

SURVEY 2 – CALL TO SUSTAINABILITY MANAGERS

We have conducted a member survey among all the member companies in the Association of Danish Architectural Firms. We have done this to create a picture of where we can contribute to competence building etc. As an expert in the field, it is targeted at you who may play a role in your company as a sustainability officer. Therefore, we would ask you to help us with your insight into the level of knowledge today in the architectural industry in some of the more specialised areas of sustainability. Partly to be able to develop services at the proper levels for the members, partly to harvest data for the research that we carry out to, among other things, be able to influence the framework conditions for architects' work.

GENERALLY

3.2.1. Identification of competency development expectations and sustainability needs

1. BQ1 - Please provide the data below.

Name / Company / Zip code / Email address / Phone number

- BQ2 We would like to ask what the company needs more knowledge and input from your point of view as head of sustainability. The questions following this question are more detailed about some of these areas.
 - Processes
 - Strategy development
 - Sustainability management
 - Communication skills
 - Competences for evaluation and follow-up
 - Continuing education in the circular economy
 - Continuing education in LCA
 - Continuing education in LCC
 - Continuing education in social value creation
 - Process planning
 - Pricing sustainability deliverables
 - Other: Please indicate wishes:

ENVIRONMENTAL AND ECONOMIC SUSTAINABILITY

3.2.2. Circular economy (CE), Life Cycle Assessment (LCA) and Life Cycle Costing (LCC) – degree of knowledge, desire for increased knowledge, and if so, what kind of knowledge.

CE

CE is a way to ensure sustainable management of the earth's resources and develop new economic opportunities for companies through new business models. For example, a circular economy in construction keeps building materials and products in the economic cycle of cities and buildings with the highest possible value for the longest possible time.



- 3. BQ3 How familiar is the circular economy to the company?
 - "What is a CE???"
 - Have heard about the CE
 - Practices CE in company projects
 - Teaches CE
- 4. **BQ4 Does the company needs to learn more about CE?** Yes / No
- 5. BQ5 If Yes: What does the company need to learn?
- 6. BQ6 If No: Why is it not relevant to learn more about CE in the company?

LCA

Life Cycle Assessment (LCA) calculates the environmental costs of products and processes over their lifetime. It estimates which materials and manufacturing processes are included, what environmental effects the product has during its lifetime, and its disposal or recycling impact. There are several indicators, including CO2 emissions and embedded energy. In addition, LCA can base material and component selection on environmental factors.

- 7. BQ7 How familiar is the company with LCA?
 - I've heard of LCA
 - Lets engineers do LCA calculations in the company's projects
 - Makes LCA calculations in the company's projects
 - Teaches LCA calculations
- BQ8 Does the company need to learn about LCA?
 Yes / No
- 9. BQ9 If Yes: What does the company need to learn?
- 10. BQ10 If No: Why is it not relevant to learn more about LCA in the company?

LCC

Total cost of ownership (Life Cycle Costing / LCC) is a method of calculating the cost of construction including operation, maintenance, replacements and eventual demolition over its entire lifetime. Thus, for example, one can assess whether it is economically viable to invest more in a long-lasting solution. Or whether it is better to use a solution that costs less in construction but may have to be changed several times due to poorer durability.

- 11. BQ11 How familiar is the total economy/LCC/Life cycle costing the company?
 - I've heard of LCC.
 - Lets engineers do LCC in the company's projects
 - Makes even LCC in the company's projects
 - Teaches LCC
- 12. **BQ12 Does the company need to learn about LCC?** Yes / No



- 13. BQ13 If Yes: What does the company need to learn?
- 14. BQ14 If No: Why is it not relevant to learn more about the LCC company?

SOCIAL SUSTAINABILITY - SOCIAL VALUE CALCULATION

3.2.3. Social value creation (SVC) – perception, practice, desires for increased knowledge in the future, and if so, what kind of knowledge and ways of evaluating.

SVC

Social value creation is about the importance of architectural design regarding behaviour, participation and consumption. Such can be exemplified as the advantages, disadvantages, benefits, costs and qualities of building projects and how such create value for the client, the users and the society. Social value creation may concern, for example, cultural heritage, cohesion, inclusion, productivity, learning, health, urban life, etc. Social value creation, specifically concerning sustainability, is about how such qualities promote environmental and economic sustainability in a given building project. And thereby also supports global ambitions to get everyone involved in sustainable development.

- 15. BQ15 Can you give an example of what you, in the company, consider to be social value creation in architecture?
- 16. BQ16 Based on this example, can you characterise what the company defines as social value creation in architecture? Check 1-4 of the fields that you find most important.
 - Mental well-being e.g. aesthetics, health, healing architecture, well-being, liveability, etc.?
 - Behavioural regulation e.g. nudging for sustainable behaviour, safety, security, overview, wayfinding, etc.?
 - Activity promotion e.g. functionality, learning, competence building, etc.?
 - Inclusion e.g. equality, community, universal design, accessibility, neighbourliness, clear boundaries, etc.?
 - Identification e.g. identity, community, sense of solidarity, belonging, etc.?
 - Ownership e.g. co-creation, participation, co-ownership, etc.?
 - Measurable qualities e.g. durability, resilience, flexibility, indoor climate, working environment, social commissioning, post occupancy evaluation, etc.?
 - Social criteria in DGNB (thermal comfort, air quality, visual comfort, control of the indoor climate, quality of outdoor areas, safety, safety, accessibility, conditions for cyclists, architectural quality, plan layout)
 - Leave No One Behind" (LNOB) The central, transformative promise of the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals?
 - Other (please specify)

17. BQ17 - How does the company evaluate and document its design intentions for social value creation?

We evaluate and document social value creation by:

- Post Occupancy Evaluation?
- Follow-up questionnaire surveys?
- Interviews with users?
- Observations?
- The company does not evaluate and document social value creation.
- Other:



18. BQ18 - Does the company need to know/learn more about evaluating and documenting social value creation?

Yes / No

- 2. BQ19 If Yes: What does the company need to learn?
 - Ways to communicate social value creation (to potential customers)?
 - Ways to argue social value creation (for solutions in concrete projects)?
 - Ways to document social value creation (after the project is completed)?
 - Ways to measure social value creation?
 - Other (please specify)
- 3. BQ20 Why is it not relevant to know more about the documentation of social value creation in the company?

ABOUT YOU

3.2.4. The respondent's role, education, background and particular competencies in sustainability.

This study is about you, who have a role as a sustainability officer in your business. If you have already answered the following questions in the first survey, tick off your response".

- 4. BQ21 What are your areas of study? (feel free to mark more)
 - I have answered this question in the previous 2022 survey.
 - Architecture
 - Urban Planning
 - Urban Development
 - Landscape
 - Area Development
 - Design
 - Concept Development
 - Competitions
 - Client consultancy
 - Housing (affordable)
 - Housing (private)
 - Business management
 - Project management
 - Design management
 - Construction management
 - Economics
 - Contractual conditions
 - Working environment
 - Sustainability management
 - Consultant or auditor, sustainability certification
 - IT
 - Citizen/User Involvement
 - Areas not mentioned
- 5. BQ22 Have you taken additional continuing education in sustainability?



- I have answered this question in the previous 2022 survey.
- Sustainability management
- LCA
- LCC
- DGNB consultant/auditor
- Other continuing education relevant in f t sustainability
- No, no formal continuing education
- If you have other relevant continuing education, please mention it here.

6. BQ23 - How would you assess your knowledge and insights about sustainability on a scale of 1-4 (limited knowledge - excellent knowledge)

- Limited knowledge
- Some knowledge
- Good knowledge
- Excellent knowledge
- Life cycle assessment LCA
- Life cycle costing LCC
- Social value creation
- Sustainability management and certification
- If you have specialist knowledge of other aspects of sustainability, please state this: