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Estonia: Skanska EMV AS

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About

Case study name:
The greening of industries in the EU

Country:
Estonia

Organisation Size:
250-500

Sectors:
Construction and woodworking

Skanska EMV AS is a large company in the construction sector of Estonia that has adopted a green business practice by finding new solutions for energy-efficient building. The case study illustrates the implementation and challenges of green change in the construction sector from the perspective of a large company in a new EU Member State. It demonstrates the impact of climate change on the entire functioning of business and provides examples of approaches used by the company to manage green change, including change in number and quality of jobs.

Introduction

The Estonian construction sector accounted for 5.7% of the country's GDP in 2010. There are approximately 8,000 construction companies in Estonia, of which 80% are small, with fewer than 10 employees. In general, the construction market is divided between five larger general construction companies. The share of energy-efficient construction is constantly increasing in Estonia. Estonian construction companies have to meet the requirements for energy performance of buildings according to EU regulations and the Estonian Ministry of Economic Affairs and Communication energy efficiency minimum requirements.

Skanska EMV AS is a large construction services company that was re-established in 1991 as a private company (the original company was established in 1949). It joined the Skanska AB group in 2001 and currently has 320 employees. The company offers a broad range of services, from project development to construction and facilities management.

Skanska is one of the leading companies in developing and applying energy-efficient building practices in Estonia. The company's business practices depend to a large extent on its parent company, Skanska AB, which has paid attention to green building for a long time and undertaken several studies exploring new possibilities for applying energy-efficient building practices as well as trying to find solutions to improving building quality.

Drivers and motivations

There were two significant motivators for the adoption of green business practices within Skanska. Firstly, the company exploited the business opportunity to be among the first energy-efficient building designers in Estonia, taking advantage of new technology from its parent company. Also the company aimed at raising awareness of energy-efficient buildings. As the company representative pointed out: 'It is important to find a niche – that we can do something better, that we actually do something better, and that what we are doing has a larger impact on everybody's future.'

The second motivator relates to regulatory changes. The EU directive 2010/31/EU on energy performance of buildings implies a transition towards 'nearly zero-energy buildings' by the end of 2020. Consequently, the Estonian Ministry of Economic Affairs and Communication has established energy efficiency minimum requirements for new and substantially renovated buildings. Another important aspect of this change is increasing client awareness of these regulations. A Skanska representative noted that 'we have a group of clients who ask whether it is possible to build their house according to requirements that will apply in 3–4 years'.

Green business practices

The most important step in implementing green business practices in Skanska was the formation in 2009 of a working group to develop energy-efficient building solutions. The starting point was to identify the people in the company who really wanted to work on developing green buildings. In the selection process, the company took into account the competences of the employees and later offered directional training for these people. Members of the working group were asked to compete in providing different innovative solutions for green business practices. The best were offered awards. In addition, when Skanska hires new people (for example, for managing new projects), it takes into account whether the person has experience in green building as well as how the company can use this experience.

In terms of building projects, it is not possible to measure the impact of energy-efficient building practice, as each project is unique. It depends on whether the aim is to follow the minimum requirements or to offer better solutions targeted at increasing energy efficiency. Skanska tries to offer different energy-efficient solutions, for instance by giving clients the choice of using energy-efficient lighting in their buildings or other energy-efficient solutions. These solutions enable lower heating costs, although the construction of such solutions is more costly than the minimum requirements. In this way, the green business practice implemented by Skanska contributes directly to climate change mitigation through reduced energy use. About half of the buildings developed and built by the company go beyond the minimum requirements.

An important outcome of the green business practice adopted has been that the company has comprehensively mapped its competences. The company business strategy can be characterised by the fact that green business practice is not the responsibility of a single person or division, but everybody is engaged in it through different projects. The biggest challenge for the company was employee time management as everybody had to deal with new tasks related to green business practice alongside their existing responsibilities. Another challenge was related to green building itself, as there are many different solutions available for energy-efficient building. The challenge was to retain credibility in providing these types of solutions and to take responsibility for their implementation and maintenance.

Anticipation and management of the impact of green change on quantity and quality of jobs

Impact on quantity of jobs

There are no purely 'green' jobs; depending on the position, around 10%–30% of each employee's tasks are directly related to the green business practice. Green tasks are mainly related to higher occupational positions – engineering of buildings and implementation of energy-efficient solutions in construction. It is estimated that roughly 10% of all 320 employees in the company are working at least partly in green jobs. Some of these jobs were specifically created as a result of implementing new green business practices and new technological solutions, including those related to energy efficiency and ventilation systems. While these new jobs do not differ from the traditional ones (such as project managers and project designers), requirements for these jobs have changed. As a result, in order to build the competences available in the company, people with existing knowledge or experience of green building have been chosen for these new jobs.

Certain other jobs have undergone a greening process, evolving from existing positions as a result of green business practices and new requirements being added to the existing jobs. These jobs are related to engineering and technical know-how of green practices. An example is the task of energy audit, which an existing employee was given responsibility for in addition to their main job. New tasks were incorporated into a position at the management level in relation to development of green business practices in the company.

No jobs have been eliminated or substituted as a result of green business practices.

There is no specific forecast system implemented in the company to anticipate developments in the future in terms of new green jobs or greening of the current jobs. Thus there are no specific activities for the anticipation or management of job quantity in terms of green jobs. Still, emergence of some new green jobs might be expected in parallel to the 'ordinary' jobs.

Impact on quality of jobs

The impact of green business practices on skills is limited to the small number of employees in the company who are working in jobs with a green component. These skills are mostly related to engineering competences and knowledge; in other words, sector-specific green skills. For instance, two of the company employees were trained for the implementation of energy audits. Much of the training on energy-efficient solutions is based on self-learning as well as learning through experience and practice under the supervision of experts in specific areas (for example, providing energy-performance labels to houses). For other employees, there has been no change in skills development related to the greening process.

The current green skills gaps (the mismatch between green skills needs and the existing skills of employees) are not assessed as significant by Skanska, although the need for green skills is expected to increase in the future. However, general awareness of green business practices is not equal across all occupations and employees. For instance, employees working on green or greening jobs (mostly white-collar workers) are more aware of the benefits of green business practices and their implementation in construction than other workers (mostly blue-collar workers).

There is no system for forecasting the need for green skills in the company. In general, it is pointed out that forecasting in a construction company is very difficult, and only a short-term perspective can be taken when it comes to anticipating future skills needs. It was pointed out that skills needs are mostly anticipated from a one-year perspective.

Other working conditions

In addition to gaps in training and skills indicated above, there are no other large differences in terms of working conditions between green jobs and other jobs in the company.

Anticipating and managing green change

Responding to green skills needs

To respond to green skills needs, the company takes a tailor-made approach based on the current needs in the company rather than anticipating green skills needs in the longer term. Based on the competences needed, a suitable person is sought in the labour market either in Estonia or from other branches within the Skanska Group. Often, Estonian employees are trained in other branches of Skanska Group to transfer the know-how available in the whole group to the Estonian market. In this context, the language skills of employees become

important, and this requires further investment.

The training plan for 2012–2013 includes a small number of activities to raise awareness of green practices among all employees. This means that employees not working on green jobs receive very few opportunities to develop knowledge and skills on the issue. Training related to green practices is mostly concentrated on specific employees working in green jobs.

Collaborative approaches

The company's most important cooperation partners are Tallinn University of Technology (TTU), expert agencies and subcontractors. Cooperation with TTU is related to different aspects of building technology, including green skills in construction and engineering that are part of the training offered in the university. Still, most of the new knowledge and skills are acquired within the Skanska Group since green building practices are not highly developed in Estonia in general.

Two examples of the cooperation with TTU in the field of green building involve: a) an engineering competition among TTU students, where Skanska developed an assignment on energy efficiency based on a building project, and students had to find energy-efficient solutions for this project; b) a green building conference, the Skanska Green Initiative, held at TTU in September 2011.

Responding to green skills needs is also hindered by lack of information on the opportunities associated with supporting green skills development (such as the financial support available). This is a relatively new area of endeavour in Estonia and, according to the comments of a representative of Skanska, the information is not well disseminated and not readily available. Finding this information would require extra work and more investment in terms of time.

Skanska recognises the need for more active engagement of public authorities in discussing and promoting green and energy-efficient building issues.

Role of public authorities

Based on the interviews, the main role of public authorities in developing green business practices takes three forms: providing information on support systems and programmes available, raising public awareness of green business practices, and raising the importance of green skills in the education system.

Public authorities implement support systems and programmes for companies for skills development (see, for instance, Enterprise Estonia, EAS). However, information on these programmes could be better disseminated to reach companies.

Another aspect is related to raising the public awareness of green change and the need for green skills. It was noted by Skanska that the development of green jobs would be easier if it were supported by public discussion and awareness-raising in society. This would also mean an increased awareness of green business practices among contractors and investors as well as potential new employees. This would support the construction sector's readiness to implement new green business practices and green skills.

The development of green skills would also benefit from increased competence in the area in schools. There are not many schools in vocational or even higher professional education that provide knowledge and skills on green practices in construction. This could be a more important subject in the educational system and thus support development in the area.

Costs and benefits for the company

Skanska is confident about developing energy-efficient building solutions and providing better services and products as a result. The main benefit to the company has been increasing its competitive advantage through raising its competences and credibility among its clients. Although until now adopting green business practices has mainly involved costs, the company expects to earn significant profits by realising the solutions it has developed in the future. The biggest cost has been the training of its employees.

Conclusions and recommendations

The case study suggests the following conclusions and recommendations:

- The main drivers of green business change relate to the exploitation of business opportunities (such as providing new solutions in the market) and regulatory changes (transition towards 'nearly zero-energy buildings' by the end of 2020).
- The adoption of green business practices has mainly resulted in changes involving the creation of new positions and raising the competences of employees so that they are capable of developing new and innovative solutions, passing on information in a credible and approachable way to clients, and taking control of these issues. The impact on levels of employment has not been substantial.
- There is a strong need to raise awareness about energy-efficient building among businesses, clients and society due to higher energy costs and climate change. In general, awareness about these issues is low in Estonia.
- The main barriers to green skills development are related to lack of know-how in Estonia, the need to acquire new skills in other countries, and lack of information on public support of green skills development.
- The role of public authorities in developing green skills should be in providing information on the support systems and programmes they provide, raising public awareness on green business practices and enhancing the importance of green skills in the education system.
- Developing energy-efficient solutions can involve many good ideas, but in terms of costs they might not always be profitable. It is important to take into account the context of the wider environment and climate-related issues.

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