

Deliverable A1.2

Case Study Report

HÅG

(a brand of Flokk)

Life Effige
Environmental Footprint
For Improving and
Growing Eco-efficiency



1. Introduction

As part of the preliminary research conducted for the LIFE EFFIGE project, Sant’Anna School and ENEA collected a list of good practices on life cycle assessment (LCA) implementation in our target industries, namely agrifood, catering services, foundry, and furniture. This list, or ‘observatory’ is made of fifty companies that had conducted an LCA for at least one of their products and used it thereafter to change either their products, their processes, or strategy. The fifty companies were then ordered according to the extent of the changes implemented. As a result, five companies were selected as they introduced substantial changes at the organizational level after conducting LCAs.

HÅG was selected for its long term commitment to environmental sustainability by means of a life cycle logic applied to all strategic decisions the company undertakes with regards to its products. HÅG was the first office chair producer in the world to be certified in accordance with ISO 14025-Environmental Product Declaration (EPD), in 2004. Now all HÅG collections carry an EPD. In 2010, HÅG *Capisco*, one of their most representative products, obtained the Nordic Swan Ecolabel and was among the first in Europe to be certified by US GREENGUARD Environmental Institute (GEI), that guarantees that the product does not emit harmful gases. Furthermore, after twenty years the company decided to use recycled plastics as part of its inputs for its chairs, HÅG *Capisco* was awarded by the European Association of Plastics Recycling and Recovery Organisations (EPRO) as *Best Recycled Plastic Product in Europe*. HÅG joined forces with RH and RBM in 2007 under the name of Scandinavian Business Seating, a global company which operates in the office chairs, canteen and conference furniture market. In 2017, the group changed name to FLOKK and it is composed now by eight companies situated in Northern Europe. Despite the merger, each brand maintains its core identity, while environmental sustainability and health of all FLOKK stakeholders remain the fil rouge among the eight companies. The group motto is: *inspire great work*. In this case study report, HÅG will be the focal point of our study.

HÅG has obtained several environmental certificates, as well as quality studies, for its collections of chairs. Its environmental certificates are listed in Table 1.

Certificate	Product
HÅG Capisco	EPD Nordic Swan GREENGUARD Möbelfakta
HÅG Capisco Puls	EPD GREENGUARD Möbelfakta
HÅG Conventio	EPD Nordic Swan GREENGUARD Möbelfakta
HÅG Conventio Wing	EPD GREENGUARD Möbelfakta

HÅG Futu	EPD GREENGUARD Möbelfakta
HÅG H03	EPD GREENGUARD
HÅG H04	EPD GREENGUARD
HÅG H05	EPD GREENGUARD Möbelfakta
HÅG H09	EPD GREENGUARD (HÅG H09: Classic, Excellence, Inspiration) Möbelfakta
HÅG SoFi	EPD GREENGUARD Möbelfakta

Table 1. HÅG Environmental certifications per product. Source: Flokk website

We collected information on HÅG by means of desk and field research. Desk research started prior to contacting the company by having access to their website, the Orbis database for the FLOKK group, and other online websites resulted from an online search. We then contacted the company to set up the interviews and, in that occasion, we also asked for additional material relevant to the scope of our case study. One interviewer was then in charge of conducting semi-structured interviews with key managerial figures relevant for our purposes. The protocols for these are available on request. Together with interviews, the interviewer had also some time allocated to conduct a site visit of the HÅG manufacturing plant in Røros. Based on our interviews, we asked for additional documents that either could not be found online or emerged from the interviews. Table 2 displays the timeline of our research procedure, while more information on the structure of our information collection can be found in our 'Case Study Framework'.

April 2018	Desk Research	Online	FLOKK website & HÅG section Orbis: FLOKK profile Various websites
May 2018	Contacts		Email exchange and calls
20/21-06-2018	Desk Research	Off-line	Annual Report 2016 and 2017
June 2018	Field Research	Interviews & Site visit	Interviews as follows: - Senior Vice President Products and Brands, 60 min; - VP Environment, 80 min; - Vice President Manufacturing, Site Manager Røros, 35 min; Site visit with R&D intern, 60 min
	Desk Research	Additional Documents	Røros production plant presentation Eco-design tools presentation Greenhouse gas account Organizational structure

Table 2. HÅG Information Collection Timeline

One researcher was tasked with the compilation of a file with key information on the company, before visiting the company to conduct interviews. This file was shared between the interviewer and other members of Sant'Anna School involved in the project. This had two fundamental aims: one to guarantee that project members shared the same notions regarding the company, and also to check whether information they deemed necessary was already available or to be requested in situ. Table 3 reports key information on HÅG.

Name of the organization and location of the headquarters	Former HÅG (Oslo), now part of Flokk (Oslo)
Foundation	1943 by Håkon Granlund
Type of company	Subsidiary
Number of employees (last available year)	2,500 (2017) for the Flokk group
Net income (last available year)	€4,40 million (2017) for the Flokk group
Main markets	Office chairs
Brands of Flokk as of 2017	HÅG, RBM, RH, BMA, Malmstolen, Offecct, Giroflex
Relevant brand/product for this report	HÅG – office chairs

Table 3. HÅG key figures. Source: Flokk annual report 2017

1.1 Case Study Takeaways

The main takeaways from the HÅG case involve the role played by the brand heritage and the subsequent company culture at Flokk. In fact, LCA studies have been long used at HÅG. It was the first environmental manager in the nineties who firstly used this approach to assess the environmental implications of product development at HÅG. This manager was essential to institutionalize sustainable initiatives and practices in the company. She was responsible to devise the first Eco-design criteria, to source recycled plastics in 1995 to produce HÅG chairs, and to introduce a life cycle logic that today still remains an essential tool and mindset in the company decision-making. Nowadays, HÅG, as part of Flokk, has its headquarters in Oslo, where the environmental unit works in close contact with the R&D and marketing department. The company as a flat structure, with very few hierarchical levels. The culture and the high competency of its people contribute to give direction and purpose to Flokk employees. Finally, HÅG, through Flokk, is engaged in projects with national and Scandinavian partners to reduce its product environmental impacts throughout its value chain.

2. Company Overview

Founded by Håkon Granlund in Oslo in 1943 as a tubular steel furniture serving schools, HÅG quickly outgrew its premises. As a result, the company relocated its manufacturing factory to Røros, famous for its a copper mines, in 1957. It was a combination of a falling demand for tubular steel furniture and the exhaustion of the copper mining that led the company on the edge of a bankruptcy. HÅG was then taken over by the new and young CEO Grimsrud who turned the situation around with the birth of *The HÅG movement*, which consisted of institutionalizing the idea of movement in chairs and thus a new way of

thinking about the company. The company had now a stronger corporate culture and it focused on mastering just one type of product, i.e. office chairs.

In the 1970s, HÅG started collaborating with leading Scandinavian designers always in search of making people's working day more comfortable with innovative design solutions. It was in 1984 that the most iconic HÅG chair was launched, the HÅG *Capisco*, after a collaboration with Peter Opsvik, whose mantra *The next position is always the best one* greatly fitted with the company's culture. The HÅG mechanism which keeps the human body continuously moving is now a trade-mark and patented technology.

In 1992 the company introduced the just-in-time manufacturing, which reduced, and even eliminated, surplus product stock and delivery time. In Røros, much of the processes are automatized, but HÅG products still require human handcraft. In fact, seven types of HÅG office chairs are produced, but customers can customize their chairs with different modules and colors, resulting in more than 700,000 final models. HÅG puts its people, both its customers and employees, at the heart of the HÅG brand and company. In fact, the idea of movement is tangible in the HÅG chairs, and implicit in the company's processes and routines, where for example, employees are allocated five minutes, on top of their coffee breaks, to practice some physical exercise in groups. Besides, in Røros, production workers are all on the same level, having the same salary, and each week group leaders are appointed in turns.

HÅG's strategic motto *Different and Better* stems from the 1970s when the company aimed at becoming a leader in Scandinavian office seating solutions while taking care of the environment. HÅG constant commitment to sustainability was then institutionalized in 1990, when HÅG became the first company in Norway to appoint an environmental manager, who was at the time a product engineer. It was her that firstly introduced life cycle studies in the company, the first set of Eco-Design criteria in 1993, and the use of recycled plastics as part of the raw materials of HÅG chairs in 1995. This part will be dealt more in detail in section 3.

In 2007, HÅG, together with RH and RBM, was merged in Scandinavian Business Seating (SBS). HÅG is the oldest and more mature company, thus having a stronger brand identity and culture, that provides the basis for SBS culture. With another three companies the group changed its name to Flokk. Flokk now consists of eight companies in the furniture sector, each with its unique brand identity. However, Flokk commits its joint efforts towards a broader responsibility which 'goes above and beyond making money' and to create a working environment that promote health and the environment. The core values of Flokk are sustainability, quality and innovation, human-centricity, which rotate around design thinking.

3. Environmental Focus

By abiding to their motto, HÅG has been a leader in environmental sustainability given its constant and long term commitment to understanding and lessening its impact on the environment and the communities that interacts both with the company and the manufacturer. HÅG environmental

concerns trace back to the 1970s with the appointment of the new CEO and the setting of a new ethos which has resisted and reinforced through the years. In the 1990s, HÅG ventured in sustainability with a more systematic approach. In 1990, HÅG was the first company in Norway to ever employ a dedicated environmental manager, who was also responsible for product engineering. In fact, at that time, product life cycle assessments were firstly used in the design and production of HÅG chairs. This longevity contributes to making the life cycle logic well entrenched in HÅG processes and strategies. Some years later, the first Eco design criteria were introduced. These criteria have been further refined and strongly implemented in HÅG's design thinking and these can be observed in Figure 1.

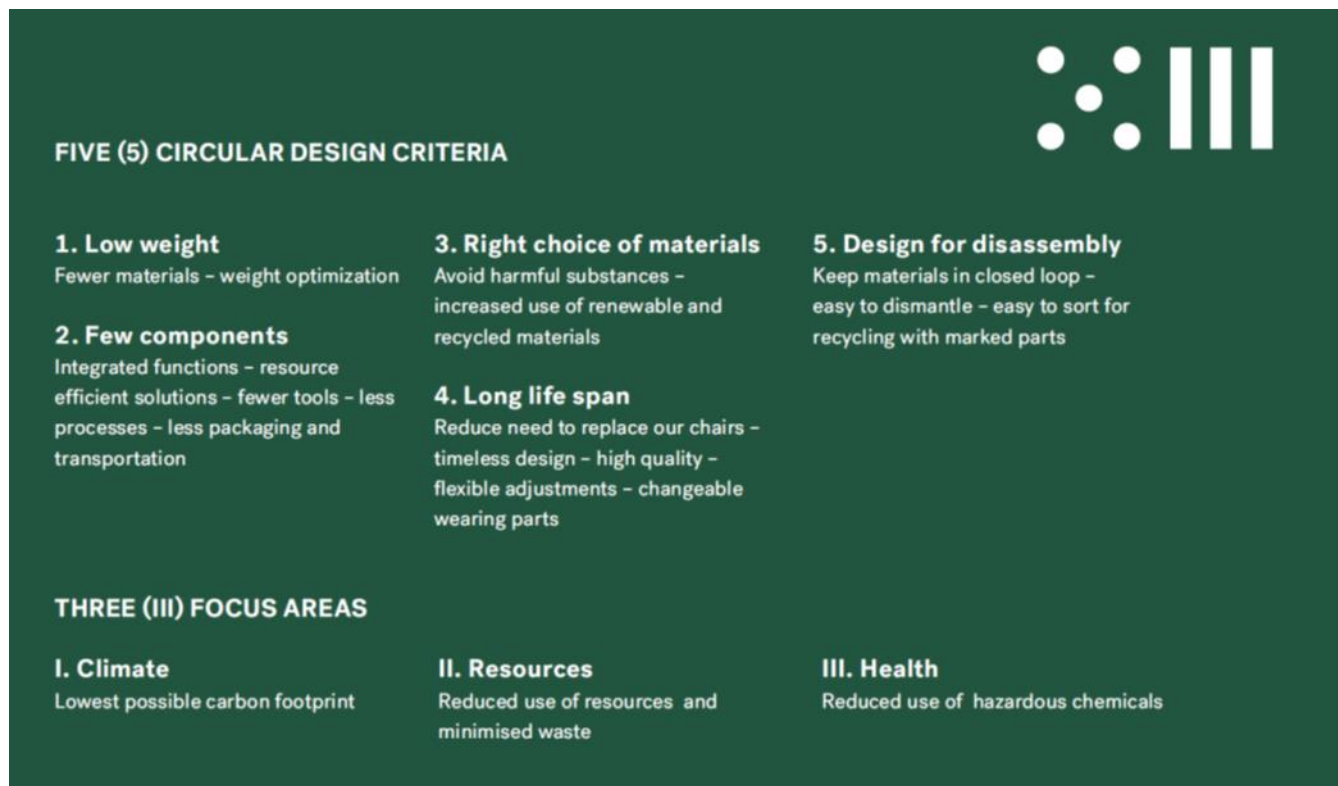


Figure 1 HÅG *Eco-design criteria*

In 1995 HÅG began using recycled plastics in the production of its chairs. The company became then EMAS and ISO 14001 certified. In 2004, HÅG also obtained its first in a series of Environmental Product Declaration (EPD). Now each collection holds an EPD and other certificates as enlisted in Section 1.

The environmental commitment of HÅG and its life cycle approach to its strategies and operations contribute to contaminate also its business partners. Besides, this approach opens up new possibilities to the company in terms of collaborations to take part in national and international projects and come up with innovative solutions. Such was the case with the project among Flokk, Gudbrandsdalens Uldvarefabrik, and Sandnes Garn, with the aim of promoting the use of Norwegian produced wool to Scandinavian manufacturers. Traditionally, Norwegian wool had a negative reputation leading to its export for carpet manufacturing. Only a low percentage was sent back to

Norway and manufacturers were mainly importing wool from New Zealand. This has now changed as Flokk changed its suppliers and actively encourage other furniture manufacturers to use Norwegian wool. This promotes local communities and helps reducing the company environmental impacts, as their life cycle studies demonstrated.

HÅG concerns for environmental sustainability is therefore part of the brand DNA and even today remains one of the core pillar of HÅG and Flokk. This can also be highlighted in the words of senior vice president (VP) and the VP environment from the headquarters, and the vice president manufacturing in the production site in Røros:

"We want to have a good feeling on the way to work and on the way back from work. So this goes all the way to the top and throughout. This is an embedded part of this company's DNA".

"To me that is sustainability: to think holistically in all the things you do in order to take care of future generations, your fellows, and the planet".

"People working here are proud of working in a company that takes the environment and environmental issues seriously, doing something real about it and this is actually making a difference".

4. From a Life Cycle Assessment to a Life Cycle Logic

Sustainability is a core value of HÅG and it has always been at the center of its strategic choices as a manufacturer of premium office furniture. For the company, sustainability has to be translated into its products, which are carefully studied through the lenses of life cycle analysis since the nineties, as mentioned by the senior VP of products and brands and the VP environment:

"The practices of the LCAs for us stem back to the 1990s. Even before then sustainability was an important part of our purpose. We had, back in HAG, the phrase 'Making the world a better place to sit' and the phrase 'Different and Better' and these are from the 1970s actually. So the sustainability aspect comes all the way back from the 1970s and in the 1990s we ventured in a more systematic approach and we started using life cycle analysis".

"We have so much incorporated in not only our philosophy but also in the products. You see the challenges for companies that are sustainable now is that they also have to transfer this into the products and we do have it already. So we just need to scale our business, unlike others that have to get it into their business".

The drivers for conducting LCAs studies were therefore intrinsic and the company relied on the consultancy of research and academic institutions to conduct and understand the implications of LCAs. Organizational actors who acted as sponsors of the project were fundamental for the success of the project, but HÅG could also count on its dedicated team of employees who also play a part in decision-making, as expressed by the site manager:

“People are expecting to be a part of the decision making in the Norwegian work environment and [...] have very little respect for authorities. This is often considered to be a problem in Norwegian businesses, but in HAG and Flokk we only looked at how this could be an advantage for us [...] because if you don't respect authority very much you do tend to respect competency very much. Than it is even better, because higher competency would drive business much more than authority. And also if you are a part of a decision taken then the decisions are much more effective and take longer time. They're not that efficient. But they are much more effective. [...] I think, people working here are proud of working in a company that takes the environment and environmental issues seriously, doing something real about it and this is actually making a difference”.

Since the first EPD, the company followed suit and performed EPDs, among other environmental certifications, for all of its chair collections with the collaboration of a Norwegian research institute, Østfoldforskning. The main aim behind this three-year project, funded by the Research Council of Norway, was to understand how to use all the data collected for the EPDs in order to improve their final products. To accomplish this, HÅG, and in general Flokk, developed a series of tools to help them in the most impactful of their processes, i.e. product development (or design), as the VP environment suggests:

“Now we had our 11 EPDs. [So the aim] was how can we use EPDs to make eco-design tools for product development process. We spent a lot time and resources to gather all this data for our chairs, let's pretend that the result is not going to be a certificate. How can we use those data to become even better?”

Three main tools emerged with a life cycle logic behind: a list that categorizes materials according to their impact on people and the environment; a carbon footprint for each of the material utilized; a carbon footprint calculator for any modules of the chairs. These tools are used in the process development phase as a milestone. The VP environment highlighted the rationale of this:

“So we had a list of materials that we call the good, the bad and the ugly to make it easy to classify the materials. If you think about it, here there is also the LCA approach, thinking about materials: today people say they are using green chrome. We believe there is no such thing as green chrome. Even though the chrome is harmless for users and processing of the chrome is done in controlled matters with no harm for the workers, what about the ladies in Indonesia and India mining? So this is not an LCA, but we have to do it throughout a life cycle [approach]. If we don't do it, we have failed, because then we cannot sell things by heart, because somewhere in our life cycle or in our value chain there are spots that you missed, and if you missed them, you failed.

Then, in product development, the EPD calculator it is incorporated in our gates, so that for each milestone, there is a checklist, and the EPD simulator is one of these checklists, so that the steering group are informed about possible carbon footprint. You don't put all the data in, but it is a very nice tool to get an indication of where you are going. You will never see that you come to a milestone with a totally high carbon footprint, because then they have failed the development phase”.

Finally, in HÅG, and Flokk, both the brand and the company, there is a high commitment to translate sustainability into their products and they long understood that the most concrete manner to do this is through life cycle assessments of their purchase decisions, productions processes, and ultimately business strategies. Because sustainability is placed at the heart of the company, all employees at any level are aware of the company's efforts and actions towards sustainability.