmental impact. Life Cycle Assessment takes into account the impact of all materials required to manufacture the pair of shoes (cotton, leather, polyurethanes, PVC, rubber...) but also transportation, energy cosumption, during manufacturing, packaging and the end-of life. Reference guide XP 30-323-1 on environmental labelling for men's dress shoes also includes the relative performances of the models.

### THE PILOT SCHEME

A pilot scheme, has allowed work to be done with 15 industry partners.

As this reference guide is limited to men's dress shoes, extensions have been developed by CTC for other categories of shoes: women's dress shoes, children's shoes, boots, espadrilles, walking shoes, Personal Protective Equipment and casual shoes.

The results sheets include two quite distinct notions:

- Data on the performance of the model (sheet 1: Durability);
- The environmental impact of the model (sheet 2).

The results of these pilot schemes illustrate the importance of the models' performance levels.

Graph 1 shows the greenhouse gas emissions of 12 models of shoe (without taking performance into account).

The results presented in graph 2 take into account the performance of the models.

### THE RESULTS

Results show the origin of the environmental impacts of a pair of shoes. The materials are the principal source of impacts for the models studied. The share accounted for by logistics and production sites remains comparatively low.

Performance of the model (and therefor its durability) has a huge impact on the environmental results.

The industry partners as a whole acknowledge the benefits of this scheme, in which they work on the environmental impact of four of their models. The scheme has allowed them to get to grips with the principles of the product life cycles and the methodologies involved, and to start to better understand the origins of the impacts of a model and thus the environmental stakes of this kind of product.

Concerning the reference unit, it is surprising to note that, of all the standards and guidelines published to date, some do not include a method for calculating the reference flow. In other words, the durability of the product is not taken into account (eight grams of shampoo without taking account of its performance, a bicycle throughout its lifespan, etc.);

### CONCLUSION

The universal introduction of regulatory environmental labelling constitutes a major constraint for French shoe industry players, who, let us not forget, are SMEs, and remain vulnerable in the face of strong competition from Asia.

Voluntary environmental labelling is a source of innovation and differentiation, which it would be a shame to restrict to the publication of three regulatory values on greenhouse gas emissions, eutrophication and consumption of non-renewable resources, the veracity of which cannot be checked.

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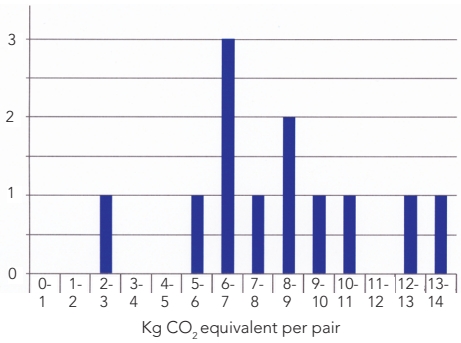
| Technical performance of the model | B |
|---|---|
| Strength of the join between upper and outsole | |
| Sole abrasion | |
| Tear strength of upper | |
| Abrasion resistance of lining and insole | |

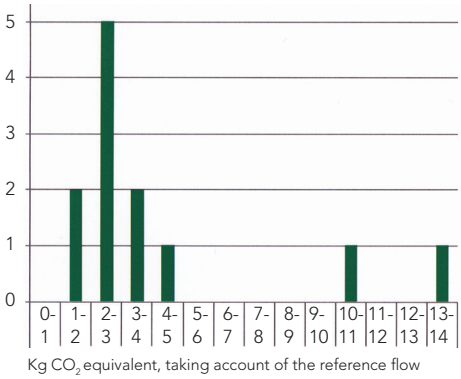
*Sheet 1: Way of presenting technical performance levels.*

| Environment | |
|---|---|
| Consumption of non-renewable resources | 0,05 mPoints |
| Global warming | 2.1 kg eq. $CO_2$ |
| Water (eutrophication) | 0.9 g eq. $PO_4^{3-}$ |

*Sheet 2: Way of presenting environmental impact according to the three indicators selected for the shoe labelling.*




*Graph 1: number of product references as a function of greenhouse gas emissions per pair of shoes.*




*Graph 2: number of product references per functional unit as a function of greenhouse gas emissions, taking account of shoe performance.*

# TECHNICAL INFORMATION



## Footwear Carbon Footprint

**There is currently a broad spectrum of methodologies for the calculation of the carbon footprint of products, which accounts for the large differences observed in the results obtained according to the methodology employed.**

Faced with this situation, as well as the fact that there is no specific methodology for the calculation of footwear carbon footprint, the CO2Shoe project "Footwear Carbon Footprint" was launched and started at the end of 2013. This 48-month project is partially funded by the European Union through the LIFE+ Programme and is coordinated by INESCOP (Footwear Technological Institute). The project also relies on the participation of other partners, such as CEC (European Confederation of the footwear Industry), FICE (Spanish Federation of Footwear Industries), CTCP (Centro Tecnologico do Calçado de Portugal), IPS (Instytut Przemysu Skórzanego from Poland) and the Italian company CGS.

The main objective of the project is to develop a carbon footprint calculation tool for the footwear sector, which allows the measurement of the greenhouse gas (GHG) emissions produced by each pair of shoes. The results will allow companies to improve their environmental impacts affecting climate change.

The greenhouse effect is a natural phenomenon by which the so-called greenhouse gases (GHG), which are part of the atmosphere, absorb and emit infrared radiation, thus resulting in an elevation of the surface temperature of the Earth, without which life, as it is currently understood, would not be possible.

The Earth already had greenhouse gases in its atmosphere before humans ever came along. But since the Industrial Revolution, and mainly due to the intensive use of fossil fuels in industrial activities and transportation, there has been a steady increase in the amount of nitrogen oxide (N2O) and carbon dioxide (CO2) released into the atmosphere.

As a result, the surface temperature of the Earth increases, leading to a global problem known as "Climate Change" (floods, droughts, icecap melting, etc.).

One of the main solutions trying to address this problem is the use of environmental management tools aiming to study the environmental impacts associated with a product.

Among the tools that are currently available, the Carbon Footprint calculation is a methodology used to quantify the GHG released by a product throughout its whole life-cycle (from raw material purchase to the end of its useful life).

The Carbon Footprint of a product provides information about the amount of GHG emissions released into the atmosphere (expressed in grams or kilograms of $CO^2$ equivalent). In addition, the analysis of the results makes it possible to identify the GHG emissions associated with each process and/or material needed for the production of said product. This way, the critical points of the system can be detected and priorities can be established when it comes to the implementation of measures to improve the environmental performance of the product.

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INESCOP FOOTWEAR TECHNOLOGICAL INSTITUTE

## Introduction of Genuine Leather Mark

**Genuine Leather Mark is a certified trademark of China Leather Industry Association (CLIA) registered in the State Administration for Industry and Commerce in 1994.**

Genuine Leather Mark is a mark of medium and high-grade natural leather, fur and their products, applicable to natural leather, fur, leather shoes, sneakers, leather (fur) clothing, leather bags, suitcases, leather sofa, and other leather (fur) products, bearing with it the connotation of "environmental protection, integrity, quality, fashion". It promises to the consumers that Genuine Leather Mark products must meet the following three conditions: 1. Be made of natural first layer of leather; 2. Be of high quality products; 3. Provide good after-sales service.

Genuine Leather Mark had been used for 20 years by 2014, and it has become a certification of brand value except quality guarantee and widely recognized by the consumers, enterprises and society. Genuine Leather Mark not only promoted the development of the companies but also enhanced the brand consciousness as well as promoted the healthy development of the whole leather industry. Nowadays, Genuine Leather Mark has become a successful model and platform of quality self-discipline and brand building. There are now 474 companies and 515 brands have obtained Genuine Leather Mark use qualifications nationwide.

As the environment protection become more and more important, China Leather Industry Association introduced the concept of Genuine Leather Mark Eco-Leather to extend the Genuine Leather Mark concept to natural leather and fur. In 2012 GLM enterprises made the proposal of "Practicing environment protection, Using Eco-Leather, Promoting national brand" and established a cooperation alliance of GLM and GLM Eco-Leather to enhance the cooperation between upstream and downstream brands, accelerate the leather industry brand building and promote the industry transformation and upgrading.

To internationalize the GLM brand, now it has already had international registrations in 18 countries and regions, which means GLM has become formerly integrated with the global market.

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## Pay your membership fees online!

Paying your membership is important to ensure the quality of UITIC activities. You can pay your membership fees for 2014 now.

For the first time, the membership fees can be paid online by PayPal, credit or debit card, via a safe and secure system. You can also pay by bank transfer or cheque: more details at **www.uitic.org**.

**Fees:**
• Associations:
€65 per group of 100 members / €195 maximum
• Individuals & Technical Centres: €25