

BETTER LIVING

SPECIAL EDITION • GUSTAVSFORS

AUTUMN • 2020



ECO-MODE Sustainable living in better age

The New Active Senior Village
in Gustavsfors Sweden

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LONELINESS & COMMUNITY

The damaging effects of loneliness counteracted by life in community. Not only good for the soul, but for the Planet!

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MODULAR & SUSTAINABILITY

The benefits of building with a modular system and how it contributes to Building more sustainably.

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INSIDER PERSPECTIVE

A heart-warming interview with an Eco-mode resident on how his life has been transformed by community.

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EDITORIAL

We are Masters Students of Architecture and Planning Beyond Sustainability at Chalmers University of Technology and this is a mock-up Magazine to cover our Indepth Studio Project of ARK174 Planning and design for sustainable development in a local context! The theme for 2020 is Architecture of Rurban Territories in Bengtsfors Municipality.

The contents of this Magazine are a result of our research, which forms the basis of our Project, **EcoMode: Living Sustainably in Better Age.**

Some of the stories and interviews are fictional, however all content is based in true facts and real interviews with Bengtsfors Municipality's actors. All references and contributors are listed on the back cover.

We hope you enjoy reading This Special Edition of Better Living which explores the lovely town of Gustavsfors in West Sweden, a place that has been impacted by a project directed to the growing senior population, which has impacted the wider community in an incredible way, where loneliness has been overwritten by active community living.

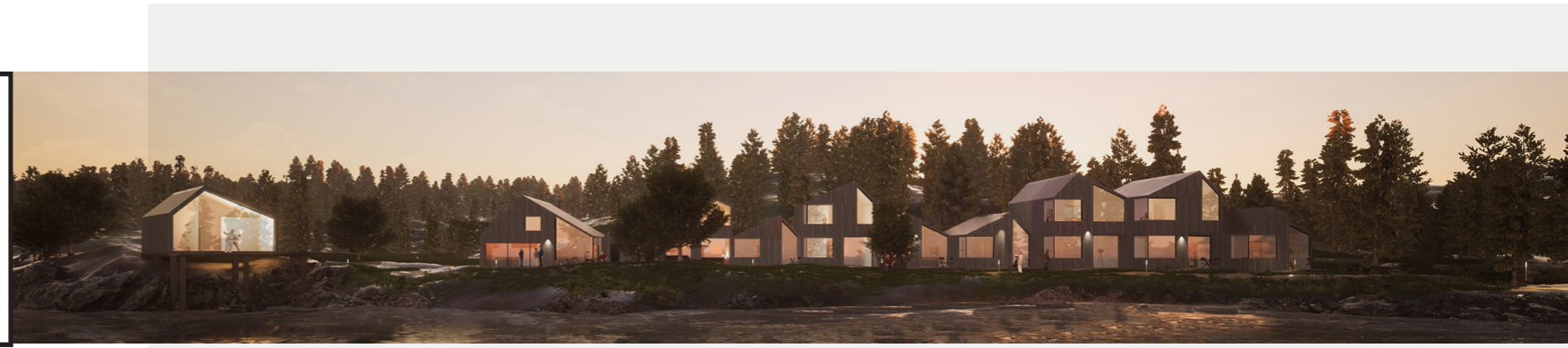
We hope to inspire you to visit, learn, share & replicate. Whatever you do, don't do it alone.

We are better together!

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Have you ever felt alone in a room full of people? Or worse, in a city with millions of inhabitants?



Illustration by Jorm S/Shutterstock.com

Have you ever felt alone in a room full of people? Or worse, in a city with millions of inhabitants? Is it not interesting that being around loads of people does not necessarily counteract the feeling of being lonely? Why is it that the larger we grow as a population, the smaller our households get?

In fact, living alone is becoming increasingly common in high income countries. Studies show that many driving forces are behind this trend, such as longevity, high divorce rates and low rates of intergenerational co-housing, amongst others. This is more evident in some countries, where Sweden reports the highest rate of people living alone amongst the European countries, with more than 50% of the households being made up of one person. (Eurostat, 2018). Other factors such as improvements to living conditions and a drop in fertility rates are causing a Demographic transition and it is already considered by many as a Global Megatrend*. Our society is getting older and we need to adjust, change our mindset, reinvent ourselves think of people's wellbeing and the Environment!

* a Global Megatrend is a force for change that is prone to impact human society in a Global scale

And this is just to mention a couple of the many challenges our society is facing at this current age. It can be very overwhelming sometimes, to a point of hopelessness, a freezing point that makes us unresponsive, depressed, lonely. Loneliness can affect us in different ways and in different levels. Some people claim they are happy on their own, however the great majority of society do not thrive isolated. It seems engrained in our DNA to live in community, we do better when we share and it is definitely more sustainable. It has been proven that living alone is directly linked to restricted social network and social isolation, which can lead to loneliness and depression. People in isolation are more prone to poor health behaviour, which effectively leads to a poorer quality of life. The financial impact is an important factor as well. Apart from being more expensive to run a household for a single person, it also contributes to the major housing crisis worldwide. The health associated costs must also be factored in. A study carried out by BMC Geriatrics in Västerbotten County, Sweden (Gunnar, 2020), has directly associated loneliness to higher mortality rates, especially amongst the senior population. The unemployed and pensioners have also been found to be at a higher mortality risk compared to other population groups. They call for change and conclude their study with the following statement: *"Therefore, it is important for policy makers to reduce the health and societal impacts of living*

alone, by focusing on designing supportive housing structures and neighbourhoods that will provide good social support for people who live alone, especially older people, in order to prevent the negative health impacts of living alone". Gunnar (2020, p. 6).

“...STUDIES HAVE LINKED LONELINESS TO HIGHER MORTALITY RATES

We can definitely conclude that living alone is not a sustainable direction for our rapidly growing population. Nor does it bring happiness, but let's not lose hope. Buckminster Fuller once said: *"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."* In search of those models, **BETTER LIVING** has dedicated the next few pages to share these alternative models created by brave people willing to defy the norm and develop something new - well some of them are really a much needed rescue of models we once had, that seemed to have been lost in history, but still so relevant to counteract the harmful consequences of our rapid changing society. They prove it is possible to live better, more sustainably, in a more affordable way, caring both for the environment and people no matter what stage of life they are at. Intentional communities include, amongst others, collective households, cohousing, co-living and ecovillages.

The Foundation for Intentional Community defines “an intentional community as a group of people who have chosen to live together or share resources on the basis of common values”. (FIC, n.d.)

The residents normally have a similar vision or follow a similar lifestyle. Sharing is on the top of the priorities list!

Ecovillages, for example, as defined by the Global Ecovillage Network is “a rural or urban community that is consciously designed through locally owned, participatory processes in all four dimensions of sustainability (social, culture, ecology and economy) to regenerate their social and natural environments”. (GEN, n.d.). Designed to produce the least possible negative impact on the natural environment through resident behaviour choices and intentional design. Usually consciously planned through participatory design, with the aim to regenerate social and natural environments.

Another model that started in Denmark in the late 1960’s is **Cohousing**, when a group of professional families were searching for better childcare and a more effective way of evening meal preparation. The idea quickly spread and nearly 300 projects have been completed in Denmark since the first project took place. Nowadays this model has spread globally and they vary in size, location, type of



Vindmøllebakken - Stavanger, Norway Gaining by Sharing
Multipurpose Shared Common Spaces
Image 1A

You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

Buckminster Fuller



ownership, design and priorities, but most of them share the same characteristics:

1. Participatory design process, where residents take part on the design process.
2. Private homes and common facilities
3. Resident management
4. Nonhierarchical structure and decision making
5. Purposeful separation from the car, the village should encourage encounter between residents as much as possible!
6. Shared evening meals

Principles from the different models can be combined to better suit the design and inhabitants needs of each project. (ScottHanson, 2020)Eco-Mode featured in this special edition is an proof of this. [page 16]

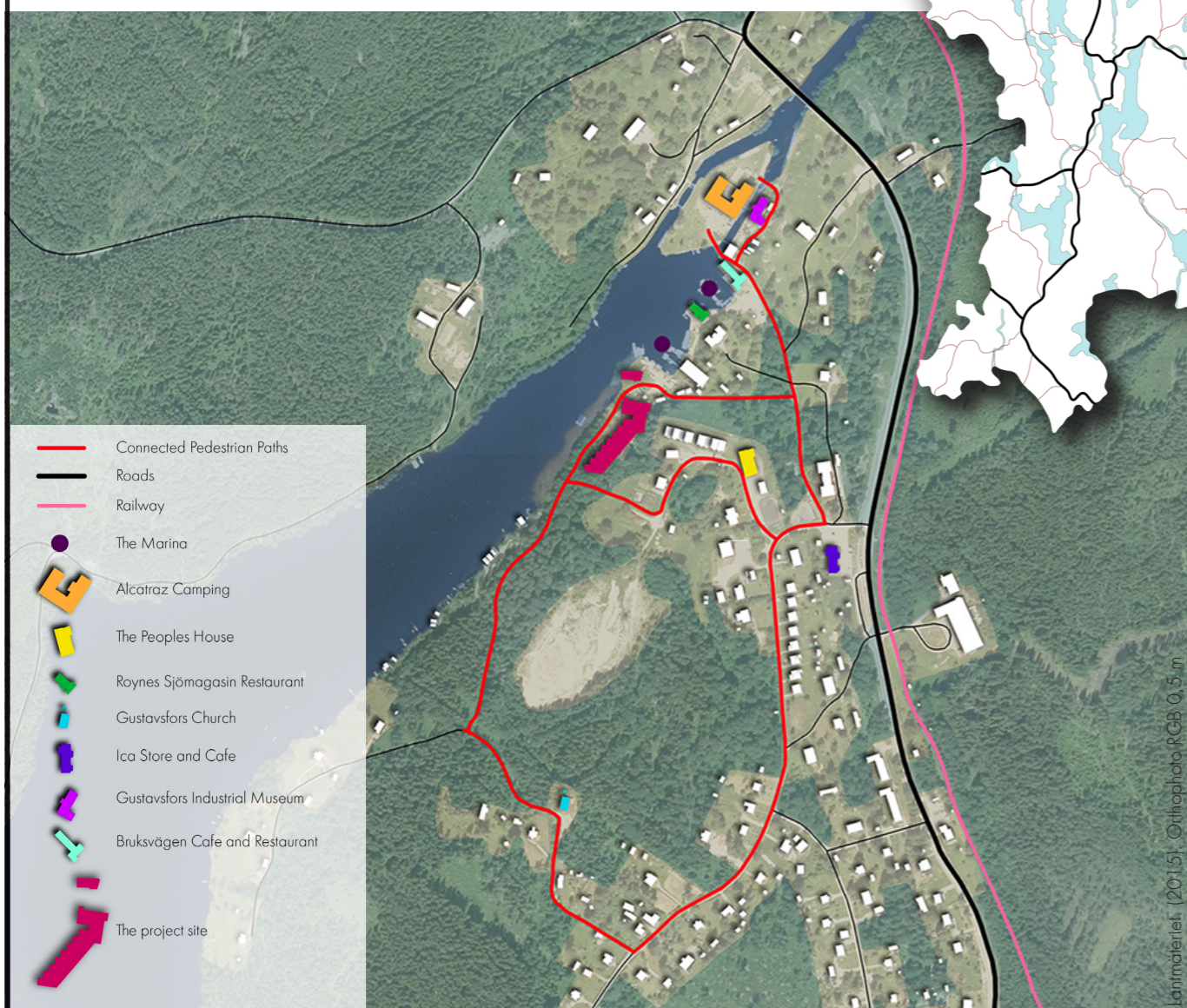
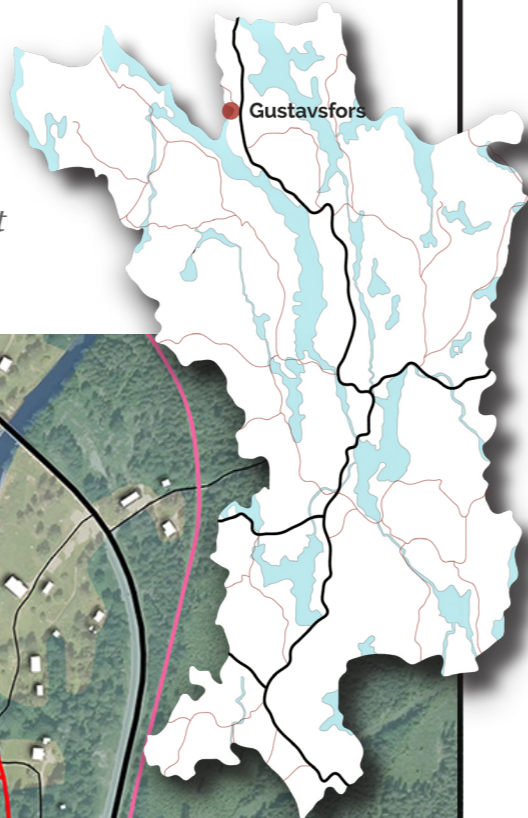


Regen Villages
Almere, The Netherlands
Car free + local food production
Image 1C

GUSTAVSFORS SWEDEN

02

This charming village located on the northern region of Bengtsfors Municipality is the perfect location for those seeking to be immersed in Nature and everything it has to offer. Join us in this exciting adventure and be tempted to book yourself your next getaway, but be aware, you might want to stay permanently. Welcome to Gustavsfors!



Aerial view from Alcatraz to the Gustavsfors town (to the left) and neighboring municipality of Årjäng (to the right) - Image 2A

Gustavsfors village is located on the northernmost part of Bengtsfors Municipality, just on the border to Värmland county. It is situated between the lakes Västra Silen and Lelången. With about 300 permanent residents, gatherings usually take place at the Peoples' house, the local church and ICA-shop, which is stocked up with the essentials and provides delivery services.

The region attracts thousands of tourists during the summer, that arrive by canoe, bike, car, boat, biketrolley and railbus. (Gustavsfors, n.d.)

The biketrolleys run on the old railway "Dal Västra Värmlands järnväg" which passes right next to the village, and the route connects the whole municipality. (DVVJ, n.d)

The lakes are a destination of their

own and attract many canoe and kayak lovers. In fact, the business community in Gustavsfors revolves around Dalsland's canal, and the marina welcomes visitors and locals wanting to enjoy a ride on the lake.

Tourist boats can stop at the bridge and have a closer look on the old works from 1740 or visit the local museum for more history.

An experience centre is located in Gustavsfors, in a historic factory on an island in the middle of the Dalsland Canal. A recommended outing is to start the day with a morning swim or a workout on the climbing wall before breakfast, then explore Dalsland Canal in a rented canoe.

Dalsland has one of Europe's finest systems of lakes and rivers for canoeing and sport fishing (Alcatraz,

n.d.). The wild forest areas, full of berries and mushrooms, have great paths and trails for hiking, horse riding and mountain biking. Don't miss out! Go on a tour in a canal boat, rent a railway trolley, a horse or a sailing boat - there are so many possibilities.

In summer time there are a few options of cafés, restaurants & pubs. About 5 km north of the community, there is a quiet camping site. From there you can take "Norrleden" hiking path southwards towards Bengtsfors town, if you enjoy walking, you'll love this 28 km long adventure, which goes through Gustavsfors village, so don't forget to stock up supplies for the journey.

There are several different accommodation options during the summer. Whether you like camping, prefer your own room or are looking for a place to park your motor home, you definitely won't be short of alternatives to recharge your energy for the following day! More detailed information on accommodation, and the various activities can be found on page 12.

[continues on page 14]

“

DALSLAND HAS ONE OF EUROPE'S FINEST SYSTEMS OF LAKES AND RIVERS FOR CANOEING AND SPORT FISHING

- ACTIVE - GUSTAVSFORS

RAIL BIKE TOUR

If you are up for an adventure, the Dal-Västra Värmland Järnväg rail bike tour might be just what you need! The whole tour is 50 km long and can be combined with a canoe. The stunning and varied landscape will make amazing backdrops for those Instagram posts. From unspoilt forests to open landscape, lakes and town centres, this experience can be enjoyed for short or long distances. For more info: <https://www.dvbj.se/> [Image 2C]



MUSEUM

Gustavsfors mill was founded in 1747 and was originally an ironwork. It's a historic site that has characterized the village and is now a tourist resort as a museum. The museum is open every day during the summer and showcases the industrial history of the village and the region around. For more info: <https://www.vastsverige.com/bengtsfors/produkter/gustavsfors-bruksmuseum/> [Image 2E]



CAFES & RESTAURANTS

Brukshandeln Cafe & Restaurant is set right in the town centre by Gustavsfors Marina. Partially built over water, enjoy a meal on the external deck with amazing views to the lake. On offer are main courses, waffles, sandwiches and coffee. Open during the summer. [Photo: Annika Karlsson - Image 2G]



CHURCH

During the latter part of the 19th century, various free church communities were established which resulted in this church being built 1891. The church emphasizes the history of religion in the working-class society and inside the church a 1978 altar artwork showcasing the industrial history can be found. For more info: <https://www.svenskakyrkan.se/bengtsfors/gustavsfors-kapell> [Photo: Lena Kärnstål - Image 2I]



PEOPLE'S HOUSE

The people's house is centrally located in the village and functions as a democratic social meeting place where the community together arrange cultural and social events such as markets, holiday parties and musical performances by local artists. For more info: <https://www.vastsverige.com/bengtsfors/produkter/gustavsfors-folkets-hus/> [Image 2D]



GUEST HARBOR

The marina between two lakes is conveniently located close to the local restaurants and cafes and shops. The harbour is 2m deep and accommodates up to 16 vessels with booms. It offers a shipyard, crane, and pumpout station. Other services such as fresh water, electricity and motor service are also provided. For more information and full list of services contact: E-mail: turist@bengtsfors.se Phone: +46 531 52 60 00 [Photo: Sofia Magnusson - Image 2F]



ALCATRAZ

Run by Bert Knuiuers and his family, Alcatraz is an activity centre located between lakes Lelång and Västra Silen. It includes a canoe rental, restaurant and hostel. Camping and motorhome parking are also available. If you are up to explore the area, the experienced staff can provide you with maps, tips and equipment. Finish your day at their local pub and meet new friends! For more information: <https://www.alcatraz.se/> [Photo: Torbjörn Tobbe Olsson - Image 2H]



ICA

Not only the main local grocery shop, but also an important meeting place for the community. Drop by to chat to the locals, get insider tips about the region and make new friends! The shop is open from 9:30-18:00 on weekdays, 9:30-16:00 on Saturday and 12:00-16:00 on Sunday. Services include Pharmacy, Post, Currency Exchange and System Bolaget. Located at Årjängsvägen 31 - 66693 Gustavsfors. [Image 2K]



[Photo: Anna Sandström - Image 2N]

Organized by Camp Dalmland, a nonprofit organization that runs various outdoor challenges in the region, Dalmland Kanotmaraton + (DKM+) is the largest canoe race in the World. It attracts participants from over 19 countries every year. If you want to join this exciting event, head over to <https://www.campdalmland.se>. It takes place on the second week of August each year.

Gustavsfors is a little pearl that comes alive in the summer



With most of the action happening during the summer months, Gustavsfors, like many other rural villages in Sweden face a different reality for the rest of the year, where the lack of infrastructure and access to services force younger families and youth to move to larger cities in search of better job opportunities and continuous education.

This trend results in a village with a predominantly senior population, in fact SCB shows that over 42% of Bengtsfors municipality's population is over 55 years old (SCB, 2019).

Another worrying fact is that single households constitute a quarter of the population in the municipality, much lower than the 52% National average, yet still high (Eurostat, 2018).

Although these numbers refer to the municipality as a whole and are not age specific, by the demographics

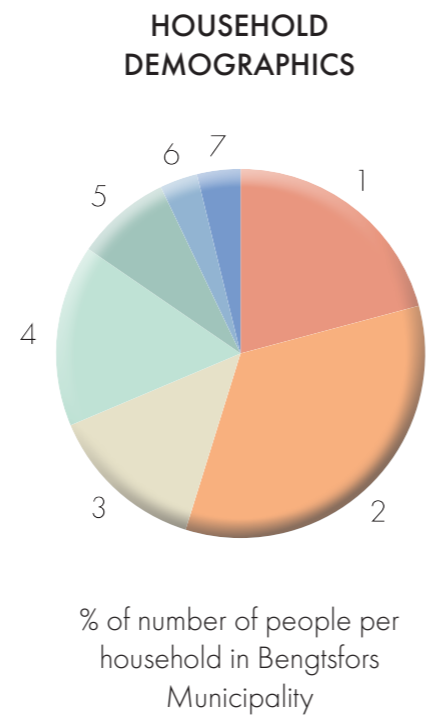
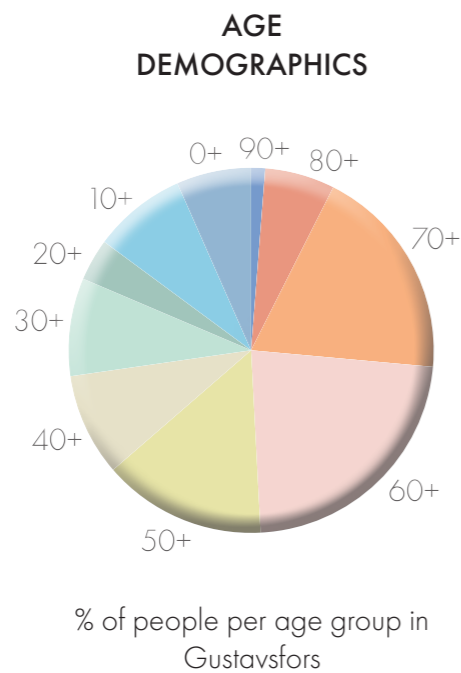
stated above, we can assume that a good portion of the single households in Gustavsfors are constituted by seniors. Additionally, the 0-19 years old age group accounts for only 11% of the population, meaning the intergenerational interaction is also minimal.

Many of these seniors live in their own villas, often oversized and in attractive locations by water and services. These properties can be attractive to families wishing to move to the town, specially if there is work opportunity and the added bonus of being close to nature. With summer tourism accounting for a big part of the economic activity in the town, there is an urgent need for diversification to other sectors that are not exclusively tied to the warmer months of the year. That way work opportunities are created and the village is activated throughout the year.



Alcatraz North facade during winter when most establishments are closed and barely any activities take place - Image 2P

OVER 42% OF BENGTSFORS MUNICIPALITY'S POPULATION IS OVER 55 YEARS OLD



STRENGTHS

- Local natural resources
- Nature and recreation
- Local business engagement

WEAKNESSES

- Lack of services and activities
- Few possibilities for social interactions
- High number of single households

THREATS

- Urbanization
- Centralization
- Ageing population
- Segregation

OPPORTUNITIES

- Sustainability awareness
- Rurbanisation
- Communal engagement
- Digitalisation
- Tourism

SWOT ANALYSIS

SET THE SCENERY

"The scary atmosphere that's constantly present in the film is backed up by really bizarre events that are easy to relate to."*

(D.Ä, J. B., 2004)

Bengtsfors municipality has been popular as a filming location for several major films during the 2000s. In Gustavsfors, the Danish-Swedish film Midsommar was played by Carsten Myllerup with Tuva Novotny in 2000.

Promotional cover for the film Midsommar

[Image 2Q]



*For full review: <https://www.gamereactor.se/blu-ray/1143/Midsommar/>

ECO-MODE

03

Living Sustainably In Better Age

Eco-Mode is a new way for active Seniors to experience life, join a community, share spaces, things, reduce waste and have a healthier lifestyle together!

“

DO WE WANT A LIFE FULL OF YEARS, OR YEARS FULL OF LIFE?”

Professor Jeremy Myerson
Academic and author focusing on design and innovation
(TEDxWhitehall, 2018)

Eco-Mode is all about creating connections, taking away the focus on things and redirecting attention to people, with a special focus on the senior group, whom for various reasons find themselves isolated from community, from society. It is about bringing people together without taking away their privacy. It is also about attracting the wider community to share: space, ideas, things, life!

In this Special Edition of BETTER LIVING we immerse ourselves in this new community of over 55's that still have a lot of life to share and many years to be active!

We find an incredible sense of community that attracts people from any age

group. Sit tight, you might be tempted to live there yourself!

The Village is a result of a participatory process which considered the effects of Global trends, such as Ageing Population and Urbanization, into the local context. Where challenges found were raised as opportunities for change. An ageing population is often perceived as a problem that needs to be solved, however by talking to the senior population and listening to their stories, we were able to identify a common point of departure: most were still extremely active and very willing to give back to society, all wanted to be part of a community, with the condition of not losing their privacy.

Image on the left: view from residential modules towards the Active space.
Image on the right: Site plan of Eco-Mode

The main access to the village is through the existing path leading to the marina, an iconic place in Gustavsfors. The existing car park, serving the marina has been extended and is now shared with the village. Disabled bays (16) are provided just by the Main entrance to the communal building and facilitates access to residents with lower mobility and also any required service vehicles. The new path along the lake allows for the wider community to engage to the residents, but also connects the village to the Church further south, an important meeting place for the town. The site plan layout encourages access and engagement with the public and connects the village to the existing community.

[continues in page 20]



- THE - COMMUNITY



SHARED KITCHEN

"Evening meals are the main event and we love it!" says one of the residents. The heart of the Main common space, this intentionally flexible space hosts anything from parties, to movies night! This is also where book club takes place along with Fika.



ACTIVE SPACE

Overlooking the lake, this amazing space with idealic views, perfectly positioned for a relaxing sunset group exercise class or a cheerful party! This space generates revenue for the village as it can be rented out to the community!

“ *Watching the sunset gathers us on the external deck and path, what a lovely time of the day!* ”

GREEN HOUSE

Food for the body and the soul! Tomatoes being the main produce, the space makes a good meeting place both between residents and the wider community.

There is a regular youth group that comes to learn about farming and socialise with the older generation, whether in search of emotional support or help with Science, the green House is always a good starting point!



WINTER GARDEN

This semi-private circulation space gives access to the individual modules and allows for a nice south-facing hangout space for the residents that can be enjoyed all year around!

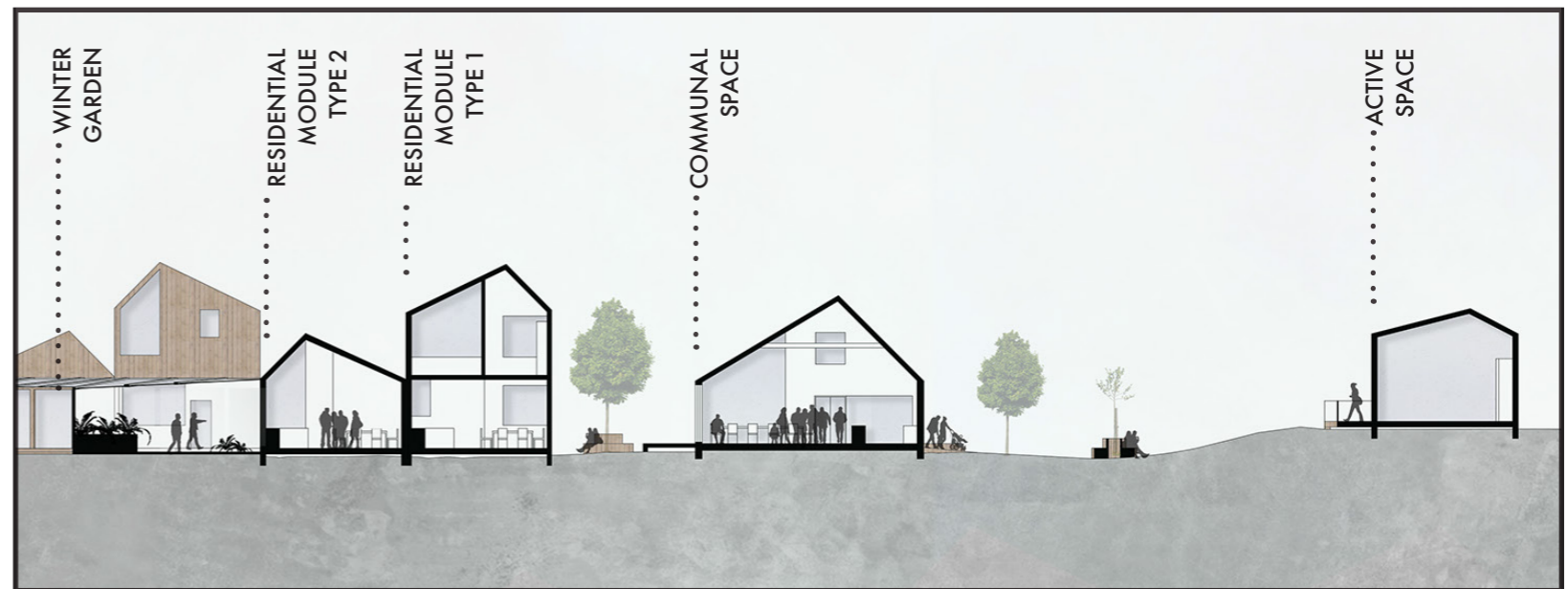
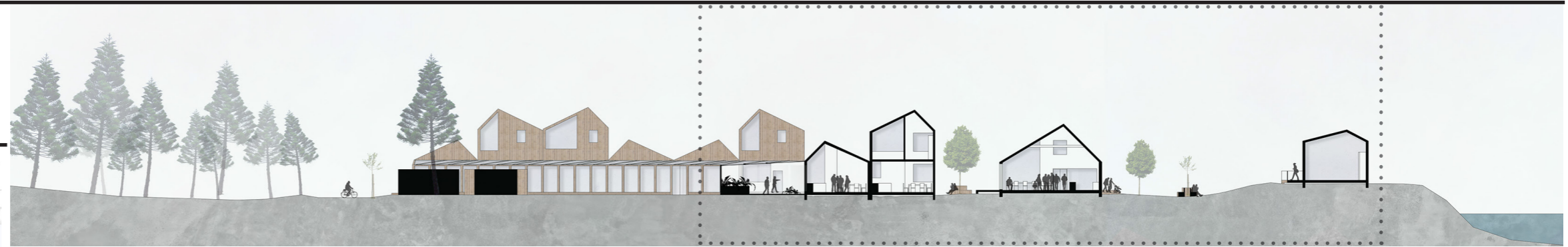


Below: Levels of Privacy Diagram
Right: Site sections

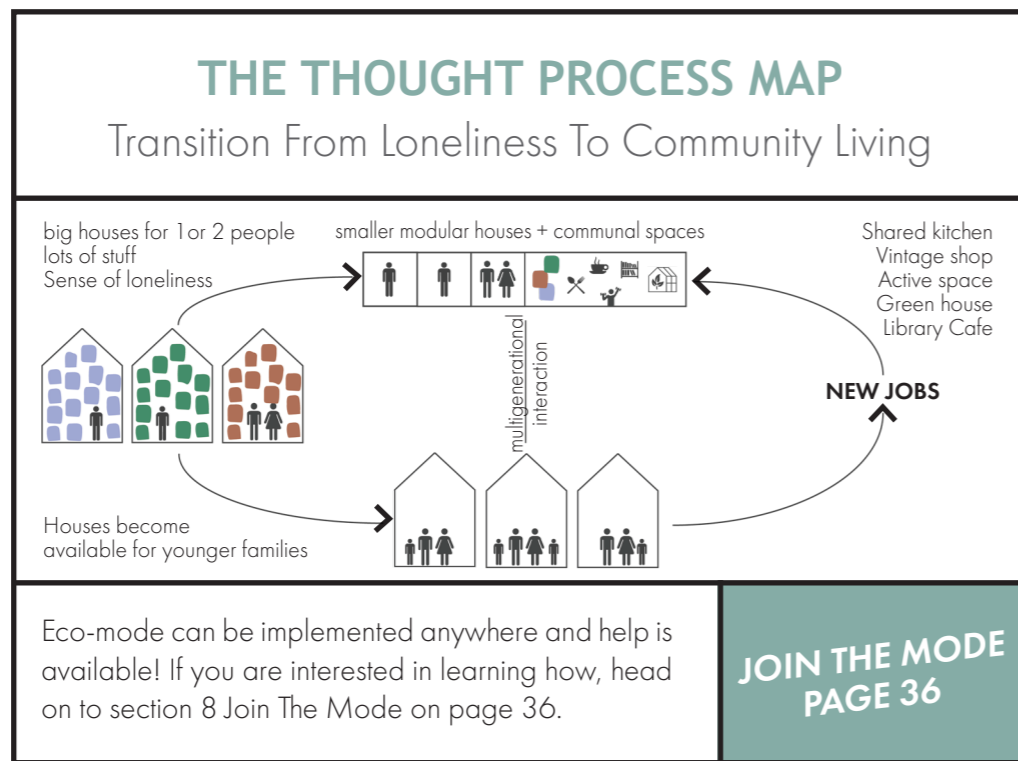


the opportunity to find a new home for no longer needed items and avoid unnecessary waste to the environment. The green house is intended to provide further social engagement and a platform for multigenerational integration, as people of all ages can come and learn about growing tomatoes and benefit from the stress relieving benefits of growing food! The winter garden is a semi-private area that provides

access to the private homes and allows residents to interact and socialise, in this pleasant, yet more secluded space that provides somewhat a better sense of security and belonging. The thought process on how the project impacts the development of the town is based on the premise that senior people living in large villas on their own, or a couple with no children, have a lot of space to store things (usually unnecessarily),



Levels of privacy were one of the many directions agreed and overall, the residents were responsible as a group for most of the design decisions. The common areas such as the shared kitchen facilitate engagement for the organized evening meals, the sustainable library café give the opportunity for interest and knowledge sharing as well as a pleasant atmosphere for a Fika. The Vintage Shop, has been an important decision to contribute for the sustainable direction of the village's circular economy. A place where residents and the wider community have



SUSTAINABLE LIBRARY

The Library Cafe is located right in the middle of the Communal building. It has been put together by the residents private collections and donations. This is open to the community, so joy us for Fika reading or take the book home! Just make sure to check it out at Vintage shop reception.

Greenhouse

The Green House is a key meeting place at Eco-Mode. Residents assist the Farmer on site in keeping the tomatoes production going. It is also a much used facility by the youth groups that come to learn about growing their own food.

Soil is also produced within the Village, a product of the Compost containers located just behind the Winter Garden. Every 18 months, 50 tons of soil are produced which are traded with local farmers for fresh fruits and vegetables. This creates resilience within the local community and ensures food security for the Village.

The tomatoes have now become a trademark of the village. Come see for yourself!

“WE GROW TOMATOES!”



Photograph by RossHelen/Shutterstock.com

however, little access to social engagement. By prioritising communal living, senior people can focus on their relationships and hobbies, rather than spending time and resources to care for their homes and its maintenance. This process then impacts the whole town, as on a larger scale their large villas become available property for younger couples and families to move to Gustavsfors.

The new development will also require specialized workforce and therefore could accommodate the professional needs of the new residents. The younger generation could also be greatly impacted by the experience, knowledge and emotional stability that senior residents have acquired throughout their lifetime. It is a win win situation, where the urban settlements once again become attractive

, viable and affordable places to settle in. Overall the project is a true testimony of sustainable living and tackles many of the Sustainable development Goals set by the UN Agenda 2030. It also sets precedents for sustainable directions that have further impact on the town and municipality as a whole. For the ‘technicalities lovers’ BETTER LIVING has put together a whole section

called The Modules [page 28], you do not want to miss it! There you can find everything you need to know about the construction system chosen by the designers and also the circular system implemented for energy generation, rain water harvesting and waste management, which greatly contributes for a more resilient community and town.

Make nature available
Develop local participation
Green and local energy production
Make use of existing physical resources
Local food production

ECO-MODE SUSTAINABLE DIRECTIONS

SUSTAINABLE DEVELOPMENT GOALS WITHIN THE PROJECT (Diver City, n.d.)



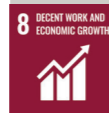
Increased quality of life for example reduced perceived loneliness, especially amongst the elderly.

Inclusion of broader group in the social and economic life.



Enables women to manage projects and influence their housing design

Affordable housing and more inclusive urbanization and improved capacity participation-based planning and management of living environments. Possibility to build in parts of the metropolitan regions with weak market. Involvement in the local environment and the desire to social stability in urban parts with large relocation.



Possibility to build in parts of the country with weak market. Employment throughout the country. Strengthen financial institution's capacity to promote/expand access to banking and finance service. Promote innovation and small and medium-sized enterprises.

More durable system and construction technology choice (easily efficient use of natural resources) through long-term investment perspective. Increased awareness of sustainable lifestyles through participatory planning and management.



Strengthened partnership civil society public sector. Democratization of decision-making understanding in urban construction.



Vintage Shop

This space was carefully designed to house all those much loved, but no longer needed items from Eco-Mode's residents, but also the wider community. All profits are directed to fund events such as movie night, parties as well as outdoor activities, all open to the community.

Come and join the fun! Donations are accepted! Free up space in your home and keep our shop running!

The Vintage shop is located right by the entrance of the Communal building. Discover hidden gems! Anything from Jewelry to Furniture. Welcome!

Opening hours
Mon-Fri 9:00 - 18:00
Sat 9:00 - 12:00



Photograph: Emily Traxler [Image 3B]

INTERACTION 04

Mutigenerational interaction has been continually fading as our society changes, however studies show its vital benefits to our modern and aging society.



“THE KEY IS PAIRING GREAT POTENTIAL WITH GREAT EXPERIENCE.

Susan Curnan, Brandeis professor and Executive Director, Center for Youth and Communities 14

Photograph by SeventyFour/Shutterstock.com

Globalization has connected nations and cultures in such an unimaginable way. With a few touches to a small screen, it's possible to walk the streets of the most remote villages or learn about humanity's earliest inventions. Just over a century ago, things were quite different. The

telecommunications were in its early stages and social interaction was mostly based in community. Food did not travel far, and people were more respectful of nature and understanding of its cycles. The Senior were the front of knowledge and the word Google was far from being incorporated into the

dictionary. As technology advanced, connections progressively shifted from people to virtual profiles, and humanity became closer to those furthest away and more distant to those closest. In fact, in most cities of the world, people don't really know who their neighbors are. So connected,

yet so lonely. And those who started their lives in a community-based society, find themselves isolated, disconnected in every sense of society, full of life to share, yet no-one willing to listen. That makes us question: How did we get so disconnected? Although, it is important to understand

how we got to this point, after all “Those who cannot remember the past are condemned to repeat it” as Santayana, G. (2018) once said, we can really benefit from nations that have been in familiar terms with this trend for longer, analyse and learn from their experience. Countries such as Japan and New Zealand, both with high percentages of older people have implemented various Senior Housing models, and show the benefits of promoting the integration of different age groups, whether within the same residential village or the integration and involvement of the wider community. **BETTER LIVING** has dedicated our famous Travel Section to a

more indepth experience of Share Kanazawa, a Continuing Care Retirement Community (CCRC) in Japan [page 32], one of the models that approaches the care of the older generation in an inovative and effective way. The benefits are clear! A study published by Stanford Center on Longevity (2016) state that the older population of today are much healthier, both mentally and physically and are capable and experienced “offers a potent synergy for society, and for youth specifically. The very attributes that older people possess – the often-overlooked gains that come with ageing –are ideally attuned to key needs of

today's younger generation” The study highlights the following benefits, ‘hidden in plain sight’:

- The abilities and motivations of the older generation can truly benefit the younger generation
- Societal challenges and inadequate connections where older adults can help them profoundly.
- Meaningful relationships can benefit both generations
- ‘making the match’ between old and young, would allow both to thrive and grow.

Youth on the other hand are ‘tech savvy’ and can surely help the older generation get up to speed. It is all about stewarding our society's human resources!

“...number of older people in the world is the only natural resource that's actually growing

Laura L. Carstensen, Stanford psychologist

Photograph by Andrew Popov/Shutterstock.com



1- Activate knowlege

“For older people it is a joy to participate in the maturation of a young person. Let's face it: You don't want your resume on your tombstone. You want Friend, Father, Teacher.”

Tom Ehrlich, Stanford Professor of Education 35

2- Share experience

“Young people need people in their lives who challenge growth, provide support, share power and expand possibilities.”

Search-Institute.org 31

3 - Support group

“Virtually all young people need more attention and guidance from their elders than they are currently receiving.”

William Damon, Professor and Director of the Stanford Center on Adolescence

INSIDER

Better Living joins **Lars Sundström** - the very first resident of Eco-Mode - on a typical day as he shares highlights of the last 12 months of his new life.



Photograph: Ighipoei/Shutterstock.com



Photograph by Per-Boge Jonelius/Shutterstock.com

“ I am particularly happy when my grandchildren come for *the adventure*, which is what they call our walk down the path by the lake and around to the Church and then to ICA for some sweets!

05

Q. What is Eco-mode for you?

A. Eco-mode is all about people over things. Over the years we tend to accumulate things and distance ourselves from people. Children grow up, move out, start their own families and a lot of us end

up living alone. In my case, my wife passed away 2 years ago and I found myself in a big house full of stuff I no longer needed. It was time for a change. Here I found a community of people that share things!

Q. How did you learn about Eco-Mode?

A. I came across a flyer of the development and decided to investigate this active, sustainable and affordable way of living. It sounded too good to be true, if I am honest.

Q. Was it true?

A. Yes! To put it in simple words: reduce private living space and exchange that for shared spaces within a community. I moved to a one bedroom module, which has everything that I need. Then,

spaces and equipment that we don't use everyday - such as laundry rooms and power tools, we share! My favourite place I must say, is the shared library cafe, which is basically our private book collections put together! We have also have a

great selection of board games and we run a games afternoon every week which is also open to the wider community. We love when we get children challenging us on chess games. We are even planning a championship this coming month!

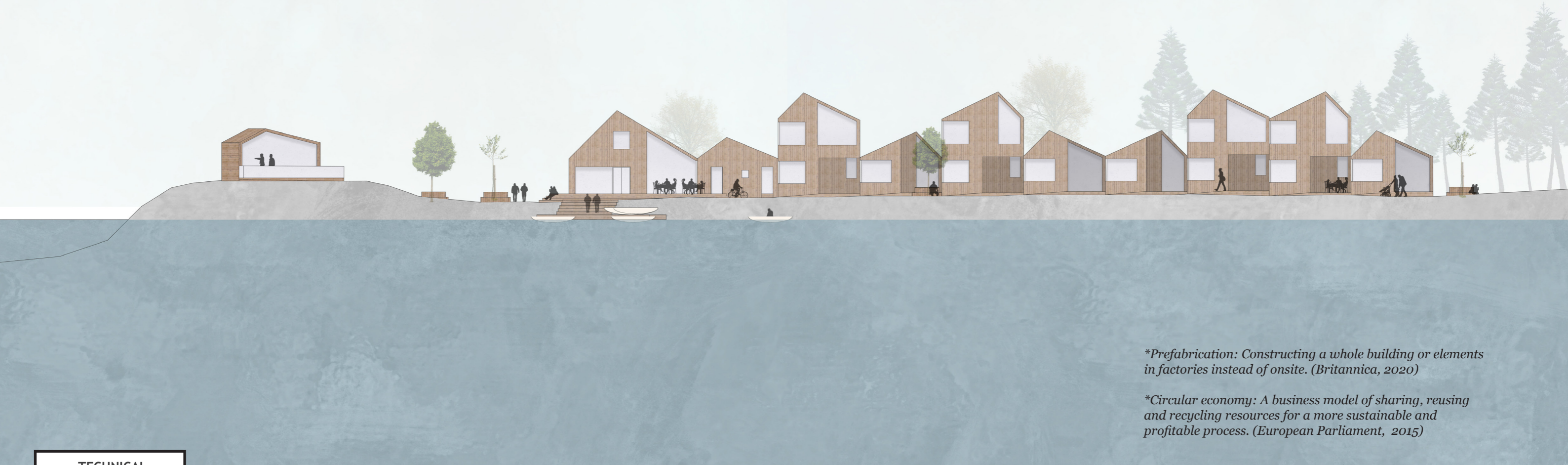
Q. What about responsibilities, are those also shared?

A. Most of us come from a busy lifestyle and slowing down is not always easy or come naturally. So here, we have the opportunity to be as active and involved as we like. We have implemented what we call a **Time Bank**, which we basically log the hours we work on the facilities, as we would in a normal job, and that reflects on how much we pay on our communal fee. Anything from working on our tomatoes Green House, assisting in our Vintage shop or general care of our Winter Garden.

Q. You mentioned Eco-Mode being open to the General Public, how does that work?

A. You see, this is one of my favorite things about living here, is that I don't feel apart from the local community or family and friends. They are welcome to visit or join in activities at any time, as after all, I still own my own home. I am particularly happy when my grandchildren come for *the adventure*, which is what they call our walk down the path by the lake and around to the Church and then to ICA for some sweets! My daughter also enjoys coming for the weekly Pilates class in our Active Space by the lake, we usually have a Fika afterwards. But lately, I have really been spending a lot of my time on my newest hobby cycling, we also do it in groups every now and then, you should join us sometime! ■

Elevation towards east
showing from left to right the
activity space, the common
space and the housing units.



**Prefabrication: Constructing a whole building or elements in factories instead of onsite. (Britannica, 2020)*

**Circular economy: A business model of sharing, reusing and recycling resources for a more sustainable and profitable process. (European Parliament, 2015)*

TECHNICAL

THE MODULES

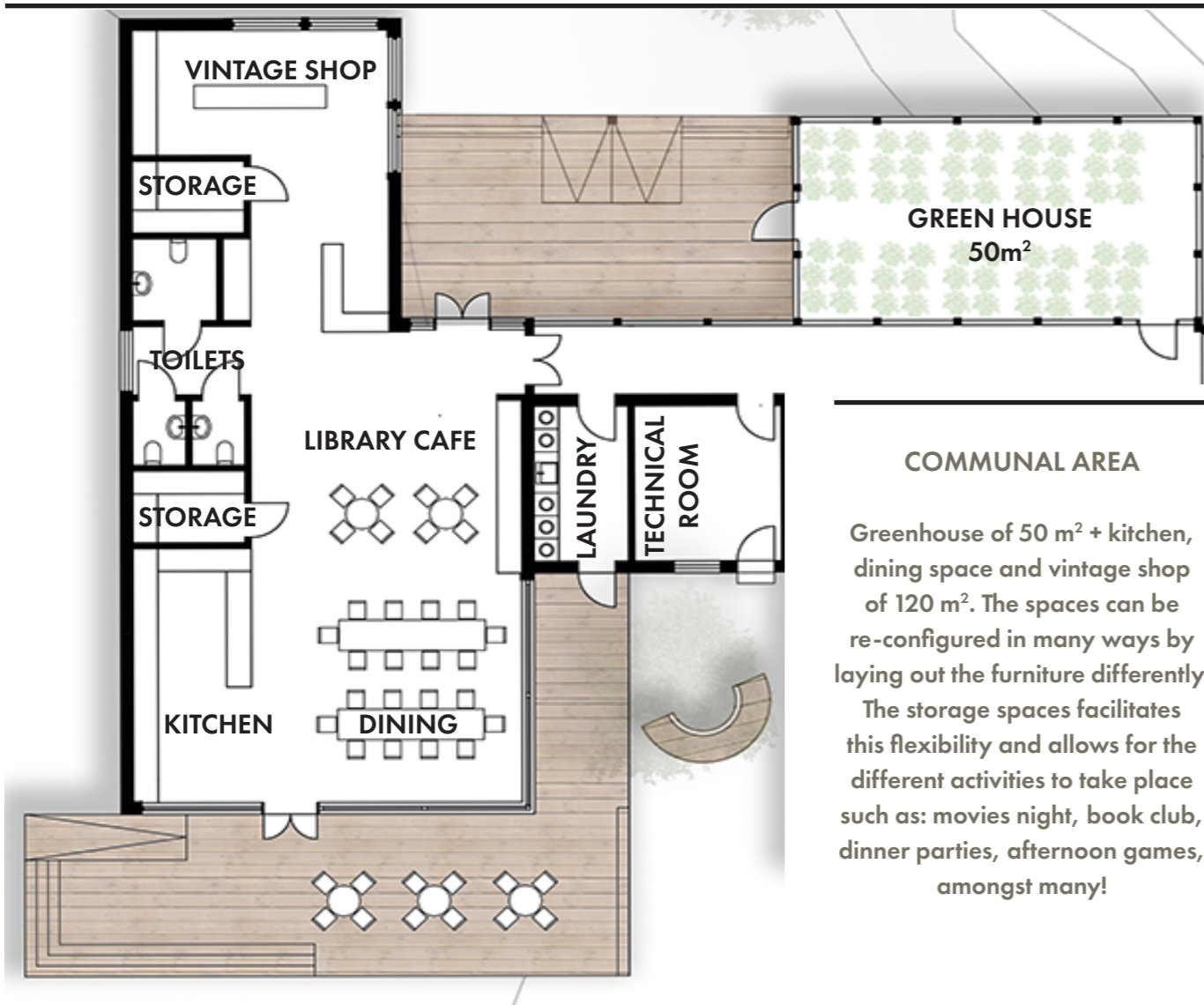
Building accessibility in a Sustainable way

Modules is a way of creating a structured and adaptable design. It makes for a creative process where the introduction of modularity can make a concept to be repeated with the possibilities to upscale, downscale, extend and reduce

a set of buildings. In the age of prefabrication* this could make for a simple, fast, cheap and if correctly done, a sustainable manufacturing and construction process. The manufacturing can in the context of this project easily be done by an extensive and already well-built production of modules and prefabricated elements in factories in the region, thereby supporting the

regional economy and reducing the long-distance shipping. The design of the modules is deliberately of a size that can be carried by normal road legal trucks. Modular construction also allows for reuse and recycle, where a module by the end of its structural and functional lifetime or as the owner of the apartment want to change their living environment can switch

out modules, elements and with this also connect to older modules left by a neighbour for a customized living environment. Combining this circular adaptability with the fact that this modular concept can be implemented in many more sites even outside of the municipality can make a circular economy* of modules where anybody can pick and choose between modules for whatever needs.



COMMUNAL AREA

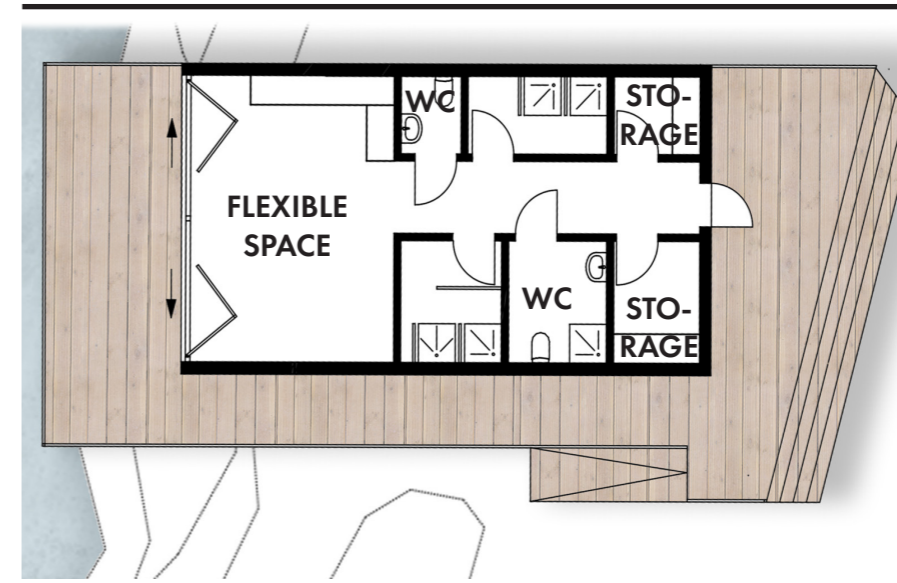
Greenhouse of 50 m² + kitchen, dining space and vintage shop of 120 m². The spaces can be re-configured in many ways by laying out the furniture differently. The storage spaces facilitates this flexibility and allows for the different activities to take place such as: movies night, book club, dinner parties, afternoon games, amongst many!

Of all building materials wood has a unique position. To construct with wood is environmentally friendly, and unlike other materials timber houses contributes to a better environment due to the ability of wood to bind carbon dioxide. The area which the project resides in is rich in forest and have a strong sector of forestry, something that enables to use local wood materials in the construction of this project.

A timber construction, wooden facade, and wooden detailing will result in a

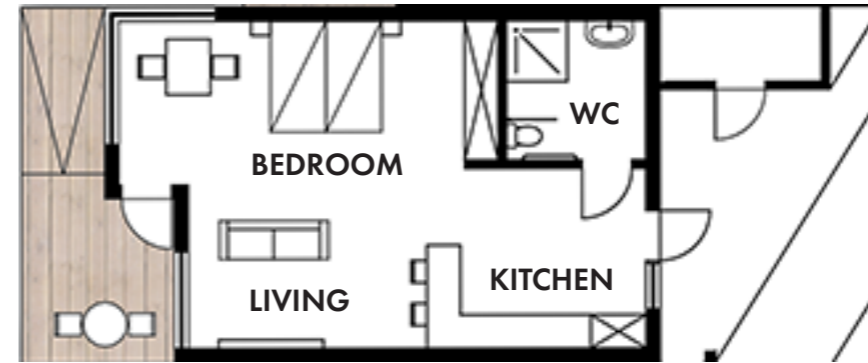
building that is more sustainable and showcases the wooden design whilst using local wood such as for example spruce and pine will connect to the local area and its history. The housing units consist of one step free and one two-story apartment. By connecting the two modules you can create the step free apartment, while connecting 4 modules, where a pair of modules on top of each other, creates the two-story apartment. Each module is 3 meters in width and 11,5 meter in length making for an apartment that is

6 meters in width when two modules are connected. The roof and the pillar foundation come as separate elements that are connected to the modular construction. The step free apartment has been carefully designed to have the basics of large kitchen, large bathroom, dining space, a terrace and bedspace that is wheelchair friendly. The two-story version rather has two bedrooms, two bathrooms, a terrace and plenty of open space for adaptability to furniture.



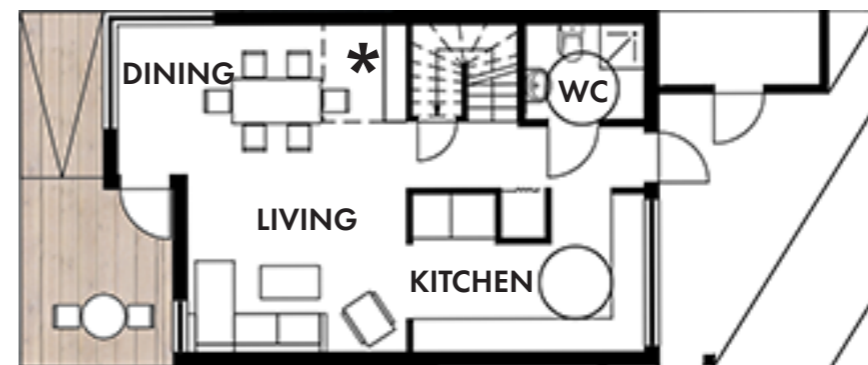
ACTIVE FLEXIBLE SPACE

This flexible space consists of 65m² of indoor space with changing facilities and storage that allows for a variety of activities, such as group exercise, craft classes, kids play, dance nights, to name a few.



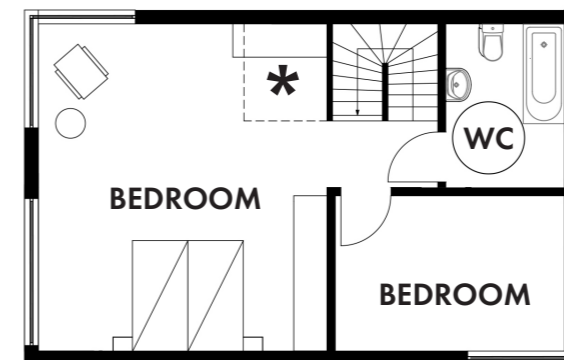
TYOLOGY 1

The step free apartment consists of 52 m² indoor space + 4m² storage accessed via winter garden.

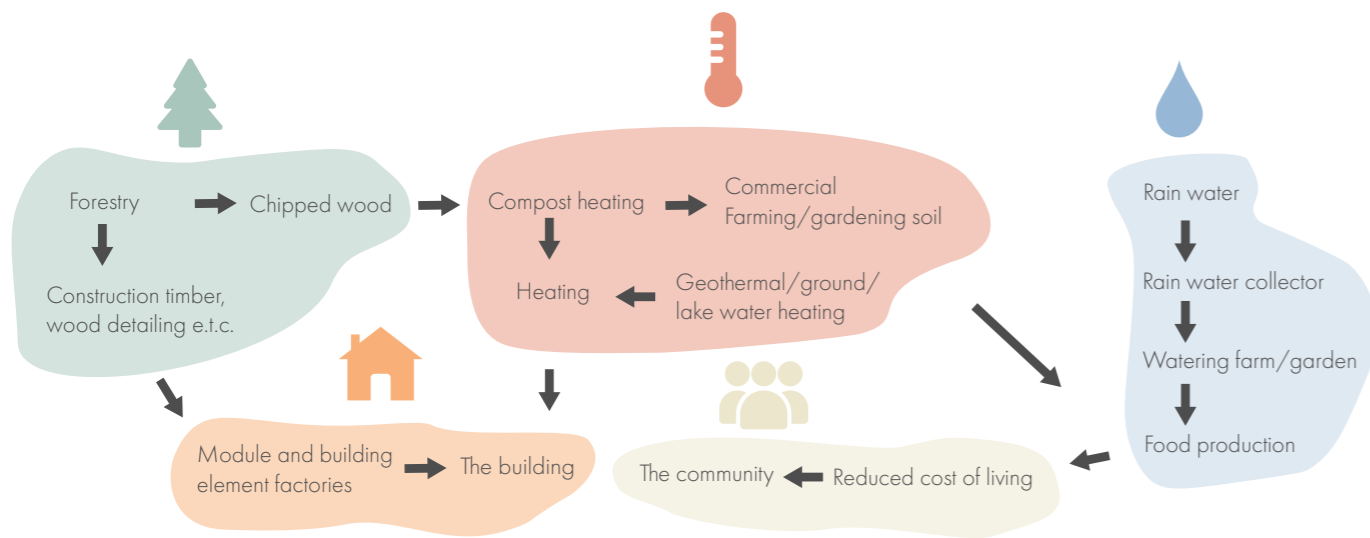


TYOLOGY 2

The two-storey apartment will consist of 107m² indoor space + 4m² storage accessed via winter garden



*potential lift location



CIRCULAR NETWORK

The exercise space also consists of a two module system like the housing units and has a wheelchair friendly design with a small exercise space and the basics of storage, showers, changerooms and toilets. It's surrounded by a terrace for further activity space outside with the view of the lake for a feeling of being on the water.

The communal areas consist of spaces that are used by the inhabitants with possibilities to open up for the public, its spacious to create and adaptable design depending on events and needs of the inhabitants. There are also outdoor spaces due to the terrace construction by the lake side and entrance side.

The greenhouse is designed to fit a mixture of plants for food but also space for socialization as the farming will be a social function. The final construction connecting all the functions in the

facilities will be wintergarden corridor. Both buildings will consist of a timber frame with openable glass panels to let in sun for natural heating during colder temperatures and let go of heat during summertime.

The roof space on the project facilities can be used to collect rainwater, which is then filtrated and collected in water tanks for usage in for example watering the gardens. Something that may lead to resilience during a potential summertime groundwater shortage.

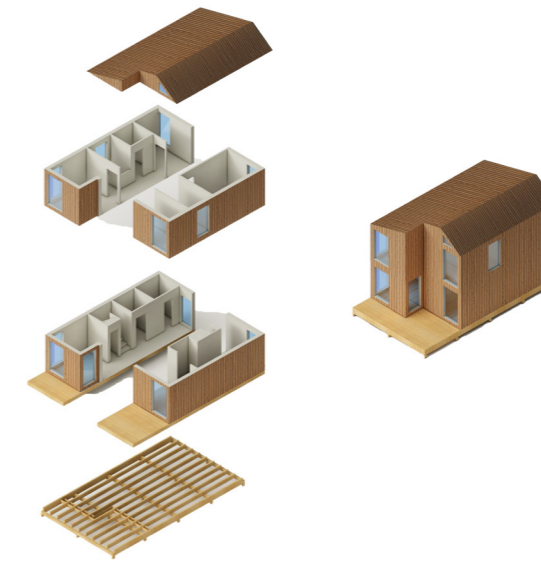
The ventilation system will constitute of simple exhaust fan system, something that is preferable in cold climates where moist air is not as common. A smaller central exhaust fan and air outlet is in each module connecting to the bathroom and kitchen whilst outdoor air is coming from the windows and exterior doors.

(Ökologisch-Bauen, 2020)

The heating will constitute of two systems with compost heating as the main one and a complementing heating system such as for example geothermal/ground/lake water heating.

Compost heating is being done by having chipped wood in a closed compost container where a stretch of water pipes also can be found. The water pipes are being heated by the natural heat process of the compost, and then directed back to the building to heat up the drinking water system and used in the floor/radiator heating system. (HomeTips, 2020)

The chipped wood can be found as a by-product of the extensive forestry in the region, the result of the compost will be nutritious soil that can be packaged and sold to for gardening and farming in the region. ■



MODULARITY

The apartments consist of a pillar foundation, set of modules and a roof element



EXPANSION

The concept can be expanded to accomodate future residents. The image to the left shows suggests an outline for future development.

SOMEWHERE IN THE WORLD



WHERE

Kanazawa Japan

HOW TO GET THERE

10h direct flight from Stockholm Arlanda

3h bullet train from Tokyo + 15min drive

For tickets go to: <https://www.jreast.co.jp/>

ACCOMODATION

From Japanese style Inn (Ryokan) to hotels

and Guest Houses, all you need is here :

<https://visitkanazawa.jp/localhospitalities/accomodation>

PLAN YOUR VISIT

There is loads to do in Kanazawa. The

Tourist information Guide is very compre-

hensive and their website has everything

you need to plan your visit! <https://visitkanazawa.jp/>

JAPAN

Join us in this incredible trip accross the Globe and learn how this Japanese Village overcomes loneliness and creates potencial in a multigenerational setting. Welcome to **SHARE KANAZAWA!**

TRAVEL

07

You might have different impressions when you first see Share Kanazawa. Johnston (2016) writes that you maybe think that Share Kanazawa is a college campus, community center, or perhaps camping area, with many wooden buildings connected by sidewalks. Small flower and vegetable gardens abound. There are 32 apartments exclusively for senior citizens in a number of “sakoju” (“home care” service) buildings around the site. Each sakoju building has a communal living area surrounded by 6 to 8 rooms.



Ukelele performance by the younger residents (Image 7A)

ABOUT KANAZAWA CITY

Kanazawa is Ishikawa Prefecture’s capital, in Japan’s central Honshu Island.

Located between the rivers Sai and Asano in the Hokuriku region of Japan, it is bordered by the Sea of Japan to the west and Toyama Prefecture to the east. Having the eastern portion of the city dominated by the Japanese Alps.

Known for its well-preserved Edo-era districts, art museums and regional handicrafts. One of its main attractions is Kenrokuen Garden or Six Attributes Garden, dated from the 17th century, celebrated for its classic landscape designs which incorporates ponds and streams.

The population of Kanazawa has seen a steady growth over the past 40 years. As of 1 January 2018, the city had an estimated population of 466,029 in 203,271 households, within a total area of 468.64 square kilometres, thus a population density of 990 persons per km².

The city has long been known as “Little Kyoto.” But over the past year, it has also been seen as a potential model for future continuing care retirement communities, or CCRCs, nationwide. (Wikipedia, 2020)

Besides these apartments there is the non-profit Gaia Nature School, a gymnaa bar called Mock, where a jazz band from Osaka is due to perform (Jarvis, 2020). Jarvis (2020) found that students From the local art college can also live in Share Kanazawa. They get cheap rent and art Studio space in exchange for 30 hours of volunteer service per month. They seem to enjoy living there and Almost all students’ rooms were full. ‘Gochyamaze’ or ‘mingling’ is the concept that Share Kanazawa is built on. Which is about choosing a community lifestyle -Establish a mechanism for informal contacts. There is a clear understanding at Share Kanazawa that mingling with others benefits health and wellbeing, and the whole complex is designed with that in mind (Jarvis, 2020). Corporate Director of Share Kanazawa, Megumi Shimizu (who moved into the company two years ago), fully understands the importance of “mingling”, but she pointed out that “mingling” is not natural and therefore needs to create opportunities. At Share Kanazawa, people can get involved in life in many ways. Such as meeting in the dog park, going to the bar or cafe, taking a ukulele class, taking care of the grounds, going to a spa or massage, volunteering

Share 金沢 概要 [総面積/約11,000坪]



The facilities: (Image 7B)
 32 Serviced Housing for the Elderly
 6 Student Housing
 2 Student housing with atelier
 Facilities for children with disabilities
 Child development support center
 Kato Kitchen Studio
 Massage Center
 Hot springs
 Mock Publish Bar
 Hands plus Laundry
 Sports Centre
 Children's facility
 Nature Communication Department
 Planning & Creative Department
 Wakamatsu joint store

バス待合場/子どもたちの通学バス、買物バスのターミナルなど住人みんなが利用します。

Common external space on the south ward



(Image 7C)

at the sweet shop for the school kids. These opportunities are not only used by Share Kanazawa's citizen but also used by the wider community does not live on site. Adults with disabilities have many job opportunities, such as working in a restaurant or making up a lunch box (Jarvis, 2020). Jarvis (2020) also mentions that due to the informal nature of the community, people can participate as much as possible or as little as they like, and they have their own space as well. It is generally accepted that group events will not suit everyone such as the annual Halloween festival. Jarvis (2020) heard that a man doesn't like participating in group activities, but he enjoys growing his own vegetables. He encourages local children to participate in the harvesting every year. Johnston (2016) emphasises that the idea of building a small village in rural Japan can not only serve as a community for senior across the country, but also as a community for students, and local volunteers and children with special needs, is something that the Japanese government has only

recently begun to pursue this seriously. The realization that Japan's overcrowded urban populations (especially Tokyo) are rapidly aging, and that there is a lack of qualified medical personnel and facilities nationwide to cope with the increase in senior, promotes the establishment of a continuing care retirement communities, or CCRC, based on the Share Kanazawa model. In addition, the decline in the birth rate and the continued exodus from other parts of Japan to Tokyo have exacerbated the economic gap between Tokyo and the rest of Country (Johnston, 2016). For the local government hosting the CCRCs, allowing older taxpayers to move from big cities to their areas means that they can maintain or even increase job opportunities, especially for local employment in the health care sector (Johnston, 2016). Johnston (2016) think about

a fundamental question which remains: Are people who were born and raised in a city with modern convenience and a pleasant climate like Tokyo, willing to relocate to rural areas where daily life is completely different? The prospect of beginning a "second life" outside Tokyo in a place where one can live an active and healthy lifestyle at a lower cost than in the capital, was cited as a key reason among the people who are interested. To their surprise, the managers of Share Kanazawa said that the facility attracted such a high level of interest outside the area (Johnston, 2016). "I moved here from Yokosuka (in Kanagawa Prefecture) after reading about Share Kanazawa in a brochure, and don't regret it at all," says 73-year-old Soshichiro Suzuki. He adds. "This is a real community with many kinds of people... It's very different from the standard retirement center where there are only old people." (Johnston, 2016). ■

“

I saw the different climate as a good thing, and I think a lot of people want to spend their elderly years in a good environment," says Suzuki, the Share Kanazawa resident.

Typical Street in Share Kanazawa

PROJECT PROFILE

Architects: GOI Architecture & Associates (Japan)
 Category: Welfare Facility
 Location: Kanazawa City, Ishikawa Prefecture
 Total floor area: 25 building totalling 8,000m²
 Completion: March 2014
 Awards: Good Design Awards 2014, Building Research Institute Homemaking Award Regional Housing Award 2015, Nikkeiren Architecture Award - Excellence 2015, Medical Welfare Architecture Award 2015, amongst others.



(Image 7D)

JOIN THE MODE

A close-up talk with the team responsible for Eco-Mode where they share their experience working in Gustavsfors

MEET THE TEAM

We are a group of Master students of Architecture and Planning Beyond Sustainability at Chalmers University of Technology in Gothenburg. We come from different parts of the world with diverse backgrounds, but one thing in common: working hard to develop projects in architecture and planning that contributes for a more sustainable future! We hope to have inspired you to be a change as well!



VIKTOR BIENEK

Has completed a bachelor's degree in Architecture at Beuth University of Applied Sciences in Berlin. Is currently studying the master program "Architecture and Planning Beyond Sustainability" at Chalmers University of Technology. Is interested in timber construction and modularity.



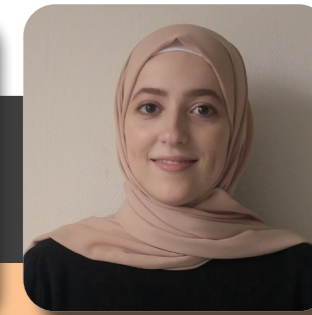
POUYA KHEZRI

Has completed a bachelors's degree in "Spatial Planning" at Blekinge Institute of Technology. Is currently studying the masters program "Architecture and Planning Beyond Sustainability" at Chalmers University of Technology. Is interested in the design and function of the built environment and it's relation to the surroundings.



CLAUDIA LARSEN

Has completed a Bachelor's of Arts with an approved programme in Architecture from the University of Westminster in London. Is currently studying the master programme Architecture and Planning Beyond Sustainability at Chalmers University of Technology. Is interested in design that bridges people relations and avoids inequalities.



NAJOUJ NANNA

Has completed a Bachelor's degree in Architecture programme at Chalmers University of Technology. Is currently studying the master programme "Architecture and planning Beyond Sustainability" at Chalmers University of Technology. Is interested in design that focus on the health and social aspect.



The map above highlights the designers home countries and diverse background.

Eco-Mode, Living sustainably in better age, a new mode of living has been successfully implemented in Gustavsfors. The town and municipality have been positively impacted, and due to the interest generated, **Join the Mode** has been created, a platform for sharing knowledge, experience, guidelines! Or simply to be a part of a community & share the same interests! **BETTER LIVING** had the opportunity to have a close-up talk with the designers as they describe their experience in Gustavsfors. Enjoy! We came as outsiders to the municipality with the intention of understanding the local context and how it is being impacted by the Global trends of our society. We visited the municipality

and made contact with local residents and organizations. This initial stage was part of a collective work that resulted in a thorough analysis of the different towns in the municipality of Bengtsfors and further the possibilities to settle in-, make a living in-, to move around in/to and from Bengtsfors but also to grow up, live and get old in-, to develop through history in- and to survive in a long-term perspective in Bengtsfors. We've also brainstormed ideas of futures that the municipality could inhabit and further what strengths, weaknesses, opportunities, threats and sustainable directions that we see in the different towns and the municipality as a whole. Looking closely at the

statistics, we realised that the senior population was quite high in comparisson to the other age groups. Another worrying factor was the percentage of people living alone and how this related to mortality rates. That's when we started researching to learn what other countries, experiencing the same ageing population global trend had been doing. And we learned so much! We had found our focus area. We carried out an analysis of the existing senior facilities throughout the municipality and interviewed senior residents, spokespeople of organizations and other locals through online platforms. Some point of interest was that all were interested in contact

with nature, they believed there needs to be greater intergenerational mixing, they were all involved and interested in community activities and believed community living was a good way of involving lonely seniors. Due to the current situation with COVID, we were not able to travel to the town and thereby do interviews with a larger number of locals. If possible, this project could have been done using a more comprehensive participatory design strategy, where the locals could've looked at our initial concept and design and make changes together with us according to their needs. So with the resources we managed to achieve, we

came to the understanding that a village for active senior was needed, a place to enhance quality of living and prevent diseases, common at the later stage of life. A different approach where a senior community attracted locals to interact and the whole town would benefit from. That's how it all started. **Q:** Could you explain to the readers how Join the Mode works and how to be a part? **A:** Join the Mode is a brand new online community, that shares interest in community living for active seniors. There we share experiences, learn from one another, we also share basic guidelines in order to implement Eco-Mode anywhere. **Q:** Could you share the basic

steps for anyone wanting to establish such community? **A:** Absolutely! Here are a few highlights:

1. Participatory design process, where residents atake part on the design process.
2. Private homes and common facilities
3. Resident management
4. Nonhierarchical structure and decision making
5. Purposeful separation from the car, the village should encourage encounter between residents as much as possible!
6. Shared evening meals, which better way to get to know people than over a meal or Fika? We hope to have inspired you! We are better together! Join the Mode!

References in text:**Section 1**

- 1.1 Eurostat. *Over half of Sweden's households made up of one person*. Eurostat; 2018. Available from: <https://ec.europa.eu/eurostat/web/productseurostat-news/-/DDN-20170905-1?inheritRedirect=true>. Cited 9 Jan 2019
- 1.2 Foundation for Intentional Community. (n.d.) *What is an intentional community?* Retrieved from <https://www.ic.org/foundation-for-intentional-community/>
- 1.3 Global Ecovillage Network. (n.d.) *GEN Glossary*. Retrieved from <https://ecovillage.org/about/about-gen/gen-glossary/>
- 1.4 Ng, Nawi & Md, Ailiana & Weinehall, Lars & Malmberg, Gunnar. (2020). *Living alone and mortality among older people in Västerbotten County in Sweden: a survey and register-based longitudinal study*. BMC Geriatrics. 20. 10.1186/s12877-019-1330-9.
- 1.5 ScottHanson, C. and ScottHanson, K., 2005. *The Cohousing Handbook*. Gabriola Island, B.C.: New Society Publishers.

Section 2

- 2.1 Alcatraz Aktivitetscenter Gustavsfors. (n.d.). Vast Sverige. Retrieved November 2020, from <https://www.vastsverige.com/en/bengtsfors/produkter/alcatraz-gustavsfors/>
- 2.2 D.Ä, J. B. (2004, February 5). Midsommar. Gamereactor Sverige. <https://www.gamereactor.se/blu-ray/1143/Midsommar/>
- 2.3 DVJ. (n.d.). Vast Sverige. Retrieved November 2020, from <https://www.vastsverige.com/en/bengtsfors/produkter/dvj/>
- 2.4 Sandström, A. (2020, March 6). Gustavsfors - en av kommunens orter - Bengtsfors kommun. Bengtsfors Kommun. <https://www.bengtsfors.se/sidor/kommun-och-politik/kommunfakta/orter-i-kommunen/gustavsfors.html>
- 2.5 SCB. (2019). *Kommuner i siffror. Sverige i siffror*. <https://www.scb.se/hitta-statistik/sverige-i-siffror/kommuner-i-siffror/>

Section 3

- 3.1 Diver City. (n.d.). Om Projektet. DiverCity. Retrieved November 2020, from https://www.divcity.se/omprojektet?fbclid=IwAR3Chik0iWfeQwIVs_Q9QMq9GIMae2LYlup2wc4INJvkih3dyYfgkX3DVU
- 3.2 TEDxWhitehall. (2018, February 23). *Why do we abandon great design when it is for 'the elderly'?* | Jeremy Myerson | TEDxWhitehall [Video]. YouTube. <https://www.youtube.com/watch?v=FbAdRpUoOpA&t=89s>

Section 4

- 4.1 Santayana, G. (2018). *The Life of Reason: Introduction, and Reason in Common Sense*. Franklin Classics.
- 4.2 Stanford Center on Logevity. (2016). *Hidden in Plain Sight: How Intergenerational Relationships Can Transform Our Future*.

<http://longevity3.stanford.edu/hidden-in-plain-sight-how-intergenerational-relationships-can-transform-our-future/>

- 4.3 Tung, Stephen. "Look for new roles for older citizens in an aging America." *Stanford Report*, February 17, 2012. <http://news.stanford.edu/news/2012/february/carstensen-older-americans-021712.html>

Section 6

- 6.1 Biomeiler - Energiegewinnung bei der Kompostierung. (2017, September 20). *Ökologisch-Bauen*. <https://www.oekologisch-bauen.info/news/heizsysteme/biomeiler-193.html>
- 6.2 Circular economy: definition, importance and benefits | News | European Parliament. (2020, December 21). *News European Parliament*. <https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits>
- 6.3 Contributor, H. (2020, September 20). *Types of Ventilation Systems*. HomeTips. <https://www.hometips.com/how-it-works/ventilation-systems-exhaust.html>
- 6.4 The Editors of Encyclopaedia Britannica. (n.d.). *Prefabrication | construction*. Encyclopedia Britannica. Retrieved November 2020, from <https://www.britannica.com/technology/prefabrication>

Section 7

- 7.1 City of Kanazawa. (1995). *City of Kanazawa*. Homepage of City of Kanazawa. https://www.city.kanazawa.ishikawa.jp/index_e.html?fbclid=IwAR0BMRPRuF1g0-OwUvtJkTaGRLuydN519u-gOxAcf3V2qsgdJ5NjYctm-g
- 7.2 Jarvis, R. (2020, May). *Alternatives to Long Term Institutional Care for Older People*. Housing LIN. https://www.housinglin.org.uk/_assets/Resources/Housing/OtherOrganisation/Jarvis-R-2019-Final.pdf?fbclid=IwAR2VjszHPwYvTFSXz5IPd-0VjXafOkr8iQ-19w1nQs9_baU1PZ6OHvUkxc
- 7.3 Johnston, E. (2016, February 15). *Kanazawa retirement community a relocation-from-Tokyo success story*. The Japan Times. <https://www.japantimes.co.jp/news/2016/02/15/national/kanazawa-retirement-community-relocation-tokyo-success-story/>
- 7.4 Share Kanazawa. (n.d.). *GOI Creation and Technology*. Retrieved November 2020, from https://www.goi.co.jp/building/share_kanazawa/
- 7.5 Share Kanazawa. (2013). *Share Kanazawa*. <http://www.share-kanazawa.com/index.html>
- 7.6 Wikipedia contributors. (2020, October 20). *Kanazawa*. Wikipedia. <https://en.wikipedia.org/wiki/Kanazawa?fbclid=IwAR1SPnInyzzVXk9LReqLmckv155GInOKZFQ4NASZpWTBsIhehiMqgJhw>

Images:**Section 1**

- 1A Helen & Hard. (2020, November 5). [Photograph] *Vindmøllebakken*. <https://helenhard.no/work/vindmøllebakken/>
- 1B EcoVillage at Ithaca. (2018, March 27). [Illustration]. *World Habitat Awards*. <https://world-habitat.org/world-habitat-awards/winners-and-finalists/ecovillage-at-ithaca/#award-content>
- 1C EFFEKT. (2016). [Visual]. *Regen Villages*. <https://www.oeffekt.dk/regenvillages>

Section 2

- 2A Ekenäs / Gustavsfors. (n.d.). [Photograph]. *Objektvision*. Se. <https://objektvision.se/Beskriv/200025192?AllImages=True>
- 2B *Lantmäteriet*. (2015). *Orthophoto RGB 0,5 m*
- 2C Short and long rail bike tours. (n.d.). [Photograph]. *VastSverige*. <https://www.vastsverige.com/en/bengtsfors/produkter/dvj/>
- 2D Gustavsfors Folkets Hus. (n.d.). [Photograph]. *Vast Sverige*. <https://www.vastsverige.com/bengtsfors/produkter/gustavsfors-folkets-hus/>
- 2E Dietz, C. (n.d.). *Gustavsfors Bruksmuseum* [Photograph]. *Vast Sverige*. <https://www.vastsverige.com/bengtsfors/produkter/gustavsfors-bruksmuseum/>
- 2F Magnusson, S. (n.d.). *Gustavsfors* [Photograph]. *Vast Sverige*. <https://www.bengtsfors.se/sidor/kommun-och-politik/kommunfakta/orter-i-kommunen/gustavsfors.html>
- 2G Karlsson, A. (n.d.). *Gustavsfors* [Photograph]. *Vast Sverige*. <https://www.bengtsfors.se/sidor/kommun-och-politik/kommunfakta/orter-i-kommunen/gustavsfors.html>
- 2H Olsson, T. T. (n.d.). *Alcatraz Aktivitetscenter* [Photograph]. *Vast Sverige*. <https://www.vastsverige.com/en/bengtsfors/produkter/alcatraz-gustavsfors/>
- 2J Kärnstål, L. (n.d.). *Gustavsfors chapel* [Photograph]. *Svenska Kyrkan*. <https://www.svenskakyrkan.se/bengtsfors/gustavsfors-kapell>
- 2K Magnusson, S. (n.d.-b). *ICA* [Photograph]. *Bengtsfors Kommun*. <https://www.bengtsfors.se/sidor/kommun-och-politik/kommunfakta/orter-i-kommunen/gustavsfors.html>
- 2M [Logo Illustration]. (2018). *Camp Dalsland*. <https://www.campdalsland.se/races/dalsland-kanotmaraton/?lang=en>
- 2N Sandström, A. (n.d.). *Dalsland Canoe Marathon+* [Photograph]. *Bengtsfors Kommun*. <https://www.bengtsfors.se/sidor/kommun-och-politik/kommunfakta/orter-i-kommunen/gustavsfors.html>
- 2P Vikanseгла. (2017, November 21). *Gustavsfors during winter* [Photograph]. Wikipedia. <https://en.wikipedia.org/wiki/Gustavsfors>

- 2Q Midsommar. (2004, February 5). [Photograph]. *Gamereactor*. <https://www.gamereactor.se/bild/?textid=1143&id=7104>

Section 3

- 3A DIVERCITY bidrar till Globala målen Agenda 2030 genom. (n.d.). [Illustrations]. *Divcity*. https://www.divcity.se/omprojektet?fbclid=IwAR3Chik0iWfeQwIVs_Q9QMq9GIMae2LYlup2wc4INJvkih3dyYfgkX3DVU
- 3B Traxler, E. (2019, June 17). *One of my favorite Antique Malls* [Photograph]. *Le Cultivateur*. <https://lecultivateur.com/2019/06/17/one-of-my-favorite-antique-malls/>

Section 7

- 7A [Ukelele performance]. (2014, March). *GOI Creation & Technology*. https://www.goi.co.jp/building/share_kanazawa/
- 7B [Share Kanazawa Map]. (n.d.). *Share Kanazawa*. <http://www.share-kanazawa.com/townnavi/index.html>
- 7C [Common external space]. (2014, March). *GOI Creation & Technology*. https://www.goi.co.jp/building/share_kanazawa/
- 7D [Typical Street]. (2014, March). *GOI Creation & Technology*. https://www.goi.co.jp/building/share_kanazawa/

Videos overall research:

Banque Cantonale de Genève. (2019, September 19). Future of Living in Regenerative, Resilient and self-Sustaining Neighborhoods [Video]. YouTube. <https://www.youtube.com/watch?v=hG7D3ouWzP0&feature=youtu.be>

BBC London. (2018, October 18). Co-housing for London's ageing population - BBC London [Video]. YouTube. <https://www.youtube.com/watch?v=OLPnNPP3Kqg>

Bovieran. (2019, October 22). Välkommen till Bovieran Floral [Video]. YouTube. <https://www.youtube.com/watch?v=I8rroyAe2Is>

Global Ecovillage Network. (2017, November 2). Ecovillage Development Programme [Video]. YouTube. <https://www.youtube.com/watch?v=Y6JaV7yCv3M&feature=youtu.be>

MINDS EYE DESIGN. (2019, February 17). 10 Incredible Prefab Modular Homes From Archiblox Architects [Video]. YouTube. <https://www.youtube.com/watch?v=W5mZ5n-8Zko&t=186s>

Modern Aging - Holistic Health and Wealth After 45. (2018, October 18). Amazing Japanese Retirement Home and Senior Living that You Will Want to Live in Now [Video]. YouTube. https://www.youtube.com/watch?v=9ISjs0h2bGg&list=UU_W2CNqJ6kjr5enV3gfZ-sw&index=43

PBS NewsHour. (2017, February 12). Cohousing communities help prevent social isolation [Video]. YouTube. <https://www.youtube.com/watch?v=DmWrxOntATU>

SLU Urban Futures. (2018, December 12). SLU Urban Futures - Lab Stories - Alnarp Rehabilitation Garden [Video]. YouTube. <https://www.youtube.com/watch?v=xC8cCi-T8QE&feature=youtu.be>

TED. (2017, August 7). How cohousing can make us happier (and live longer) | Grace Kim [Video]. YouTube. <https://www.youtube.com/watch?v=mguvTfAw4wk>

TEDx Talks. (2015, May 15). Ecovillage living - a new source of hope | Kosha Joubert | TEDxGeneva [Video]. YouTube. <https://www.youtube.com/watch?v=MmWa3mFKM84&feature=youtu.be>

TEDx Talks. (2016, December 21). The 'Tesla' of EcoVillages | James Ehrlich | TEDxTrondheim [Video]. YouTube. https://www.youtube.com/watch?v=kH_94v67upo

TEDx Talks. (2017, January 5). Designing sustainable eco-villages | Declan Kennedy | TEDxTUberlin [Video]. YouTube. <https://www.youtube.com/watch?v=4WYDp8evnuI>

TEDx Talks. (2020, January 13). Cohousing: The Future of Community and Human Connection | Trish Becker-Hafnor | TEDxCherryCreekWomen [Video]. YouTube. <https://www.youtube.com/watch?v=s9yRwn90aBw>

Websites overall research:

Bovieran. (2020, December 9). Bovieran – Upptäck framtidens boende. <https://bovieran.se/>

Brinkley, M. (2020, May 20). Triple Glazed Windows: Do They Make Sense? Homebuilding & Renovating. <https://www.homebuilding.co.uk/advice/triple-glazed-windows-do-they-make-sense>

Co-Elderly. (2013, November). Best practices in self-administration of communal senior housing. Co-Elderly Best Practice Report. <http://www.kollektivhus.nu/pdf/BestPracticeReport131116.pdf>

De Decker, C. (2015, December 24). Reinventing the Greenhouse. LOW TECH MAGAZINE. <https://solar.lowtechmagazine.com/2015/12/reinventing-the-greenhouse.html>

Ekobyggportalen » Ekobyar/kollektivhus. (n.d.). Ekobyggportalen. Retrieved November 2020, from <http://www.ekobyggportalen.se/ovrig-fakta/ekobyar/#:%7E:text=Ekobyar%20%C3%A4r%20en%20boendegemenskap%20d%C3%A4r,finns%20odlingar%20och%20alternativ%20energiteknik>.

Ellens, T. (2020, February 12). Advice for Heating Your Greenhouse | Alitex. Alitex. <https://www.alitex.co.uk/blog/advice-heating-your-greenhouse#gref>

European Commission. (n.d.). Senior Plus: Keeping elderly people healthy and active in society-Projects. Regional Policy - European Commission. Retrieved November 2020, from https://ec.europa.eu/regional_policy/en/projects/czechia/senior-plus-keeping-elderly-people-healthy-and-active-in-society

Gustavsfors Yacht Harbour in Gustavsfors, Sweden - Marina Reviews - Phone Number. (n.d.). Marinas.Com. Retrieved November 2020, from https://marinas.com/view/marina/g9cxd8_Gustavsfors_Yacht_Harbour_Gustavsfors_Sweden

Hanson, S. (2019, December 18). Use These 5 Colors to Liven Up a Senior's Home. Home Care Assistance Rockwall. <https://www.homecareassistancerockwall.com/colors-that-can-bring-up-a-seniors-home/>

Hanson, S. (2020, January 20). How to Help Seniors Naturally Alleviate Stress. Home Care Assistance Rockwall. <https://www.homecareassistancerockwall.com/natural-ways-seniors-can-alleviate-stress/>

Henry, R. (2003, October 17). 6 Ideas for Elder-Friendly Design. This Old House. <https://www.thisoldhouse.com/home-safety/21015178/6-ideas-for-elder-friendly-design>

Kartsök och ortnamn. (n.d.). Kartsök Och Ortnamn. Retrieved November 2020, from <https://kso.ejjanster.lantmateriet.se/LowImpactLivingAffordableCommunity>. (2020). LILAC – Low Impact Living Affordable Community. LILAC. <http://www.lilac.coop/>

Ranieri, F. (2018, August 26). How To Design for Senior Citizens. ArchDaily. <https://www.archdaily.com/900713/how-to-design-for-senior-citizens>

SGUs Kartvisare. (n.d.). SGU. Retrieved November 2020, from <https://apps.sgu.se/kartvisare/kartvisare-jordarter-25-100.html>

Skyddad natur. (n.d.). Skyddadnatur. Retrieved November 2020, from https://skyddadnatur.naturvardsverket.se/?-zoom=10&lat=6564691.61435&lon=334530.77328&baseLayer=terrangskuggning%40mkarta-bakgrund-maps%2Cmark%40mkarta-bakgrund-maps%2Chydrografi_nedtonad%40mkarta-bakgrund-maps%2Chydrografi_nedtonad%40mkarta-bakgrund-maps%2Ckurvor%40mkarta-bakgrund-maps%2Ckommunikation%40mkarta-bakgrund-maps%2Cjarnvag_nedtonad%40mkarta-bakgrund-maps%2Ckraftledning_nedtonad%40mkarta-bakgrund-maps%2Cbebyggelse%40mkarta-bakgrund-maps%2Cadministrativ_indelning%40mkarta-bakgrund-maps%2Ctext_nedtonad%40mkarta-bakgrund-maps&layers=Stora_skogsagares_markinnehav%40mkarta-pu-map

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