



GUIDELINES FOR SOCIAL LIFE CYCLE ASSESSMENT OF PRODUCTS



UNITED NATIONS ENVIRONMENT PROGRAMME



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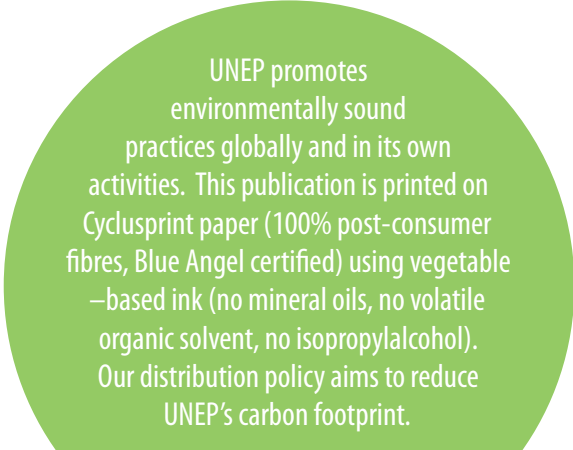
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Guidelines for Social Life Cycle Assessment of Products

Social and socio-economic LCA guidelines complementing environmental LCA and Life Cycle Costing, contributing to the full assessment of goods and services within the context of sustainable development

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Executive summary

The *Guidelines for Social Life Cycle Assessment of Products* provides a map, a skeleton and a flash light for stakeholders engaging in the assessment of social and socio-economic impacts of products life cycle.

First, the *S-LCA Guidelines* provides a map, which describes the context, the key concepts, the broader field in which tools and techniques are getting developed and their scope of application. The map is important because it relates to history, initiatives and ideas that are both molding the S-LCA technique and essential to its broad application.

Shared concerns about the state and sustainability of environmental, economic and social dimensions of today's and tomorrow's world are expressed through the concept of Sustainable Development. The journey towards sustainability finds sustainable production and consumption at its very heart. It also relates to the social responsibility of organizations and the objective to improve social and environmental performances along with sustained economic profitability -all in the perspective to contribute notably to greater human well-being.

Because it is holistic, systemic and rigorous, Life Cycle Assessment is the preferred tool when it comes to access information about potential and real impacts of products life cycle. Life cycles of products involve material, energy and economic flows. They are also made of stories about production and consumption impacts on the workers, the local communities, the consumers, the society and all value chain actors.

Second, the *S-LCA Guidelines* provides a skeleton. It presents key elements to consider and provide guidance for the goal and scope, inventory, impact assessment and interpretation phases of a social life cycle assessment. The *S-LCA Guidelines* provide the necessary basis for the development of databases and the design of softwares that will ease the practice of S-LCA. The skeleton is important because it is a foundation on which a larger group of stakeholders can engage.

The framework detailed in the *S-LCA Guidelines* is in line with the ISO 14040 and 14044 standards for Life Cycle Assessment. Adaptations for the consideration of social and socio-economic issues are described in the framework. It proposes a two-fold classification of social impacts: by stakeholder categories and impact categories. A set of subcategories, which are social and socio-economic issues of concerns, to be used in S-LCA are presented.

Third, the *S-LCA Guidelines* provide a flash light that highlights areas where further research is needed. Other publications shall follow these *Guidelines*, presenting details of the methodology and further developments notably in regard to Impact assessment. A flash light is important to enable researchers and practitioners to identify rapidly where additional efforts should be invested. It also helps to prevent the use of the technique for applications that would not be appropriate considering its current state of development such as comparative assertion communicated to the public. Further resources will be made available to the public on the UNEP/SETAC Life Cycle Initiative web site.

Social Life Cycle Assessment is a technique available to account for stories and inform systematically on impacts that otherwise would be lost in the vast and fast moving sea of our modern world. May it help stakeholders to effectively and efficiently engage to improve social and socio-economic conditions of production and consumption.

Sommaire exécutif

Les *Lignes directrices pour l'Analyse sociale du cycle de vie des produits (ASCV)* fournissent une carte, un squelette et une lampe de poche pour les parties prenantes qui s'engagent dans l'évaluation des impacts sociaux et socio-économiques du cycle de vie des produits.

Premièrement, les Lignes directrices pour l'ASCV délivrent une carte qui décrit le contexte, les concepts-clés et le champ dans lequel les outils et techniques ont été développés, et présentent leurs applications possibles. Cette carte est importante car elle retrace l'histoire, les initiatives et les idées qui ont façonné l'ASCV. La compréhension de ces composantes est essentielle pour mettre en oeuvre cette technique de manière cohérente et extensive.

Les préoccupations communes concernant l'état et la durabilité des dimensions environnementale, économique et sociale du monde d'aujourd'hui et de demain sont exprimées dans le concept de développement durable. La production et la consommation durables sont au cœur de ce concept. Il se rapporte également à la responsabilité sociale des organisations et vise à améliorer les performances sociales et environnementales à l'instar de la rentabilité économique à long terme – dans la perspective de contribuer notamment à un plus grand bien-être humain.

Holistique, systémique et rigoureuse, l'analyse du cycle de vie (ACV) est un outil privilégié pour recueillir des informations sur les impacts potentiels et réels du cycle de vie des produits. Les cycles de vie des produits sont composés de flux matériel, énergétique et économique. Ils sont également composés d'histoires témoignant des impacts de la production et de la consommation sur les travailleurs, les communautés locales, les consommateurs, la société et tous les acteurs de la chaîne de valeur.

Deuxièmement, les Lignes directrices pour l'ASCV fournissent un squelette. Elles présentent des éléments-clés à prendre en considération lors de l'utilisation de cette technique. Elles donnent également des conseils et des directives spécifiques à chacune des phases de l'étude : définition des objectifs et du champ de l'étude, analyse de l'inventaire, évaluation des impacts et, finalement, interprétation des résultats. Ces lignes directrices constituent le support nécessaire pour développer des bases de données et concevoir les logiciels qui simplifieront la pratique de l'ASCV. Le squelette est important car il représente l'armature à partir de laquelle un plus grand nombre de parties prenantes peut s'engager.

Le cadre détaillé dans les Lignes directrices pour l'ASCV est conforme aux normes ISO 14040 et 14044 pour l'analyse du cycle de vie. Les lignes directrices décrivent les adaptations nécessaires à la norme afin de permettre la prise en compte des considérations sociales et socio-économiques de façon optimale. Une double classification des impacts sociaux et socio-économiques est proposée : à la fois par catégories de parties prenantes et par catégories d'impacts. Le document présente également un ensemble de sous-catégories, illustrant des questions sociales et socio-économiques d'importance, à utiliser lors de la réalisation d'une ASCV.

Troisièmement, les Lignes directrices pour l'ASCV fournissent une lampe de poche mettant en lumière les secteurs où davantage de recherches sont nécessaires. D'autres publications suivront ces Lignes directrices, détaillant la méthodologie et faisant état des développements, notamment en terme d'évaluation des impacts. Cette lampe de poche est importante car elle permet aux chercheurs et aux praticiens d'identifier rapidement là où des efforts additionnels devraient être consentis. Elle permet également d'éviter que la technique soit utilisée à des fins non appropriées étant donné son état de développement actuel (par exemple pour une évaluation comparative des produits qui serait rendue publique). Des ressources complémentaires seront disponibles pour le public sur le site web de l'Initiative sur le Cycle de Vie du PNUE et de la SETAC.

L'Analyse sociale du cycle de vie est une technique adéquate pour rendre compte des faits vécus dans le cadre du cycle de vie des produits et pour informer systématiquement sur les impacts qui menacent d'être passés sous silence dans la mer aux flots rapides de la civilisation moderne. Nous souhaitons qu'elle aide les parties prenantes à s'engager de manière efficace et décisive pour améliorer les conditions sociales et socio-économiques de la production et de la consommation.

Resumen ejecutivo

Líneas Directrices para un Análisis de Ciclo de Vida (ACV) Social proveen de mapa, una estructura y una retrospectiva hacia el involucramiento de partes interesadas e involucradas en la evaluación social de los impactos de productos en el ciclo de vida.

En primer lugar, las Líneas Directrices para un ACV Social ofrecen un mapa que describe el contexto, los conceptos clave, las áreas adicionales en las que las herramientas y técnicas son desarrolladas, y el ámbito de aplicación de las Líneas Directrices. El mapa es importante porque hace relación a la historia, las iniciativas y las ideas que son moldeadoras de la técnica de ACV Social e indispensables para su amplia aplicación. Bajo el concepto de Desarrollo Sostenible se expresan las preocupaciones sobre el estado y la sostenibilidad de las dimensiones ambientales, económicas y sociales del mundo de hoy y del mañana. El viaje hacia la sostenibilidad considera la producción y el consumo sostenibles en el centro de sus actividades; también se refiere a la responsabilidad social de las organizaciones y al objetivo de mejorar el desempeño social y ambiental a la par de una rentabilidad económica sostenida – todo desde la perspectiva de contribuir sensiblemente a un mayor bienestar del ser humano. Por ser una herramienta holística, sistémica y rigurosa, el Análisis de Ciclo de Vida es la preferida cuando se trata de acceder a información sobre los impactos potenciales y reales del ciclo de vida de los productos. Los ciclos de vida de productos se elaboran a partir de flujos de materiales, de energía y económicos. Los ciclos de vida también se elaboran a partir de historias acerca de los impactos (reales o potenciales) de la producción y consumo en los trabajadores, las comunidades locales, los consumidores, la sociedad y todos los actores de la cadena de valor.

En segundo lugar, las Líneas Directrices para un ACV Social ofrecen una estructura. Las Líneas Directrices presentan los elementos clave a ser considerados y proporcionan orientación acerca del objetivo y ámbito de aplicación, el inventario, la evaluación del impacto y la interpretación de las fases de un Análisis de Ciclo de Vida Social. Las Líneas Directrices para un ACV Social proporcionan la base necesaria para el desarrollo de bases de datos y el diseño de softwares que facilitará la práctica de ACVs sociales. La estructura es importante porque es una base sobre la cual un grupo más amplio de partes interesadas e involucradas puede participar.

El marco detallado en las Líneas Directrices para un ACV Social está en línea con las normas ISO 14040 y 14044 para un Análisis de Ciclo de Vida. Adaptaciones de las normas a fin de integrar cuestiones sociales y socio-económicas son descritas en las Líneas Directrices. Se propone una doble clasificación de los impactos sociales: por categorías de partes interesadas e involucradas y por categorías de impacto. Se presenta una serie de subcategorías a ser utilizadas en un ACV Social, las que se refieren a cuestiones sociales y socio-económicas de preocupación. En tercer lugar, las Líneas Directrices para un ACV Social constituyen una retrospectiva que resalta las áreas donde se necesitan más investigaciones. Otras publicaciones sucederán a estas Líneas Directrices presentando detalles de la metodología y nuevos desarrollos, en particular en lo que respecta a la evaluación del impacto. Es importante una retrospectiva a fin de permitir a los investigadores y los profesionales la identificación rápida de las áreas donde deberían ser invertidos esfuerzos adicionales. También ayuda a prevenir sobre el uso de la técnica considerando su estado actual de desarrollo en casos de aplicaciones que no serían adecuadas, tal como la afirmación comparativa comunicada al público. Más recursos serán puestos a disposición del público en la página Web de la Iniciativa PNUMA/SETAC de Ciclo de Vida. El Análisis de Ciclo de Vida Social es una técnica disponible para dar cuenta de historias e informar sistemáticamente sobre los impactos que de otro modo se perderían en el mar vasto y dinámico de nuestro mundo moderno. Esta técnica podrá ayudar a partes interesadas e involucradas a participar de manera eficaz y eficiente a fin de mejorar las condiciones sociales y socio-económicas.

General public summary

It used to be that when consumers had to choose between two similar products, it was a pretty easy decision to make: just weigh the benefits of cost and quality then pick the item and brand that suited your needs. Today, the choices are many, and more difficult. Buyers are now driven to be conscious of the effects their choices have on our environment and on the local economies. Do we buy from the farm stand or the supermarket? Which choice will result in a less polluted, more sustainable globe? Perhaps even more daunting is the fact that some of our choices will have social and socio-economic effects as well, not only on workers but also on entire communities where production takes place. These social and socio-economic consequences are the primary concern of a social and socio-economic life cycle assessment (S-LCA).

Life cycle assessments, until now, have generally been used to analyze the effects that a product or process will have on the environment. Results of an LCA study will let companies know which aspects of their production are efficient, and where they can improve efficiency to reduce environmental impacts. All stages in the life cycle of the product are considered in an LCA, from the mining and extraction of its raw materials, to the shipping, right on to the landfill. Data are not only considered for the initial product, but also for the full life cycles of other materials that are used in the making of the product. Social and socio-economic life cycle assessments add extra dimensions of impact analysis, valuable information for those who seek to produce or purchase responsibly.

Take, for example, a simple cotton T-shirt. First, let's imagine that Shirtz—a hypothetical retailer—has requested an LCA of their latest product: a package of white undershirts. Shirtz Inc. wants to know how this new item will affect its environmental footprint as a corporation as well as what sort of improvements they can make to the production of the shirts that will reduce emissions and other harmful environmental outputs. Furthermore, Shirtz wants to know what sort of social and socio-economic effects these shirts will have on their workers, and on the communities where they have shirt factories. As an already established company, Shirtz is legally held to minimum benchmarks for things like workers' rights but they want to take their social responsibility further and need guidance on how to proceed. The label "Fair Trade" is limited in scope and ignores huge sections of the life cycle. While the making of their shirts may be ethical, the company wants to know if this can be true for the entire life cycle, even phases like shipping and disposal. These specifications and questions will help the analysts focus on finding data relevant to the goals of Shirtz.



Shirtz will work in cooperation with the analysts to determine what sort of data will be required to do the

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