Egnahemsfabriken

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Introduction

Egnahemsfabriken Tjörn's work is dedicated to creating affordable housing through a collaborative and sustainable model. Founded in 2017, the project aims to empower local communities by involving them directly in the construction process and fostering social cohesion. Egnahemsfabriken strives to make homeownership more accessible, while simultaneously fostering community spirit and promoting sustainability.

The project aims at integrating four main key activities: building projects, involving residents in the construction of affordable homes, providing educational workshops, such as training in sustainable construction techniques, organizing cultural initiatives and promoting local culture through various events, and finally working on community engagement, encouraging active participation from residents in the building process.

1 Aim of Study

In this report, we will analyse Egnahemsfabriken's business- and social activities, as well as their environment and the international field. By performing this analysis, we will be able to give Egnahemsfabriken feedback and recommendations based on our "outsiders" perspective. The main topics we will be focusing on include Egnahemsfabriken's internal operations and their BMC, Egnahemsfabriken's sustainability and impact, EU-related opportunities, their marketing strategy, and a comparative analysis with the international field. Linked to these topics, we will attempt to answer the following research question posed to us by Egnahemsfabriken and HoloHouse:

- 1. How are Egnahemsfabriken's sustainability efforts in accordance to the Sustainable Development Goals (SDGs)?
- 2. Which other Swedish or European companies are there that have similar aims and operations to Egnahemsfabriken?
- 3. What recommendations and feedback can we give?

2 Business Model

The business model canvas (BMC) is a comprehensive, strategic management tool in which a company can visualise all crucial components of their business. Using this tool, businesses can ensure that the components align with each other to ensure the goals and reason for existence are not lost. In this section, we will be explaining what we believe to be Egnahemsfabriken's business model components and where the alignment between certain

parts is missing (see appendix). As will become clear from the detailed explanation of all components, Egnahemsfabriken has a double-sided business model. On the one side, they conduct for-profit business activities. On the other side they have social activities that fill up gaps in the market and society where the government isn't able to help. This double-sided business model shows that Egnahemsfabriken can be qualified as a social enterprise (i.e. a business that conducts activities to maximise financial, social and environmental gains).

2.1 Value Proposition

From the information that we have gathered, it seems clear that the main goal of Egnahemsfabriken is to engage communities in building projects. Offering both for-profit and not-for-profit services, they try to ensure every individual can have a roof over their head, which is a human right. They fill up a gap in the market as building houses for people might be too expensive using traditional construction companies. Instead, Egnahemsfabriken established a system in which all actors in need of help to build their own homes, receive education, perform research, etc. are met with an engaged team ready to assist them every step of the way.

By creating a community around building houses, Egnahemsfabriken transforms individual housing problems into a concern of the entire community, where everybody can take part in the solution. To target different groups in the community, they set up different divisions. These divisions will be explained in detail below. The divisions may seem very fragmented from the outside due to their variety of activities, but when looking at what they contribute to the community, it is clear they are all in place to achieve the common goal. For most divisions, the local community is the only targeted audience, but Egnahemsfabriken also involves tourists to add to the local co-creative tourism (i.e., locals and tourists take on active roles in creating tourism experiences).

Additionally, they aim to create sustainable development catering to some of the Sustainable Development Goals (SDGs). Each division targets a different set of SDGs and contributes to sustainable development. Egnahemsfabriken can be seen as a platform where rural development is the central goal. The integration of the SDGs assures that the building projects, educative activities, etc. fall under the theory of social constructionism (i.e., the interactions between people are the causes of development and knowledge sharing). Besides giving individuals the opportunity to build their own houses, Egnahemsfabriken aims to improve the knowledge sharing of building practices and project management to improve the general knowledge of the community.

2.2 Customer Segments

As the company has both for-profit and not-for-profit activities, a distinction must be made between the customers of the company and the beneficiaries. The customers are individuals or companies paying Egnahemsfabriken for their services, while the beneficiaries are the people who benefit from certain activities of the company without having to pay for them or receive a significant discount on the actual price. The activities directly targeting the beneficiaries are often paid for by the government (regional and federal) or the European Commission as these activities are necessary for the development and wellbeing of the people but cannot be fulfilled by the government itself.

Due to the variety of activities, the targeted customers differ from division to division. The building projects division targets primarily people who share the company's values and who are located in the company's region (i.e., the islands of Tjörn and Orust, Sweden). These customers want to build their own small homes as this will be more within their budget than having an entire construction crew do all the work. Another group of customers are the adults who pay for the courses and specialised training given by Egnahemsfabriken's employees.

The youth program focuses on young people who do not want to attend school and get a formal education. Egnahemsfabriken gives these youngsters an education in construction so they can add value to the community as well as ensure they lead a good life. Other beneficiaries of Egnahemsfabriken's activities are the volunteers who receive training and valuable working experience in exchange for their labour.

2.3 Customer Relations

The entire business of Egnahemsfabriken is to engage the wider public in its activities and goals. To ensure this happens, the co-creation element is crucial. Involving all stakeholders guarantees the development of a community and shared values. Although Egnahemsfabriken aims to involve as many people as possible, the importance of personal assistance is not forsaken. The dedicated support and guidance tailored to each customer's specific needs is a big part of the business side of the company. To ensure customers and other actors previously involved with Egnahemsfabriken take part in their activities in the long term, Egnahemsfabriken organises summer "Building Camps". They encourage everybody to take part in this and to join the non-profit activities and projects of the company.

2.4 Key Activities

Egnahemsfabriken's key activities include the assistance they give to their customers every step of the way, which is their most prominent business activity. They ensure that their customers can rely on them to buy a plot for their house, to assist the customer in the purchase of building materials and the actual designing and building of the house. Egnahemsfabriken's different teams consist of professional architects, builders, carpenters, etc. capable of assisting with even the smallest details. The other key activities are primarily social activities focused on filling gaps in the market or the community that the government is unable to fill. These activities include building courses and specialised training, the Youth program, hosting events that promote the local culture, and the research with their academic partners. For most of the social activities, Egnahemsfabriken receives grants to fund these projects. Below we explain how each activity is funded. The building courses and specialised training are focused on people who want to learn a new craft and potentially educate themselves for a future career switch. The Youth program was created to educate young people who do not want to attend school and allow them to receive a different type of education in the construction industry. This program actively engages future generations in the social construction industry and helps them bring value to the market and the community. The research Egnahemsfabriken conducts with its academic partners is explained in detail below.

2.5 Key Resources

The key resources falling under the term human capital include architects, builders, carpenters and other specialised employees. These employees bring their knowledge, expertise and skills which are necessary for the company to operate its business activities. As an addition to the employees, Egnahemsfabriken also employs volunteers who want to learn while gaining invaluable working experience. Another type of resource is the capital they utilise. This consists of the building supplies Egnahemsfabriken gets through dismantling donations of materials and houses. Another capital resource is the project areas made available for them and their customers to build their projects.

2.6 Channels

The main channel used by Egnahemsfabriken is their website, which they use to inform people about their mission and activities. Potential customers or partners can contact them through the contact information given on the website. The website also includes a blog and podcast webpage where they give more information on their projects. Another channel the company uses is various social media platforms where they show the process of building projects and the final results. Additionally, Egnahemsfabriken distributes posters and flyers locally to gather applicants for their building courses. As a final channel, networking conferences are organised every two years

by the company. This conference invites all experts, governmental bodies, partners and other stakeholders to listen to the speeches and information from Egnahemsfabriken as well as other guest speakers. This conference is important for the creation of a network of experts and partners the company can rely on when needed, as well as to give these people a sense of belonging and connection with the company on a deeper level.

2.7 Key Partners

For Egnahemsfabriken to operate their different projects, several crucial partners are needed. Firstly, they have partnered up with some suppliers of building materials needed for the building projects. Customers are advised to buy their materials from these specific suppliers, but they eventually have the final decision power to choose whether or not to buy from these partners. Secondly, both customers and local municipalities are required to financially kickstart certain projects. Thirdly, Egnahemsfabriken partners up with the University of Gothenburg to conduct research. The Gothenburg Research Institute conducts research with them on the topics of social construction and Egnahemsfabriken's business systems (engaging both sides of their model, the for-profit- and not-for-profit business activities). Lastly, another university they partner with is the Chalmers University of Technology. Together with this university's Department of Architecture and Civil Engineering, they document the multidimensional benefits and effects of social construction and the processes.

2.8 Revenue Structure

The main revenue streams for Egnahemsfabriken are the grants they receive from the governments, the income from their business side and the tuition fees for their courses. The grants they receive vary from division to division and project to project. There are three different types of grants they receive. Firstly, they receive individual grants from the local and federal government for individual projects that add value for the wider community and public. Secondly, there is a special grant paid by the government that increases per every youth they teach through their Youth program. Thirdly, they participate in an EU project by the European Commission, which allows them to receive a grant of which 20 should go to the development and maintenance of a garden and certain water ecosystems. The revenue streams coming from their business activities include the rent collected from customers who use tools, the assistance of architects, builders, carpenters, etc., and the tuition fees collected from the courses they teach. Additionally, they also receive income through the research they conduct together with partners.

2.9 Cost Structure

The primary costs of Egnahemsfabriken include the salaries of their employees and the rent they have to pay on the property they have to run their business. The two costs are the largest and take up most of the budget. Other costs the company incurs are the cost of the construction tools they have on site to rent out to customers who need them, and the maintenance costs for the property.

2.10 Recommendations

Based on the information we primarily gathered from the website, the part of the mission of Egnahemsfabriken to integrate the SDGs and sustainability in their operations, seems to be underdeveloped. No concrete measurements or activities are mentioned in alignment with the SDGs and sustainability. Although people can deduce from the other information which SDGs could be a possible fit, communicating this is very important. No measurements on waste and pollution reductions were mentioned anywhere on the website.

According to the differences between the customers and beneficiaries of Egnahemsfabriken, various marketing strategies are needed. Although it seems logical for Egnahemsfabriken's customers to be people who share their values, the people with limited budgets for building a house might be primarily young people, single people, etc. It is important for Egnahemsfabriken to accurately and actively target their audience and potential customers through different channels. Creating specific marketing campaigns to target the different customer segments will increase Egnahemsfabriken business activities, add more people to their network and carry their name out into the world.

To ensure the complexity of Egnahemsfabriken's different divisions and their activities is reduced, a visual representation of the different divisions displayed on the website would be beneficial. When taking a first glance at the website you are quickly overwhelmed with a lot of information about all the different activities Egnahemsfabriken conducts. Showing a visual representation before giving all the in-depth information would reduce this feeling.

Egnahemsfabriken is eligible to join a network of social enterprises. In these networks, social enterprises gain free recognition of their positive impact on society and the planet. These networks, often found in the shape of online platforms, are a way to show your company to all those interested locally and globally. It is the perfect way to get more people involved in your mission. Several countries have national social enterprise platforms, which list all social enterprises in that country. One example of such a platform is the national social enterprise platform of Belgium. On this platform, all companies are displayed, as well as a description, the link to their website,

other contact information and which SDGs they impact. Creating a likewise platform for Sweden in cooperation with the state and other social enterprises would be good for Egnahemsfabriken and the overall social enterprise landscape in Sweden.

3 Marketing

Egnahemsfabriken has not conducted formal market research. They have a couple of employees dedicated to managing their website and social media channels but lack statistical data on customer reach and the effectiveness of different channels. No feedback surveys are conducted, with customers typically finding Egnahemsfabriken through "word-of-mouth", their extensive network, social media, and references. Additionally, there is no collected data on customer segments or demographics. The company would benefit by conducting short surveys with customers and starting to gather customer data. Dedicating more resources to social media operations could enhance their reach and effectiveness.

As previously mentioned, Egnahemsfabriken's primary communication and presentation channels are their website and social media platforms. In this segment of the report, we will conduct an analysis of the company's website and social media, focusing on their structures and functions. The aim is to determine how these channels may influence potential customers. This examination will cover the design, content, and user experience of the website, as well as the engagement and effectiveness of their social media presence. By understanding these elements, we can assess how effectively Egnahemsfabriken communicates its values and interests, and how this may impact customer perception and engagement.

3.1 Website

3.1.1 Structure

Egnahemsfabriken's website is designed to provide an engaging and comprehensive overview of their projects, values, and services. The homepage immediately captures attention with prominent visuals and a clear statement of the company's mission. The navigation menu, located at the top of the page, includes sections such as "About Us", "Build with Us", "Projects", "Education", "Research", "Media", "Blog", "Join", "Shop", and "Contact", making it easy for users to find relevant information. Each section is meticulously structured to deliver detailed content. For example, the "About Us" page gives an in-depth look at the company's history, mission, and team, establishing credibility and trust. The "Build with Us" and "Projects" sections showcase current and past projects with high-quality images and detailed descriptions, demonstrating the company's expertise and range of activi-

ties. The "Education" and "Research" sections highlight their commitment to learning and innovation, offering information on courses and ongoing research initiatives. Additionally, the "Media" section provides access to press releases, articles, and videos, while the "Blog" keeps users updated with the latest news and insights. The "Join" section encourages user participation by offering membership options and volunteer opportunities. Lastly, the "Shop" provides a platform for users to purchase related products, and the "Contact" page ensures easy communication with the company. This comprehensive structure ensures that users can easily navigate the site and find the information they need, enhancing their overall experience.

3.1.2 Functions

Egnahemsfabriken's website serves multiple functions mostly aimed at providing comprehensive information. It is highly informative, detailing the company's various building projects, educational courses, and research activities. Interactive elements, such as options to join projects, enrol in courses, and become members, encourage active participation. The site also fosters engagement through regularly updated blog posts, newsletters, and social media integration, keeping users informed and connected.

Additionally, the user experience is prioritized with intuitive navigation, clear call-to-action buttons, and a responsive design that ensures accessibility across different devices. This combination of informative content, interactivity, and user-friendly design helps build trust and loyalty among potential customers.

3.1.3 Potential Customer Impact

Egnahemsfabriken's website has a significant impact on potential customers by fostering trust and long-term relationships. The transparent presentation of projects and team members builds credibility, while interactive features, such as project participation and course enrolment, actively engage users. The educational resources and detailed information align with customer interests, facilitating deeper understanding and connection with the company's mission and values. This comprehensive approach ensures that potential customers feel valued and informed, promoting lasting relationships. However, the website is only available in Swedish, which is a limitation given their target audience might include the immigrant population, as well as sustainable tourists, necessitating at least an English version. Additionally, the site's heavy focus on information over interactive content likely reduces user engagement, potentially leading to lower overall engagement rates.

3.2 Social Media

Egnahemsfabriken's social media platforms play a crucial role in providing timely updates and showcasing their projects, ensuring transparency and community engagement. These channels share project progress, educational content, and community events, which helps maintain an active connection with their audience. However, the social media content is predominantly in Swedish, limiting accessibility for non-Swedish speakers, including immigrants and international tourists. Additionally, while the information shared is valuable, the platforms could benefit from more interactive and engaging posts to increase user participation and overall engagement levels. Offering content in multiple languages and diversifying post formats could significantly improve their outreach and impact.

4 Sustainability

4.1 Sustainable Development Goals

The United Nations' 2030 Agenda for Sustainable Development, including the 17 Sustainable Development Goals (SDGs) and 169 targets, aims to drive a sustainable transformation of societies worldwide. This agenda stands as one of the most significant and ambitious global agreements in recent history. It mandates that all UN member states implement these SDGs and their associated targets, striving to achieve a sustainable future for all humanity by 2030.

While nations are primarily responsible for implementing the SDGs, they also provide a framework for evaluating any activity's alignment with sustainable development. Therefore, the SDG impact assessment relies on the knowledge and ambition of the individual conducting the evaluation. Consequently, the results are subjective, preliminary and they necessitate openness to revisions.

Egnahemsfabriken works to contribute to the goals of the Agenda 2030. To fulfill the goals, however, they collaborate with different actors that work in the territory: Tjörns and Orust municipalities, the Västra Götaland region, and with both local and national collaboration partners; The Association Omställning Tjörn, Billström Folk High School, Chalmers, University of Gothenburg, RISE, the Association for Building Communities, and others.

Egnahemsfabriken aims to contribute to sustainable development in Tjön's area and to achieve these goals:

- 1. Give more groups in society an active role in construction
- 2. Offer more roads to own homes for more people (through their own work)

- 3. Platform for rural development and local resilience
- 4. Create multidimensional values through social construction
- 5. Contribute to a living building culture and built environment
- 6. The research and innovation arena around social construction

These goals perfectly align with the objectives described in the 2030 Agenda. In the following section, we will discuss the goals that the company has decided to focus on, analyzing their reasonability, risks and credibility from a theoretical perspective.

- Target 2: Zero Hunger. End hunger, achieve food security and improved nutrition and promote sustainable agriculture. Hunger is the leading cause of death in the world. Our planet has provided us with tremendous resources, but unequal access and inefficient handling leaves millions of people malnourished. If we promote sustainable agriculture with modern technologies and fair distribution systems, we can sustain the whole world's population and make sure that nobody will ever suffer from hunger again.
 - 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
- Target 12: Responsible Consumption and production. Ensure sustainable consumption and production patterns. Our planet has provided us with an abundance of natural resources. But we have not utilized them responsibly and currently consume far beyond what our planet can provide. We must learn how to use and produce in sustainable ways that will reverse the harm that we have inflicted on the planet.
 - 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.
 - 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
 - 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.
- Target 14: Life below water. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

Egnahemsfabriken focuses on building, cultivation, culture, education, and nutrition activities. As they work towards reducing resource consumption, minimizing climate impact, and enhancing reuse and resource sharing, they prioritize the construction of houses and other structures through local social cooperation.

Egnahemsfabriken is involved in multiple projects aligned with Target 2.4. They collaborated with Brunnsbo residents to build an outdoor kitchen in Gothenburg, initiated by Community Center Brunnsbo, Bostadsbolaget, Stena fastigheter, and Socialförvaltning Hisingen to create a new community meeting space. They also hosted a three-day workshop at Omställningslabbet at Frihamnen with HDK-Valand's Embedded Design master's students, resulting in a mobile outdoor kitchen for culinary training. Additionally, in summer 2020, a young summer worker designed and built an outdoor kitchen at the Svanvik factory, which is now used for social events and available for guest use.

Egnahemsfabriken manages to tackle Target 12 (12.2, 12.5, 12.8) because it operates as a cooperative dedicated to creating sustainable built environments at all scales, emphasizing social participation, quality, craftsmanship, and environmental considerations. Their approach to building houses involves broad community involvement and voluntary cooperation, making the construction process slower and more labor-intensive. However, this approach fosters cultural values, relationships, self-confidence, trust, knowledge sharing, insight, and a strengthened local economy. The company also run recycling operations for building materials, engages in the demolition and dismantling of structures, both large and small, and deals with storing, passing on, and selling reused building parts. They accept scraps and leftover construction materials from the trade and construction sites. The company undertakes a variety of projects and activities, including programs for children and youth, integration work, education and courses, cultural activities, innovation and development projects, research, book writing, cultivation, animal husbandry, and operating a café, among other things. They offer activities for all ages and groups, aspiring to be a construction school for self-builders and the public, with short and long training courses for non-professionals. One of their goals is to transform housing issues from individual challenges into collective concerns, providing people with more opportunities to own homes through their efforts. The company believes that sustainable construction—ecologically, socially, and economically—on a human scale, where individuals can actively participate, also contributes to strengthening and defending democracy.

In regard to Target 14.1, the company has been working on the "Water

as a Local Climate Regulator" project, that emphasizes the critical yet often neglected role of water vapor and soil health in climate regulation. Human activities, particularly fossil fuel combustion and unsustainable agriculture, have degraded topsoil, releasing stored carbon and reducing the soil's ability to retain water. This leads to increased runoff, soil erosion, and higher local temperatures, exacerbating the greenhouse effect. While technological solutions to climate change are popular, they often miss the root causes and are dominated by large corporations, perpetuating social and economic inequalities. Instead, the project advocates for local and regenerative practices, like cover cropping, no-till farming, agroforestry, and wetland restoration. These practices enhance soil health, increase carbon sequestration, improve water retention, support biodiversity, and empower communities. The project, funded by Leader Bohuslän, Sparbanken Tjörn, and Sparbanken Orust, will run from 2024 to 2026 in Orust and Tjörn. It aims to develop an action plan for regenerative farming, selective forestry, improved grazing, and wetland restoration. It also seeks to educate communities on the importance of water in climate regulation and provide tailored information materials to support these efforts.

4.1.1 Recommendations

Egnahemsfabriken has demonstrated a strong commitment to sustainable development through its various initiatives aligned with the United Nations' 2030 Agenda. To further enhance their impact, we propose the following recommendations and suggestions.

Target 2: Zero Hunger (2.4 - Sustainable Food Production Systems)

- Introducing more comprehensive educational programs on sustainable agricultural practices for local communities.
- Strengthening partnerships with local farmers to share knowledge and resources, fostering a network of sustainable food producers.
- Organizing workshops and hands-on training sessions for residents on topics such as soil health, composting, and pest management.
- Establishing local food markets that prioritize sustainably grown produce, provides a platform for farmers to sell their goods and educate consumers.

Target 12: Responsible Consumption and Production (12.2, 12.5, 12.8)

• Implementing community-wide initiatives to reduce waste, such as zero-waste challenges, repair cafes, and upcycling workshops.

- Developing digital platforms or apps to facilitate the sharing and exchange of tools, materials, and other resources within the community.
- Engaging in sustainability education in schools, doing workshops and teaching students about responsible consumption and the importance of recycling and reusing materials.

Target 14: Life Below Water (14.1 - Marine Pollution Reduction)

- Organizing regular coastal cleanup events to remove litter and prevent marine pollution.
- Collaborating with local fishing communities to promote and implement sustainable fishing practices that minimize environmental impact.
- Engaging youth in marine conservation activities, such as educational trips, snorkelling tours, and interactive workshops on marine ecosystems and pollution prevention.

By implementing these recommendations, alongside the meaningful work it is already putting into practice, Egnahemsfabriken will significantly enhance its contribution to the 2030 Agenda for Sustainable Development, creating a more resilient, sustainable, and equitable future for all.

4.2 Sustainable Materials

When looking at the sustainability of the materials used in Egnahemsfabriken's construction process, we need to consider several different factors:

- How intensive is the manufacturing of the material?
- Are the materials renewable?
- How far have the materials travelled to the construction site/factory?

Looking at Egnahemsfabriken's current material usage, there are several things to note:

- They do not actively seek out sustainable materials for all their projects due to the increased cost of sustainable materials often exceeding the customer's budget
- Most projects try to use some recycled materials, with customers often bringing their own
- Wood is the main building material used in the majority of Egnahemsfabriken's projects, which is deemed to be a fairly sustainable material

• Egnahemsfabriken runs a material donation scheme where useable material from demolition sites can be donated for use in future projects

From this, we can see that the current practices at Egnahemsfabriken do use a fair amount of sustainable materials and there are processes in place to try and reduce the impact of their business on the environment in terms of sustainable materials. However, nearly all projects use new materials and it has been difficult to acertain the effectiveness of Egnahemsfabriken's recycling scheme.

It is also important to consider the forestry laws in Sweden. The Forestry Act states that the forest is a renewable resource that is to be managed sustainably. There is an obligation to reforest felled woodland, using established methods and tree species suitable for the site. This means that wood sourced within Sweden (and especially wood sourced locally to the project) is one of the most sustainable material options for many of Egnahemsfabriken's projects. However, we appreciate that not every project can be built from locally-sourced wood, nor can every element of a project be constructed from wood, and so we want to recommend alternatives for such projects.

4.2.1 Costs and Benefits of Using Sustainable Materials

We feel that it is important to note the potential costs and benefits of using sustainable materials for both Egnahemsfabriken and their potential customers. It is important that Egnahemsfabriken and their customers are aware of why they should be looking to use as many sustainable materials in their projects as possible, and the potential problems that they may face.

	Company	Customer
Benefits	 Reduced waste production and the costs associated with disposing of waste products Reduced transportation costs 	 Many sustainable materials are designed to last longer meaning a higher initial investment reduces long-term costs Can increase property value due to a growing demand for eco-friendly buildings Many sustainable materials are free of toxic preservatives and emit very few toxins
Costs	• Limited availability of sustainable materials in some regions can make sourcing difficult and more expensive	sive than traditionally

We have then included some possible material sources that Egnahems-fabriken could recommend to their customers to try and support a goal of increasing their use of sustainable materials in all their projects. We have found that most suitable material suppliers are based in the Stockholm area, which does increase travel costs and the associated carbon emissions. However, we feel that the benefits of using second-hand materials outweigh these costs.

	Overview	Benefits	Costs
Egnahems- fabriken's Recycling Scheme	 Materials salvaged from demolitions can be directly donated to the company Customers can then buy these materials to use in their projects 	 Reduced carbon footprint of materials as they don't have to travel far to construction sites or the Egnahemsfabriken factory Cost can be made affordable for the customer as all material is donated 	Can't guarantee what materials will be available at each point as it relies on donations from demolition
ReTuna Återbruks- galleria	 The world's first "recycling mall" Run by EEM (a municipality-owned company) Used items are taken in and given a new life through repair and upcycling with different shops specialising in different types of products There is a small selection of shops who have some supplies of building supplies and home furnishings (such as carpet) 	 All products are recycled so have a massively reduced environmental impact Costs can be more affordable for the customer as all items are donated 	 Can be more expensive than traditionally sourced materials Located in the Stockholm area so there would be associated travel costs and environmental impacts due to increased carbon emissions There is only a very small selection of shops who sell building supplies (such as doors, windows etc.) and so supplies cannot be guaranteed

Uppsala
Bygglogist-
ikcenter

- In cooperation with Wiklunds logistics and waste management
- Will collect leftover building materials from construction sites, store them and make them available for use in other projects
- Materials were destined for construction sites so are of a decent quality, and are as close to new as possible
- Reduces waste from construction sites which would have to be disposed of
- Located in the Stockholm area so there would be associated travel costs and environmental impacts due to increased carbon emissions
- Can be more expensive than traditionally sourced materials

4.2.2 Recommendations

Although sustainable building materials is not a main focus of Egnahems-fabriken's work, it is clear that there is an undercurrent of trying to use sustainable materials throughout their projects, mainly through the use of wood as the main building material in most of their projects and the culture of customers bringing some of their own sustainable materials to use in their projects. However, we still feel that improvements could be made to try and improve this aspect of the enterprise. These are detailed below:

- Egnahemsfabriken's factory currently doesn't have much storage space for donated building materials. We would suggest looking at possible ways to expand or reorganise the factory to create some extra space to store these materials. In addition to this, we also suggest that the material recycling scheme recieves more marketing presence in order to build up supplies, and hopefully a variety of materials which can be used in a variety of projects. In increasing the supply of recycled materials stored at the Egnahemsfabriken factory, we hope that a larger proportion of materials used in every project can be recycled materials, which are much more sustainable than new materials. This would also greater establish an alternative revenue stream for the company through selling the donated materials to customers.
- As an alternative to increasing their own supply of sustainable building materials, Egnahemsfabriken could focus on providing their customers with information about different places where they can source sustainable materials (such as the options detailed in the above table). In order to encourage more customers to build more sustainably, the information about

how they do that needs to be readily available to them, which is something that Egnahemsfabriken could easily facilitate

 We also recommend that Egnahemsfabriken considers approaching local construction projects with the aim of acquiring unused building materials for their stock. This would allow for even more materials to be recycled and so projects can be built more sustainably but also reduces waste produced by these construction sites

5 European Grants

Egnahemsfabriken was a prominent participant in the EU-funded MERG-ING project under Horizon 2020, which focused on housing and integration for migrants in Europe. As an implementation partner to the University of Gothenburg, Egnahemsfabriken played a pivotal role in this trans-European research and innovation initiative. Over the course of its three-year duration, from January 2021 to April 2024, the project aimed to investigate and implement participatory housing initiatives across Lyon (France), Valencia (Spain), and Gothenburg (Sweden). Led by project manager Catherine Mercier-Suissa, MERGING engaged 10 partners including universities, research centres, and NGOs to explore integration policies and assess the impact of housing on migrants' socio-economic integration. Through a multimethod approach including interviews, focus groups, and policy analyses, the project sought to identify effective strategies and provide evidence-based recommendations for policymakers at local, national, and European levels. MERGING's €3 million budget highlighted its commitment to fostering sustainable integration practices and influencing future European policies in migrant integration. Looking forward, the company stands to benefit significantly from pursuing more EU-funded opportunities to further its mission. This section of the report will highlight three promising funding sources: Horizon Europe, Creative Europe, and Erasmus+.

5.1 Horizon Europe

Horizon Europe is the successor to Horizon 2020 and remains the EU's primary funding programme for research and innovation. With a budget of €95.5 billion until 2027, it targets key global challenges, including climate change and sustainable development. Egnahemsfabriken could benefit from Horizon Europe's Cluster 2: Culture, Creativity and Inclusive Society, which aims to foster democratic values, safeguard cultural heritage, and promote socio-economic transformations. This funding could support initiatives that align with the company's mission to promote inclusive growth and socio-economic integration through cultural and creative sectors. By tapping into these resources, Egnahemsfabriken could further enhance its

impact on community development and sustainable housing practices across Europe. To secure funding, Egnahemsfabriken should collaborate with academic institutions and NGOs across Europe, leveraging its experience from the MERGING project to propose initiatives demonstrating strong societal impact and interdisciplinary collaboration.

5.2 Creative Europe

Creative Europe is another EU-funded programme with a budget of €2.44 billion dedicated to supporting the cultural and creative sectors. This programme aims to promote cultural diversity and enhance the economic potential of the creative industries. Egnahemsfabriken can explore the Culture strand of Creative Europe, which supports an array of sectors, including architecture, cultural heritage, and design. The company could apply for European Cooperation Projects funding, which facilitates transnational collaboration. By forming partnerships with other cultural organisations and artists, Egnahemsfabriken can develop innovative projects that promote social integration through cultural and creative activities, thereby enhancing its role in community building and cultural preservation.

5.3 Erasmus+

Erasmus+ is the EU's programme dedicated to education, training, youth, and sport, with a significant budget of €26.2 billion. This programme focuses on social inclusion, digital transformation, and youth participation in democratic life. Egnahemsfabriken can benefit from Erasmus+ by participating in projects under Key Action 2: Cooperation among Organisations and Institutions. This action supports the development and implementation of innovative practices across various educational and training sectors. Egnahemsfabriken could initiate partnerships with educational institutions to create more programmes that integrate youths into the workforce through vocational training and apprenticeships. This approach not only addresses social inclusion but also builds the capacity of Egnahemsfabriken to operate internationally and attract diverse funding opportunities.

5.4 Recommendations

To effectively pursue these funding opportunities, Egnahemsfabriken could take the following steps:

1. Form Strategic Partnerships: Collaborate with universities, NGOs, and cultural organisations to strengthen project proposals and demonstrate the ability to work across borders.

- 2. Leverage Past Successes: Highlight the successful outcomes and methodologies from the MERGING project to build credibility and showcase expertise in social housing and integration initiatives.
- 3. Focus on Innovation and Impact: Ensure that project proposals emphasise innovative approaches and the potential for significant societal impact, aligning with the goals of each funding programme.
- Engage with Local Communities: Actively involve local communities and stakeholders in project development to enhance relevance and sustainability.

By strategically aligning its projects with these EU-funded programmes, Egnahemsfabriken can continue to make meaningful contributions to social inclusion across Europe.

6 Comparative Analysis

In this comparative analysis, we will discuss several companies from different European countries who operate in the same industry as Egnahemsfabriken, or who could add value to the company through the implementation of impact measurement software. We divide this section and its recommendations into various specific topics. Based on the information we gathered from glancing at the companies' websites, their activities and missions, we will write down some recommendations for Egnahemsfabriken to improve their business and broaden their network.

6.1 Similar concept as Egnahemsfabriken

Habitat, the largest international social enterprise (SE) falls under this category. Habitat is a company focusing on the inadequate housing conditions of the poorest communities on the Eurasian and African continents. They build sustainable houses for refugees, Roma communities, and other vulnerable people. Close cooperation with and the involvement of the local communities is very important for Habitat as the housing issues are specific to that region. The renovations, constructions and repairs are done by the volunteers together with the homeowners, who pay for the service and materials. This company is more advanced as it has been in existence for 48 years. Other examples of SEs whose mission is to build sustainable housing are Ecodev and Waldcube in Belgium, The Colony in Germany, Ecodome, Casapasiva, Taller Karuna and EcoPaja in Spain, Asuntosäätiö and Johtava Group in Finland, and lastly, Wohnwagon in Austria. All of these companies share a passion for sustainable construction of houses, battling housing issues both locally and on a larger scope. Some of these companies don't share the value of engaging the local community in their projects, while others thrive on that value and can fulfil their mission by connecting with others. For Egnahemsfabriken to become more sustainable and fully integrate this concept into their activities, we suggest they take a look at the processes and materials used by these other companies to identify the options available to them. Since most of these companies work on a local or national scale and there is no competition between Egnahemsfabriken and the companies mentioned above, an exchange of knowledge between them and maybe even partnerships would greatly increase Egnahemsfabriken's understanding of how to build more sustainable houses, and for other companies to involve the community more.

6.2 Recycling & Sustainable Building Materials

Besides building sustainable houses, recycling and reusing old construction materials will reduce waste production and contribute to the development of a circular economy. Some of the companies who specialise in this area are Circq, Greeninclusive, Beton-Lab and Chainable in the Netherlands, Aterbygget in Sweden, Aprior engineering in Austria, and finally, Loopfront in Norway. These companies can be divided up into two separate groups, one with the companies that recycle old construction materials, and the other one with the companies that develop new, sustainable materials. Depending on the building materials Egnahemsfabriken currently gets through donations or the materials their customers bring themselves, working together with some of the companies like Circq, Chainable, Loopfront and Aterbygget will enable Egnahemsfabriken to use more recycled materials to ensure their active participation in the creation of a circular economy. Additionally, Greeninclusive, Beton-Lab and Aprior engineering are companies creating sustainable construction materials. They came up with innovative and green processes of producing substances and materials currently used in the construction industry. Instead of working together with traditional construction material suppliers, these companies would be better alternatives to create sustainable housing. If Egnahemsfabriken wants to become not only a community-oriented company, but also a sustainable/green company, they need to change the materials they use to ensure a better future.

6.3 Sustainable Energy Consumption

Using sustainable materials will already increase Egnahemsfabriken's impact positively, but it might not be enough. To construct a house, move it to the plot and then for people to live in it requires a lot of energy. As a next step to take into account for Egnahemsfabriken, they should focus on both their energy consumption as well as that of their customers and make it as sustainable as possible. A couple of companies whose mission it is to make the energy consumption of households and companies less wasteful are

Bao Living and Corenove from Belgium, and Bioo from Spain. Bao Living has created a system to implement in houses where all energy consuming devices are centralised. Their solution creates more living space, a shorter installation time of all necessary facilities, and all materials are easily recyclable. Corenove renovates houses in cooperation with the municipalities in the Southern half of Belgium, which reduces the overall greenhouse gas emissions, while actively employing citizens who are looking for a job in the construction industry. The last example is the most innovative one, Bioo pursues the creation of biotech cities. They have developed technologies to generate energy from nature. Using their experts' knowledge on chemistry, biology and engineering they have made a name from themselves globally winning 117 international awards. This disruptive and game-changing company is certainly one to look at when talking about sustainable energy consumption. Partnering with this company would be a great step forward in Egnahemsfabriken's sustainability adventure.

6.4 Sustainability Measurement

In this last section, we will discuss a long-term goal for Egnahemsfabriken to set up. Something that currently seems to be missing is an accurate way to measure their impact and sustainability. The measurement of impact and sustainability in exact numbers is crucial for every social enterprise to communicate to the public. Without these numbers and their publication, the credibility of the social enterprise might be doubted. Since the main goal of the company is not to make a profit, the financial statements are of the same importance as the numbers measuring the impact. Although a lot of information about current projects and research can be found at first glance when opening the website, no numbers on impact- and sustainability measurements are given. To ensure Egnahemsfabriken accomplishes its social goals, measurement of impact is just as necessary for them as financial statements are for for-profit companies. There are plenty of companies who currently offer software to calculate the impact and sustainability in addition to some other features. We found three examples, ClimateSeed from France, and Ducky and Energi-ai from Norway. These three companies offer essentially the same thing, software to measure, report and reduce companies' carbon footprint. Each of them offers various additional features.

Seeing how we don't have any financial data on Egnahemsfabriken's operations and budgets, we can't determine whether it would be more cost-and time-efficient for them to create their own system to keep track of sustainability and impact, or if it would be better for them to partner up with a similar company to the ones mentioned above. We highly recommend Egnahemsfabriken to determine which option would be better and implement this as soon as possible. Clearly and accurately measuring the overall impact and sustainability is crucial information to be communicated to the

public as a social enterprise's main characteristic is the impact they have on society. Without the necessary results being communicated to the public, the goal of the company can be seen as ambiguous and unattainable. Giving this information will lead to people trusting and supporting the company and its activities.

Conclusion

In this report, we have attempted to fully analyse Egnahemsfabriken's operations from an "outsider" perspective and give them valuable feedback and recommendations to take into account in the future. One of the main focuses of this report was to find ways for Egnahemsfabriken to improve their impact on the SDGs and how they could measure this. Accurately reporting concrete measures of waste/pollution reduction, people impacted, etc. is crucial for a social enterprise to gain credibility. We hope that Egnahemsfabriken will put in the resources to take active action with some of our recommendations and that their company and impact will grow to ensure their mission is shared with the world.

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Appendix

Appendix A: Business Model Canvas of Egnahemsfabriken

· Customers with same values with lower income, immigrants unemployed people or groups - Vulnerable groups (such as locally limited: W-N Sweden Customer Segments Multi-Sided Platform (see value proposition) (Lign) 2 Dedicated personal assistance https://tjorn.egnahemsfabriken. Instagram, YouTube, LinkedIn), se/), includes a blog page and product development in order **Customer Relationships** products and the process to customers in the process of · Networking, conferences interaction, specific needs) Social Media (Facebook, (support and guidance to Flyers & posters (for the recommendations, direct - Co-creation: involving shows a mix of finished establish community customers; tailored building courses) getting there Channels Website podcast Social construction + contribute Platform for rural development Contribute to local sustainable out not really a thing in practice Engage different demographic o research & innovation in this Improve general knowledge in development (on their website, and local resilience (didn't find Transforming housing issues building practices and project Development of co-creative rom individual problems to Engaging communities in /alue Propositions groups in construction community concerns ouilding projects nanagement ourism his...) dismantling donated houses and the rest sourced with the budget builders, and co-creative design events and activities promoting Donations of building supplies andscape and garden, project their own construction projects with access to other resources Community building projects Integration intiatives through management for construction teams, construction planning Building supplies; some are customers space to carry out courses, specialised training Research participation and ocal culture and community collaboration with academic Educational programmes: and project support for selfand voluntary contributions sourced second-hand from Cultural projects: hosting social&ecological-focused architecture and planning, collaborative construction Focus on sustainability Areas of competence: of the customer in mind volunteers, apprentices Project Areas; allows Workers; employees, customised activities Key Resources Key Activities nstitutions projects spirit University of Gothenburg; work municipalities to get started (see - Material Suppliers; dependent https://tjorn.egnahemsfabriken.s Institute to assess the effects of construction methods they apply on the region and the materials effects of the social design and with the Gothenburg Research construction methods that they document and follow up on the the Department of Architecture Technology: collaboration with multidimensional benefits and require initial investment from Customers; some projects required for each specific - Chalmers University of and Civil Engineering to the social design and customers and local e/projekt/egnahem-

Revenue Streams

- Customers pay for services (architects, real estate, builders, carpenters, etc.)
 - Customers rent tools

Construction tools

Maintenance

Cost Structure

Salaries - Rent

- Grants for individual projects (from federal government, regional government & EU) - Grants for the Youth program (paid by the government for every youth they teach)
 - Income from research

 - Tuition fees from courses they teach
- Grant for the garden and water ecosystems