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CHALLENGES AND OPPORTUNITIES IN COMMUNICATING LCM ISSUES AMONG ACADEMIA, POLICY MAKERS AND INDUSTRIES IN THE REGION OF WESTERN BALKANS

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ABSTRACT

The paper describes a search for adequate vehicles and tools to support improving Life Cycle Thinking practices in the region, and foster dialogue on the issues between industries, SMEs, and policy makers. The aim is to disclose potential channels of communication among stakeholders and describe an algorithm for disseminating information on significance, structure and market potential of applying LCA approach among regional manufactures. Channels for informing consumers on life cycle approach and environmental features of products have been suggested, since the pressure from consumers might be important incentive for manufacturers to take into account environmental issues.

INTRODUCTION

The significance of sustainability issues has been recognized among major corporate players and industrial sectors of developed world. Progressive companies are motivated to communicate the environmental performances of their environmentally friendly products and services, since the most developed markets worldwide have accepted environmental friendliness as an important mark of quality. Consumers learn how to distinguish environmental features of product and services they acquire, and how to make informed choice on the market. Methodologies for quantifying product environmental attributes such as LCA have matured and comparing eco-features of specific products has become increasingly common (Ingwersen & Stevenson, 2012). Environmental issues are of particular importance for West Balkans transition countries striving to enhance resource efficiency in accordance with EU policies that significantly influence regional decision makers. Since the beginning of the second phase of UNEP Life Cycle Initiative, some sporadic and rather isolated, but yet significant steps toward dissemination of LCM thinking have been noticed. For instance, regional LCA network for Central and South East Europe has been established in Novi Sad, Serbia in 2011, academic subjects and programs on LCA are being taught at University of Nis (Faculty of Occupational Safety, Dept. of Environmental Studies), University of Novi Sad (Faculty of Technical Sciences), University EDUCONS (Faculty of Environmental Studies), and certain groups (e.g. Cluster of Automotive Manufacturers) have organized workshops on



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Life Cycle Approach. Some other multi-stakeholder organizations have organized several training programs with content that comprised themes like LCA, resource efficiency, Environmental impact assessment, etc. However, lack of broader knowledge on LCM principles and application remains noticeable throughout the region, in spite some obvious signs of progress in quite isolated circles.

METHOD

A pilot, web based survey, has been designed and carried out as a part of a supervised student assignment. With the intention to collect as much possible information on the subject in given circumstances, a study was launched. Appropriate questionnaire, aimed to reveal general awareness of LCA significance among local industries and services, was designed and distributed to 120 SME's, larger enterprises (some of which operate in other countries in the WB region as well) and certain public institutions in south-east Serbia. As for temporal range, the survey spanned from early November to late December 2011. Participants comprised random representatives from trade, industry, various agencies and public utility services (Glisovic, 2013). Return rate was mere 24%, mostly due to inadequate timing and rather week explanatory activities. As a preliminary, pilot survey, this scanning did not aim to be a statistical representative study of society, which would certainly require a much larger sample and somewhat different data processing. In this stage, the main purpose was to get fast, although superficial, but yet quite clear insight in the regional perception of LCA approach. The survey was primarily aimed to motivate efforts for identification of appropriate channels for communicating information and spreading knowledge on LCA practices in the region.

RESULTS

The preliminary survey has revealed significant lack of information on the subject among representatives of different industrial sectors. It seems that LCA procedures remain widely unknown or at least seldom applied in the region of West Balkans. Furthermore, it seems that manufacturers do not fully recognize potential of LCA practices to boost environmentally friendly product presence on the regional markets. In order to validate and evaluate preliminary findings, a more extensive and demanding survey has been suggested. However, one such endeavor requires full collaboration of different players, such as Regional Chambers of Commerce, associations of different industrial sectors, Consumer Protection Organizations, national Environmental Protection Agencies and alike. Preliminary contacts with all relevant players have been established and a new, redesigned survey of a kind is on the way. Expected results should reveal the weakest players in supply chains, as well as the most motivated companies to start with a novel program of trainings. Subsequently, a series of tailor-made information sessions should be arranged for industrial sectors, and in particular for SMEs (Small and Medium Enterprises), and web based and printed materials should be designed and distributed through Consumer Protection Organizations.

In spite of certain shortcomings and limitations of described preliminary survey, it became clear that even those SMEs representatives that declared certain familiarity with LCA concept did not realize that environmental superiority of their products or services could provide them better market position on the long run. Thus, life cycle approaches did not become part of the daily industrial and business activities in transitional countries of the West Balkans. A lot of

information on LCM concept is yet to be communicated between industrial sector and various players from different levels of government, economy and academia. A web for distribution of LCA practices (expertise and data flows) is suggested as shown in the Figure 1 (Glisovic, 2013). Therefore, there is plenty of room for two-way communication between industry and academia, with necessary institutional support from policy makers. Integration and mainstreaming of life cycle thinking among a wide range of local industries, trade organizations and business supporting bodies is obviously needed.

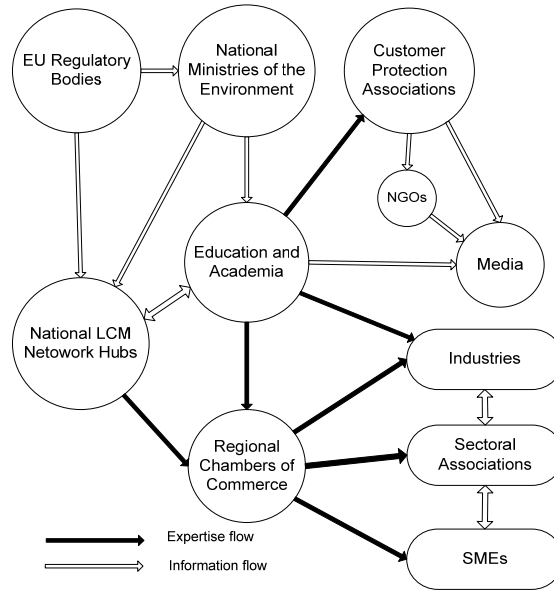


Figure 1. Distribution of LCM Practices – Expertise and Data Flow

The introduction of LCA can take place both by a ‘top-down’ approach (by the order from top management) or by a ‘bottom-up’ approach (by the initiative of the designer, or other employee). LCM adoption patterns and integration of LCM principles in decision-making processes comprise a learning process, organizational changes and certain structural changes. Subjective factors are also of crucial importance, since it is all about evolutionary changes in the attitude of the company or association.

DISCUSSION

It is understandable that governing bodies of weak economies in times of global economic crisis are focused on more immediate priorities than environmental issues seem to be from their prospective. In those circumstances, LCM information and communication should emphasize resource efficiency, as it is usually easily noticeable benefit for policy makers.

Small and medium enterprises would certainly need a kind of hub to exchange their experience and compare results of life cycle based activities with other companies and academia. National associations of LCA consisting of representatives from industry, academia, public authorities, consumer associations and research centers, exist for years in Japan, Korea, India, Italy, and France, giving huge support to spreading the concept nationwide (Frankl, 2001). It is obvious that multi-stakeholder associations of the kind might



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have the crucial role in dissemination and mainstreaming of LCM practices in West Balkans. It should:

- support capacity building and training of professionals, particularly those from SMEs
- develop standardized and simplified screening procedures, suitable for SMEs;
- provide education for consumers, increasing their ability to make informed choice;

Permanent communication between all the involved stakeholders (foremost, between industry, authorities and consumers) is essential for the future diffusion of LCM practices.

CONCLUSIONS

Promotion of LCA concept is of particular importance for the countries in transition and their environment, since they could be heavily impacted by emerging consumerism. LCM based communication tools could be applied to protect developing markets against the unfair competition by manufacturers that supply low priced products, but with higher environmental externalities (Blengini & Shields, 2010). Instead of remaining passive, waiting for environmental impacts to strike, those vulnerable societies should undertake adaptation, based on acquired knowledge about eco-effectiveness and resources management. Academia, governmental agencies and consultant firms should couple efforts in popularization of this important system approach in the region of West Balkans in order to facilitate timely implementation of life cycle management principles. The process of communicating introductory LCA practices between West Balkans institutions and industries is obviously not yet done, and it is still needed in order to strengthen the potential of local, administration, research and education, to forward life cycle thinking to industries and SMEs.

Dissemination of information on benefits that LCM could bring to manufacturers, consumers and entire society is of great importance for both environment and economy of Western Balkans. Export oriented manufacturers would faster learn how to cope with ever more stringent rules of the most demanding markets. Additionally, the very activities on preparing a LCA would reveal the weakest environmental features of a product and thus support environmentally friendly product design procedures and direct design changes. One such approach would certainly lead, step by step, toward increased resource efficiency, better material choice, and improved energy efficiency of products and manufacturing processes.

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