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Life cycle competence needs, current and future, in the Swedish industry sector

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Agenda

Welcome and introduction
Presentation of results
Discussion
Wrap-up





Project objective

- Map and understand competence demands in Swedish Industry current and future
- Describe the role of life cycle competences in the transformation to a sustainable, circular economy
- Contribute to formation of future content of life cycle competences

Method

Interviews with academic researchers and life cycle experts and sustainability managers at Swedish Industrial companies.

Focusing on impact of "Life Cycle Perspective" in organisations and competence needs and roles

Survey, based on outcome from interviews, sent to companies in the Swedish Life Cycle Center network representing different industry sectors.

Focus on organisations driving forces to work with "Life Cycle Perspective", success factors, competence needs and roles



Results

– the role of Life Cycle Perspective

• Strategy

- Life cycle perspective to be integrated and anchored in company strategy
- Strategy interpreted and translated into common and relevant targets for each function/department to engage all co-workers. Secure compliance
- Engaged and “educated” management
- Life cycle perspective implies a systemic view of the company impact
- Up to date with legislation, regulations, policies, trends, etc.

Results

– the role of Life Cycle Perspective

- Enabler

- Actions related to strategy targets can be set
- Wider understanding of everyone's contribution
- Provides data supporting decisions
- Fact/data based communication
- Identifying "hot-spots"
- Visualising actions to reach sustainability targets
- Strengthening competitiveness
- Marketing and brand
- Respond to increased external expectations
- Organisation prepared for changes in legislation, regulations etc.

Results

– the role of Life Cycle Perspective

- Way of working

- Support needed to “translate data into relevant recommendations for the receiver”
- Break-down of strategy into department targets
- Cross functional, collaborative teams – all departments/functions need to be involved
- Include in all internal processes – development, production, procurement, finance, sales, marketing, after-market, etc.
- Early integration preventing sub-optimisation
- Roles – “Communicator/translator”, “Life Cycle Facilitator” and “Department Life Cycle Angel”

Results

– competence need current and future

• Competences

- All functions need some level of understanding of Life Cycle Perspective to ensure transforming into a sustainable operation
- Understanding the system or value chain to be analysed to set the right limits
- Translation and communication of data
- Business understanding
- More specialists as Life Cycle Perspective becomes more complex
 - Circular business models
 - Legislations, regulation, policies, trends, etc.
 - Chemistry, materials
 - Mass balance systems
 - Recycling techniques
 - Design for circularity
 - Sustainability
 - Environment

Results

– competence need current and future

• Tools

- Simple, “digital” tool to be used within internal functions without LCA experts for screening. Supporting making the best choice
- Simple “digital” tool accessible for customers to enable comparison between different product alternatives

Results

– competence need current and future

• Education

- Education directed towards an industry branch or a function
- Everyone along the value chain need basic education about Life Cycle Perspective
- Internal education to increase the awareness of the company targets and impact

- Life cycle perspective should be incorporated in all educations irrespective of faculty or level

Conclusions

- Company strategy needs to integrate Life cycle perspective
- Life cycle targets needs to be implemented for all functions
- Cross-functional teams to prevent sub-optimisation
- Life cycle education both directed towards specific industry branches, functions/departments and generally for everyone
- Need of some new roles
 - Communicator
 - Facilitator
 - Guardian Angel
- There are gains to be made:
 - Brand
 - Competitiveness
 - Communication
 - Planning (product, production, technology, etc.)

A flock of white birds, possibly egrets or herons, is shown in flight against a light, hazy sky. The birds are captured in various stages of their wing strokes, with some wings fully extended and others partially folded. The overall scene is serene and naturalistic.

Group discussion

Instructions

You will automatically be divided into smaller discussion groups.

Appoint a secretary and presenter

- Notes to be sent by mail to lifecyclecenter@chalmers.se. (They will be used as further input to the report)
- After the discussion give a short presentation of 2-3 main points from your group in the main fora.

Discussion

- Which of the competences mentioned do you see as key for success?
- Do you see other competences of importance were Life Cycle Perspective makes difference in an organisation?
- Do you see other competences needed to support transition into a sustainable future?
- What roles/responsibilities does academia, companies and authorities have when it comes to develop Life Cycle Perspective?

Contact

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