Environmental Sound Technology Information System for the Life Cycle Initiative

Cássia Maria Lie Ugaya
Universidade Tecnológica Federal do Paraná
Departamento Acadêmico de Mecânica, CURITIBA, PR – Brazil
Guido Sonnemann
United Nations Environment Programme
Division of Technology, Industry and Economy, PARIS, France
Sonia Valdivia
United Nations Environment Programme
Division of Technology, Industry and Economy, PARIS, France
e-mail: cassiaugaya@utfpr.edu..br

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ABSTRACT

UNEP and SETAC launched in 2002 the Life Cycle (LC) Initiative to develop and disseminate practical tools for evaluating the whole life cycle. The first phase of the LC Initiative had 13 task forces generating a huge amount of information in a decentralized way. On the other hand, previous LC Initiative Website (WS) management was centralized. In 2005, to promote the dissemination of LC information, UNEP provided ESTIS (Environmental Sound Technology Information System), developed by the UNEP/IETC, that allows the publication of pages in the web and helps to increase the efficiency of communication among its members. Since it was launched, the LC Initiative WS visits increased significantly. Except for the first month, the average number of visits was around 3.300 visits, and it is among the top 3 most visited websites from more than 500 ESTIS WS developed worldwide. A previous study using ESTIS for the LC Regional Networks showed a positive correlation between the amount of webpages developed and the number of visits. The same evaluation was done for the task forces pages. As for the previous work, it was concluded that to disseminate information, it is necessary to keep the information updated in the website.

Introduction

UNEP (United Nations and Environment Programme) and SETAC (Society of Environmental Toxicology and Chemistry) launched in 2002 the Life Cycle (LC) Initiative to develop and disseminate practical tools for evaluating the whole life cycle [1].

In order to use LC Approaches (Ap), it is demanded environmental information from several countries, as the life cycle of a product, process or service is often global. On the other hand, LCAp has not being extensively used in several parts of the world due to the lack of several resources, including capacity and technology [2].

The first phase of the LC Initiative had 3 programs, divided in 13 task forces responsible for the decentralized generation of information. On the other hand, previous LC Initiative website management was centralized in one webmaster, who published the information which came from all these different sources.

In 2005, to promote the dissemination of LC information, UNEP provided an information system called Environmental Sound Technology Information System (ESTIS), developed by the UNEP/IETC that allows the publication of pages in the web as well as it helps to increase the efficiency of communication among the task force members.

ESTIS

ESTIS is a multi-language, Information System (IS) management tool developed to assist the transfer of

Environmentally Sound Technologies (EST) and encompasses two integrated components providing a decentralized IT network for improved access and local control in EST related information transfer [3]. ESTIS was a response from the demands of developing and emerging countries to disseminate ESTs non-expensively and without the need of an IT expert.

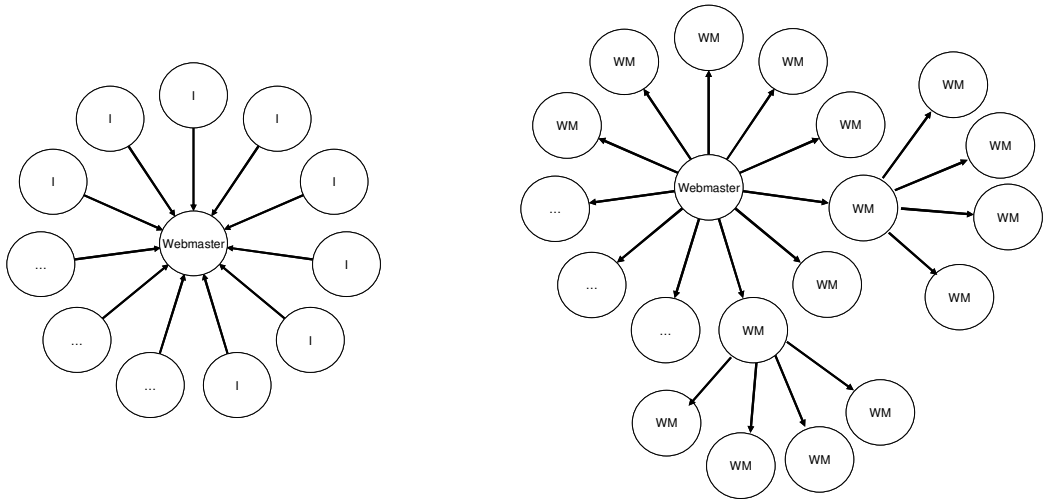
ESTIS is free of charge for the LC Initiative and the LC Regional Networks and only 5 steps are necessary to develop the website:

- choose theme
- choose homepage
- build pages
- publish
- build menu

Usually, website management is centralized in one webmaster, who publishes the information which comes from different sources. Therefore, every time someone needs to input or delete some information, it is necessary to send it to the webmaster, who is going to publish or unpublish it (Figure 1a).

Whenever the number of information needed to be updated, the demand for the webmaster increases, delaying the process.

Therefore, when ESTIS was developed, decentralization was always aimed and an easy webpage composer was always in mind.



a) common structure b) ESTIS

Figure 1: Structure of WS development
Note: I – information provider

The idea of ESTIS is to decentralize the publication of webpages, by connecting several webdesigners in a network as shown in Figure 1b.

All in all, not only ESTIS allows the decentralized management of content but also [3]:

- the creation and management of information websites on the Internet;
- Sharing and searching of information across multiple ESTIS websites and,
- publishing of information by non-web designers.

LC Initiative ESTIS Website

Due to the characteristics of ESTIS, the LC Initiative website (WS) was reformulated, now available at lcinitiative.unep.fr (see Figure 3).

The structure of the Life Cycle Initiative ESTIS website is shown in Figure 2 and all the related pages in the menu bar are controlled solely by UNEP team. The direct links connected to the homepage are those available in the menu bar, on the left side of the website, that can be seen in the whole website.

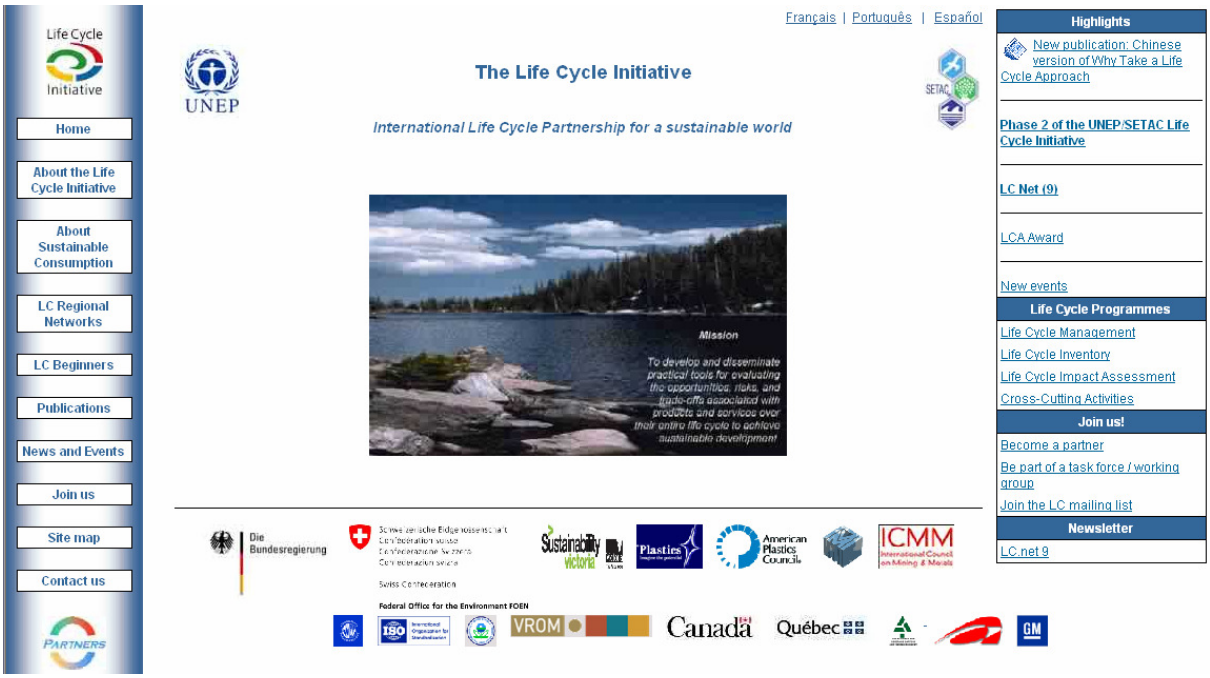


Figure 2: LC Initiative Homepage

Other pages are linked to the About the Life Cycle Initiative, About Sustainable Consumption, LC Regional Networks, LC Beginners, Publications, News and Events, Join us, Site map and Contact us pages. The pages linked to About Us are: Structure and Background. The former has links to the independent LC Initiative Programmes or Task Force ESTIS Website. All in all, the whole website contains currently around 70 pages, updated from time to time.

The Life Cycle Initiative Programmes information is available in ESTIS Communities. Therefore, all the managers of the websites that belongs to the community are able to change it. The only Task Force that is currently directly linked to the LC Initiative ESTIS Website is the Cross-Cutting Extended LCA, as it does not belong to any of the Programmes.

All these communities and websites are available to the general public, however there are websites for the ILCP and the task forces for internal purposes. These are websites with restricted access, password controlled and only available for the members and UNEP LCInitiative team.

These restricted web pages support the ILCP and the review process of the deliverables of the LC Initiative, as shown briefly in Figure 3.

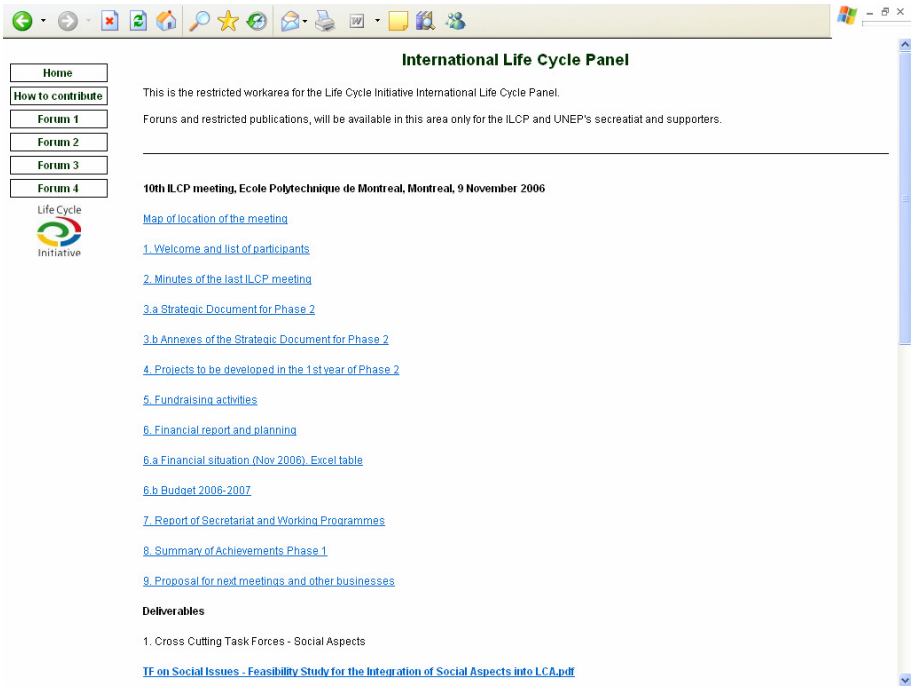


Figure 3: ILCP Restricted ESTIS webpages

Each Task Force (TF) has two websites: an open and a restricted one. The latter is only for the members. All TFs that belongs to the same Programme share one Community. Therefore, there are currently three communities: Life Cycle Management Community, Life Cycle Inventory Community and Life Cycle Impact Assessment Community. Only the Cross-Cutting TFs shown in the picture are not related to any Programme. In Figure 4 it is shown the structure of the LC Initiative. The ILCP, Secretariat and Cross-Cutting Activities WS are controlled by UNEP, while the remaining ones are controlled by each Programme or TF.

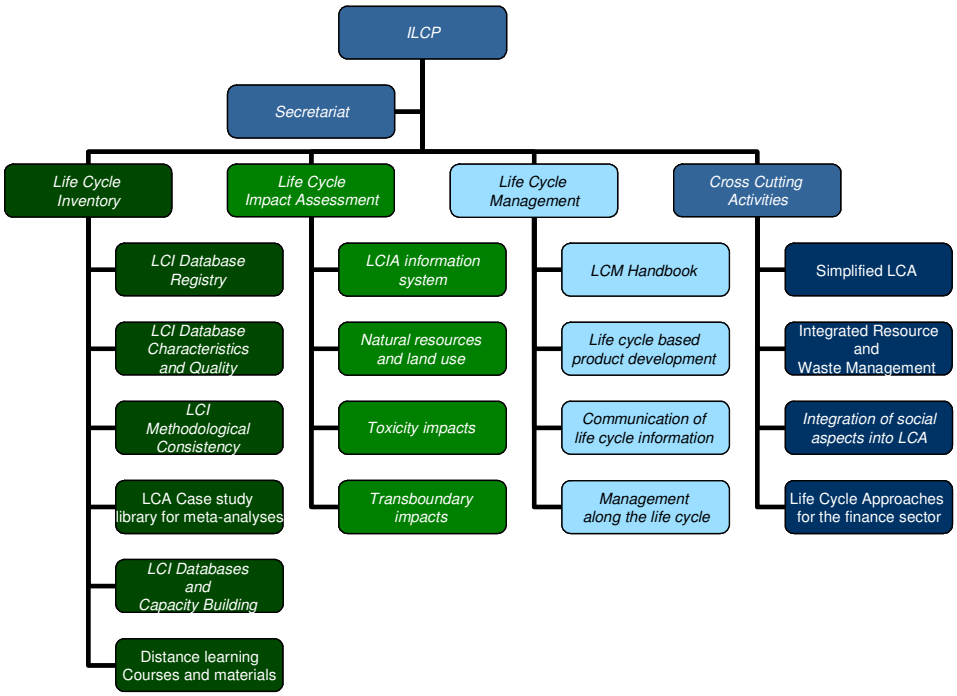


Figure 4: Life Cycle Initiative links to the LC Programmes and Task Forces

Since it was launched on February 2006, the LC Initiative WS visits increased significantly (Figure 5). Except for the first month, the average number of visits was around 3.900 visits, with an average standard error of 1380. From March 2006 to March 2007, the increase of visits was of 4,6%. Among the more than 500 websites built with ESTIS, the LC Initiative WS is among the top 3 most visited webpages worldwide and the top 3 most accessed UNEP/SETAC publications for August 2006 [4].

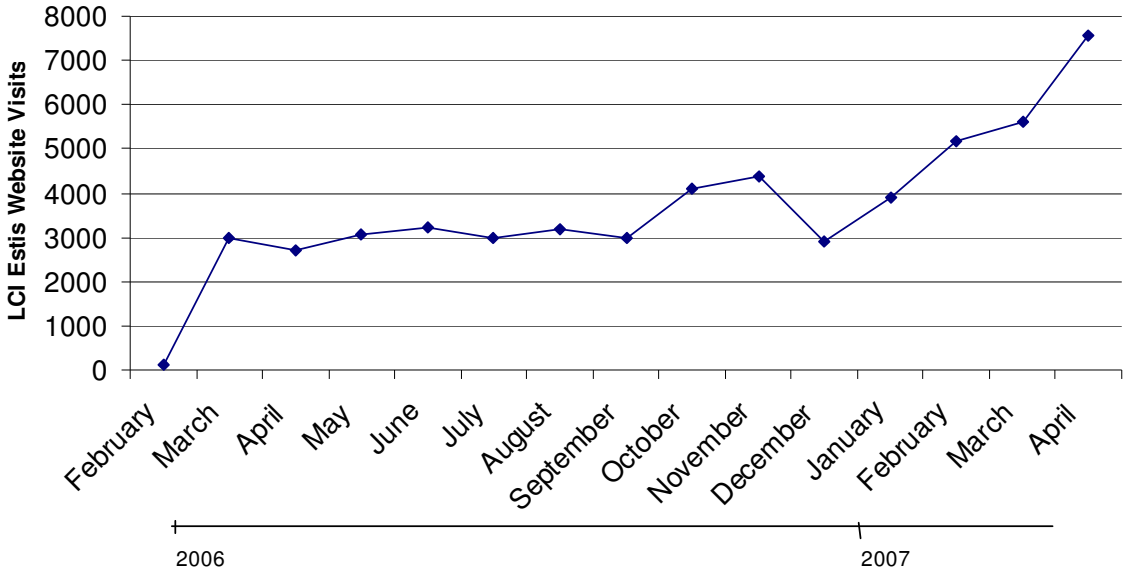


Figure 5: Number of LC Initiative Website Visits

A previous study using ESTIS for the LC Regional Networks showed a positive correlation between the amount of webpages developed and the number of visits [5]. The same has been tried for the task forces, nevertheless the same amount of pages are in each task force website. It was noted, nevertheless, that few information was available in those pages, which resulted also in a lack of visits (around 550 in average, since the websites were published). On the other hand, it has been seen a greater interest in some of the topics, mainly the LCM handbook, although the visitor could not find information about it in this specifically website.

Conclusions and Recommendations

From what has been pointed out, ESTIS can be used free of charge by the LC Initiative, nevertheless very few information was available in the task forces websites.

The LC Initiative had a significant increase of visitors, especially the three last months.

For the second phase of the LC Initiative, aiming the dissemination of life cycle approaches around the world, we strongly recommend that more public information shall be published in websites and with constant updates. Therefore, we would like to invite all the managers of LC projects supported by the Initiative to add more information about the projects at ESTIS.

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