



**UTOPIAS FOR  
ABANDONED INDUSTRIAL  
SITES IN THE ALPS**



# DESIGNING NEW STABILITIES

Results from research and student projects for the industrial site Munichtal



TU Wien  
Institute of Spatial Planning  
Local Planning | Spatial Simulation Lab



## BACKGROUND AND MOTIVATION

When thinking of the Alps, most people associate beautiful mountainous landscapes, Alpine agriculture, tourism or winter sports. The term „industry“ is probably not initially connected to the Alps. However, the Alpine region is one of the most important industrial sites in Europe.

Industry in the Alpine region developed mainly in the 19th and 20th century, but its importance is still greatly underestimated. This development of Alpine industries was favored by raw material deposits such as ore or minerals, by a surplus of labor or by the use of hydropower for high energy production. Depending on local and regional conditions and potentials, various industries have emerged, such as the aluminum, chemical, magnesite, steel or textile industries (Bätzing 2003: 136 ff.). Another important influence on the development of the industrial sector in the Alps was the supply and equipment of technical infrastructure, especially with rail-bound infrastructure. From a European perspective, the Alpine region is an important trade link from north to south and vice versa. Many European transport corridors run through the Alps. Valleys with good access to the transport network were then and are now important transit routes for the transport of industrial goods.

Due to the massive exploitation of resources in recent decades, many of these sources have been depleted or even wiped out, leading to a decline in the traditional heavy and manufacturing industries. As a result of the increasing automation in mining and production processes, fewer workers were needed in the industry. Therefore, shrinking population can often be seen as one reason for the retraction of industry.

In many regions the decline of industry left former production landscapes of significant size and complexity, so-called Alpine industrial landscapes. Their potential value in terms of their sustainable transformation is closely linked to the Alpine-wide environmental, economic and social key challenges, such as the renewal and improvement of blue and green infrastructure, the reactivation and improvement of regional economy and the promotion of local identity and culture heritage (trAILs 2018: online).





## trAILS - THE EU-FUNDED PROJECT

The INTERREG Alpine Space project called „trAILS - Transformation of Alpine Industrial Landscapes“ deals with the lack of information on brownfields in the Alpine area. It generates knowledge about Alpine industrial landscapes and shows how such sites can be transformed and how the awareness for the topic, which will gain more and more importance in the future, can be strengthened.

## trAILS - THE STUDENT PROJECT

The EU-funded INTERREG project „trAILS - Transformation of Alpine Industrial Landscapes“ provides a framework for the interdisciplinary collaboration of researchers. At the same time it creates an environment for interdisciplinary cooperation of students of the academic project partners.

At TU Wien, architecture and spatial planning students dealt with the industrial landscape of Munichtal in Eisenerz. The aim of the interdisciplinary course was the conception of development paths for the partly obsolete area and the existing buildings. At the same time, the student projects try to respond to regional needs, objectives and expectations and put them in the center of the analysis and the development of ideas. The multi-scale concepts and the interdisciplinary elaboration of the drafts show development paths for the industrial landscape itself and present new ideas for Eisenerz and the region.

The development paths shown in this publication should not constitute concrete project proposals for the industrial landscape and the region. They rather serve as a base for communication and discussion of existing opportunities. The visual presentation of the project ideas strives to highlight local potentials and to transform apparent weaknesses into possibilities by means of reconfigurations. By tangible examples of implementation on site, the projects get enriched as bases for planning and decision-making.



# WOODLAB EISENERG

*Sarah Gross  
Sarah Raiger  
Max Scheidl*

# CONCEPT

The "Woodlab Eisenerz" project redesigns the industrial site, in the north of Eisenerz, into a modern and friendly working environment. The main task is to solve some of the key problems of the population decline in the area around Eisenerz. The biggest problems are a lack of jobs for young people, low educational opportunities for adults and a shortage of skilled workers in the region. In addition, Eisenerz still has the image of an industrial city. This project will bring stability to Eisenerz and its residents. Through for example municipal tax the city will be able tackle other problems, this project can not solve on its own.

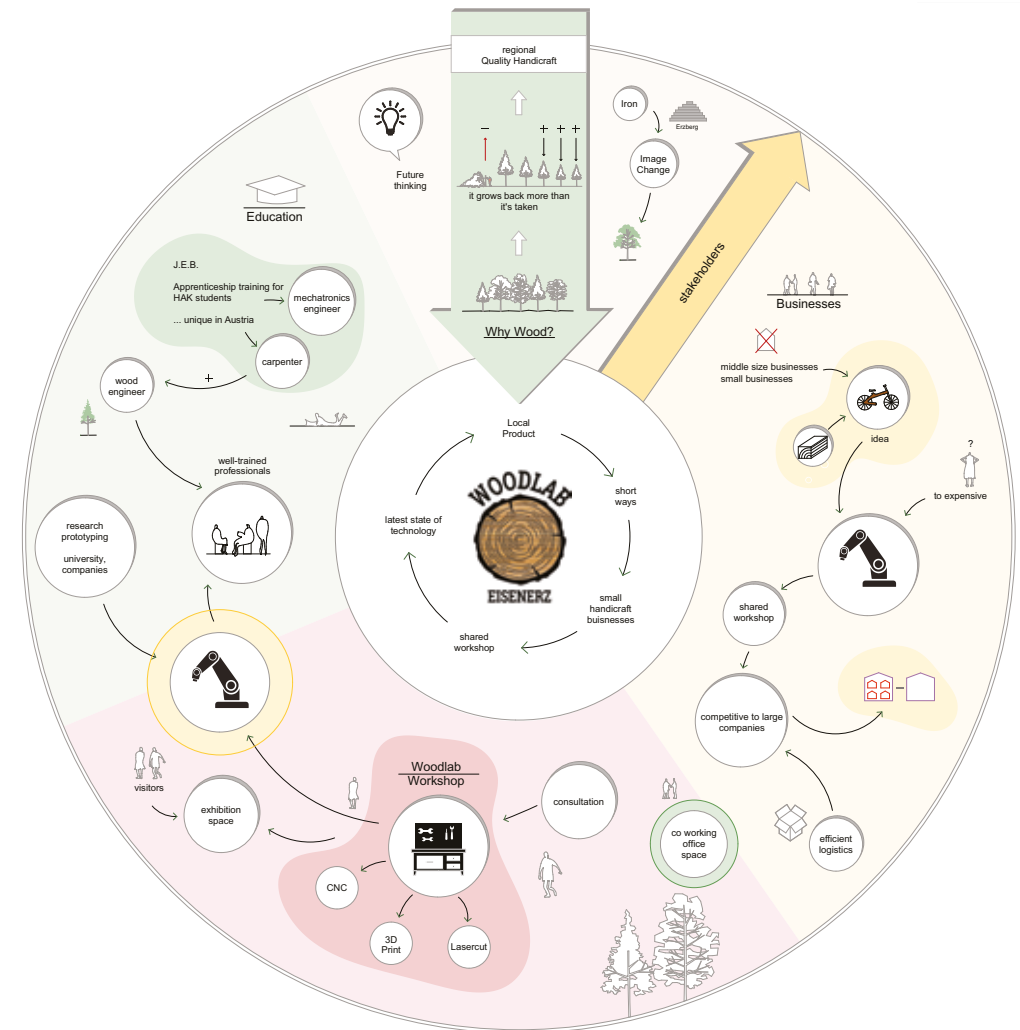
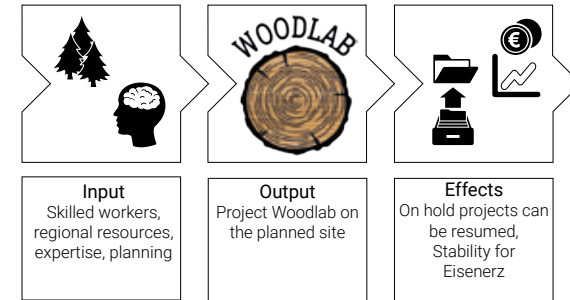
The Woodlab is a network, in which businesses, universities, schools and research institutes that involves wood processing are joint together. In this network professionals can be contacted, advanced courses are offered and the members have modern equipment for wood processing at their disposal. Through this network exchange of knowledge is easier accessible and every party will profit from it.

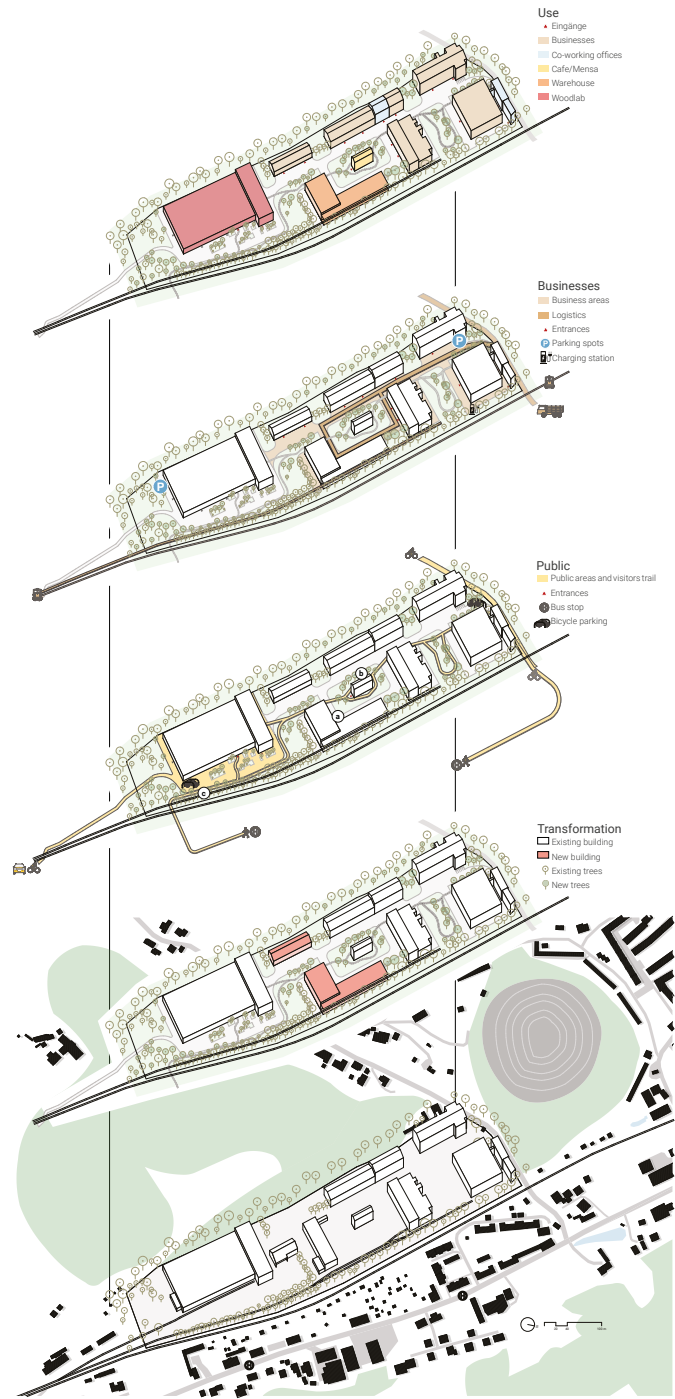
The redesigned site is used by small to medium-sized businesses from the wood sector. The heart of the project, the Woodlab Workshop is located in the former Alumelt hall. The already existing cooperation between "HAK" and the "Jugend- und Erwachsenenbildungszentrum" will be further expanded, which means that more apprenticeships in the wood sector will be offered. The image change will be created by the fact that the mainly used material is the regional resource wood. In addition, only electric vehicles will be used to distribute the goods on the site, which will drive as autonomously as possible. The supply and delivery will be done collectively, saving costs and time. The logistics and transportation on site are environmentally friendly and the buildings are formed sustainable for the future.

# KEY PROBLEMS



# VISION

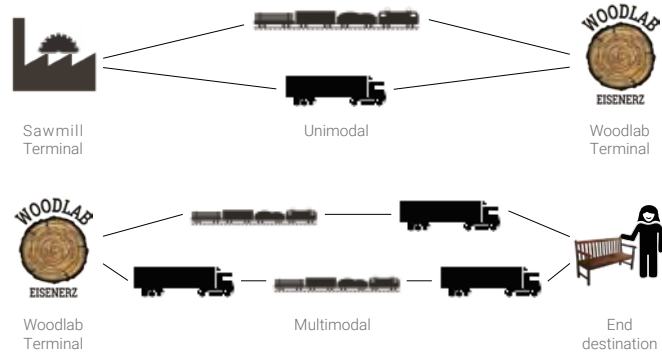




## LOGISTICS

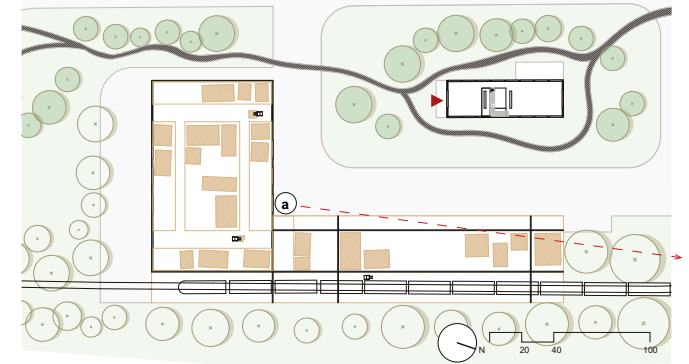
The network will organize an efficient and collective way to transport the raw materials to the site and a combined transport of the finished products so that the goods arrive at their destination in the most environmentally friendly way. "Innofreight" a regional company developed a concept "Woodlogistic" to optimize the transport of wood. They developed wagons that are optimal for the transport of wooden goods. These are constantly being further developed and could be operated autonomously in the future. Furthermore, there is the possibility to receive financial funding for combined transport at national level.

For local transport, environmentally friendly vehicles, such as electric forklift trucks, will be used. Possible transport chains are shown here:



The Woodlab project is to be realized on a site of approximately 110,000 m<sup>2</sup>. It is located northwest of the city centre. Most of the existing buildings that are on the site can be easily adjusted to the Woodlab concept. But it is in need of a reconstruction and a few new buildings that can offer the necessary space. In the end this project will offer more than just new space, it offers advantages and opportunities for all actors involved.

## WAREHOUSE





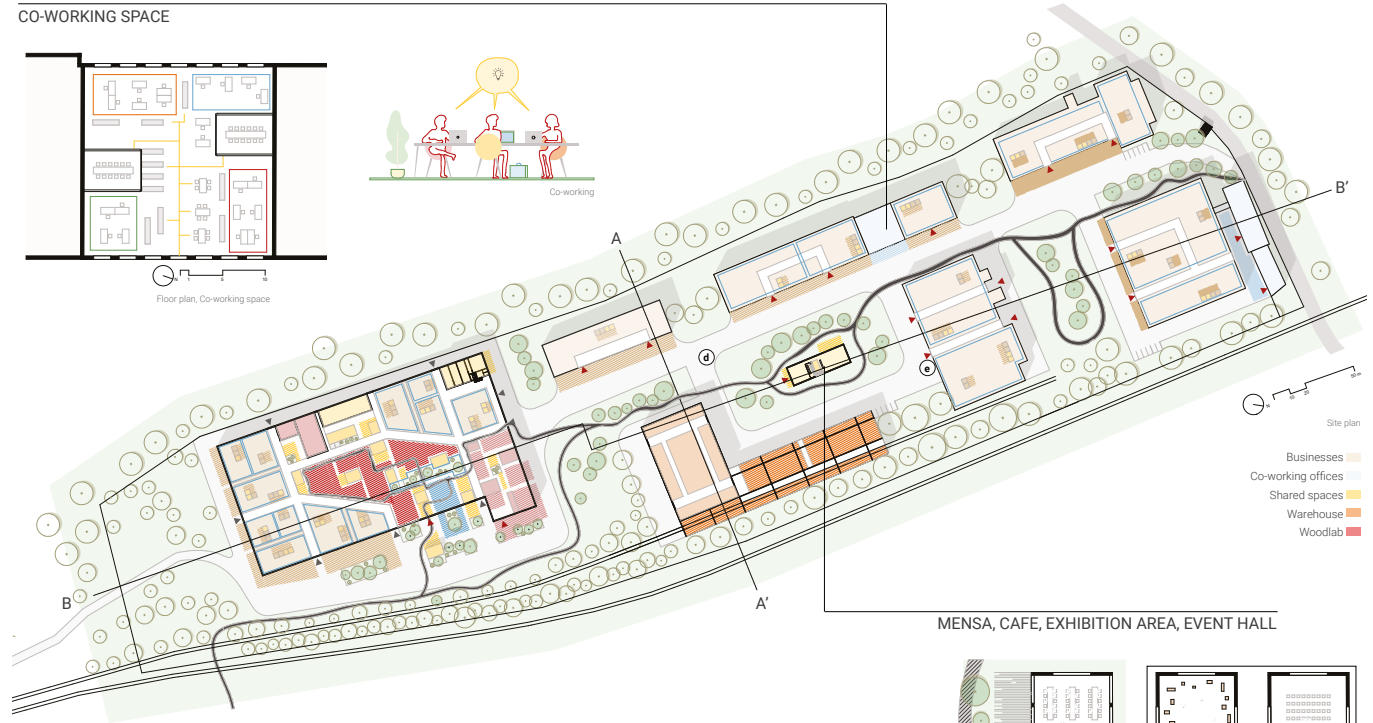
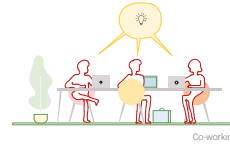
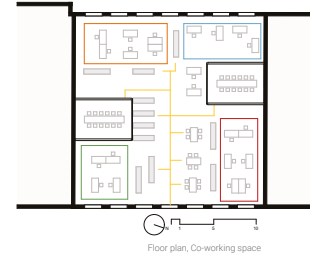
# VISITOR TRAIL



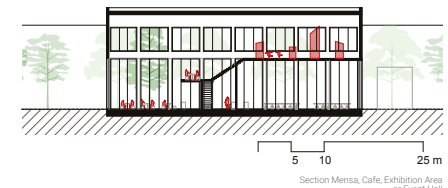
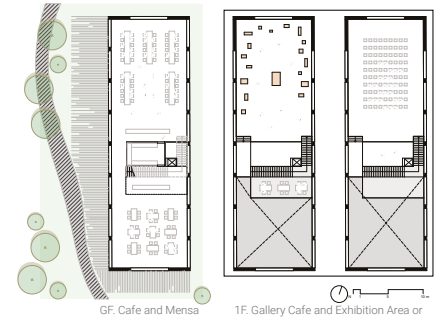
# EXHIBITION AREA



## CO-WORKING SPACE

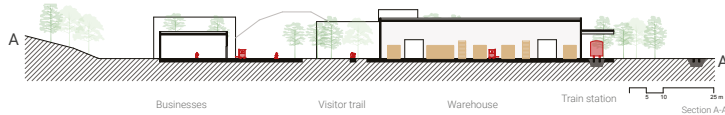


## MENSA, CAFE, EXHIBITION AREA, EVENT HALL



The Cafe will be a meeting point for everyone on the site, workers, students and visitors. The ground floor will be a Mensa at noon and a cafe throughout the day. The gallery will offer more seating. The upper floor is multi-functional. The members of the network will have the opportunity to exhibit their masterpieces. Furthermore, it can be turned into an event hall for events concerning wood or a Network meeting. The building is equipped with an elevator, so it will be accessible for all people. The Cafe and exhibition area are also a part of visitors trail. The project Woodlab focuses on exchange and knowledge transfer between everyone involved. In order to make this possible, certain premises must be offered. As well, cost-effective variants are an important factor of this project. Thus, the offices will be designed as co-working spaces.

## SECTION A-A'



## SECTION B-B'



## THE HALL

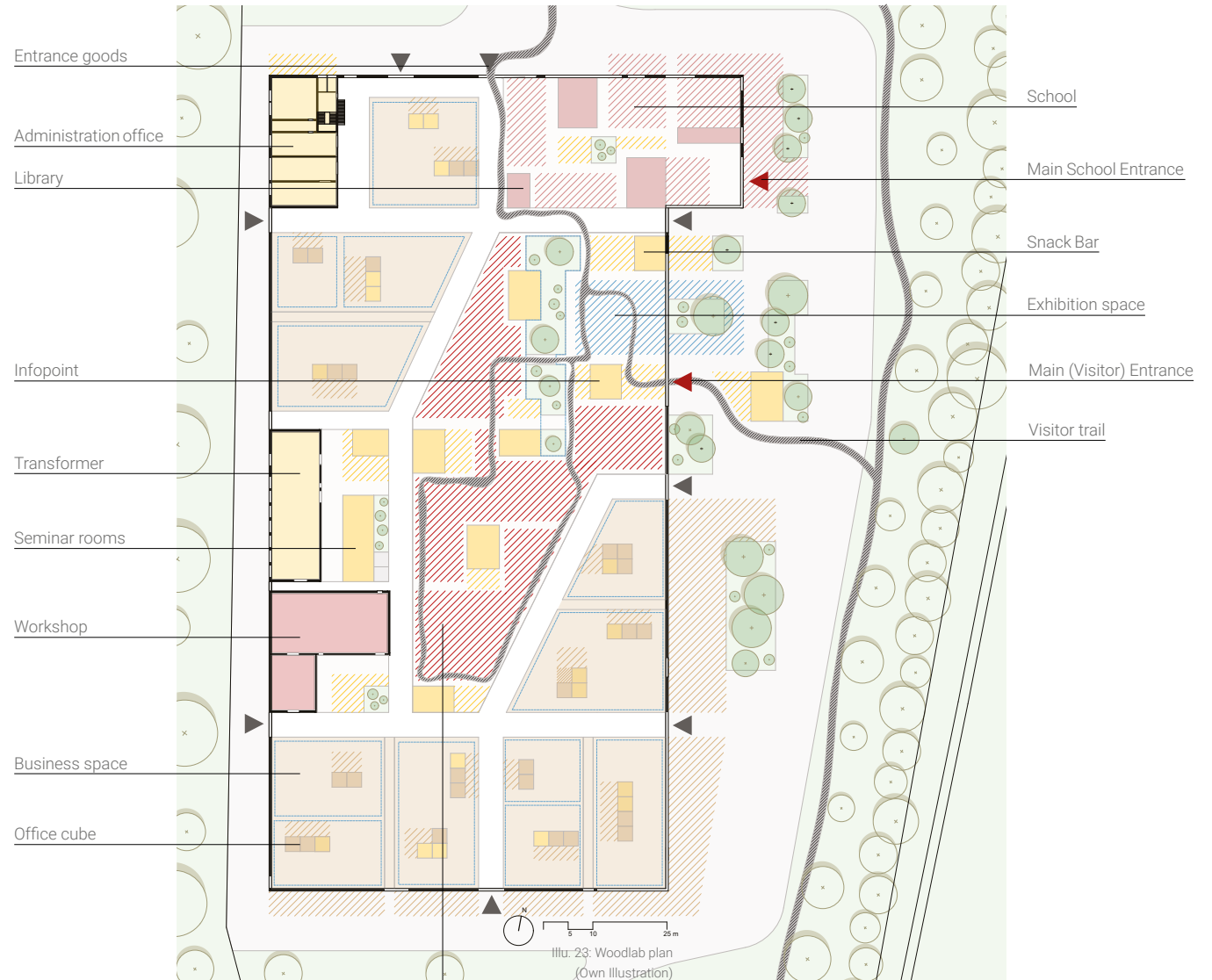
The hall forms the main element on the site, because the Woodlab Workshop with its equipment is located here. The administration and logistics department of the Woodlab will find their space in the already existing offices in the hall. In contrast to the site, small businesses with a maximum of five employees can rent space in the hall and use the common rooms such as seminar rooms or workshops. Additionally the school is located in the hall. The students will have the opportunity to gain practical experience at the local businesses. The businesses will benefit by being able to hire young employees, who are already acquainted with the equipment that will be used in their daily work. The hall itself is built like a city. There are main streets and side streets, private and public spaces, as well as built-up and open spaces.

The businesses may design their area as they wish, but the hall should always show a certain openness and transparency. For this reason, only a limited amount of solid materials are used as space-forming elements.

## WOODLAB WORKSHOP

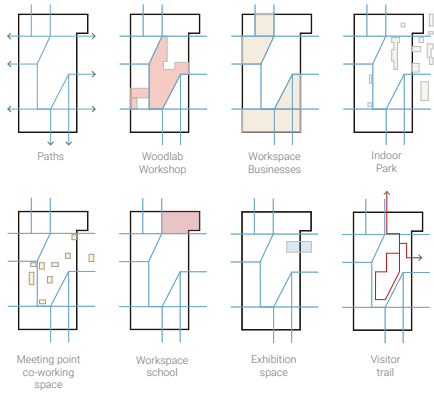


## USE



## WOODLAB WORKSHOP

## CONCEPT HALL



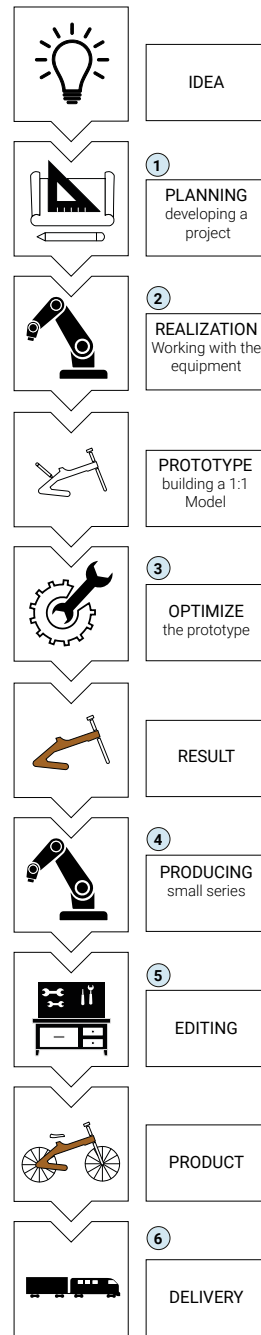
## WOODLAB WORKING-SPACES



## WOODLAB INDOOR PARK



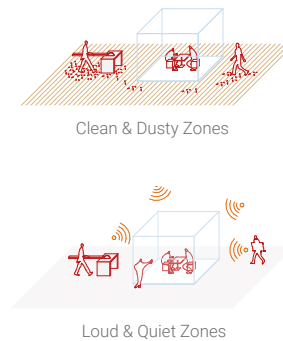
## PROCESS OF A BUSINESS IDEA



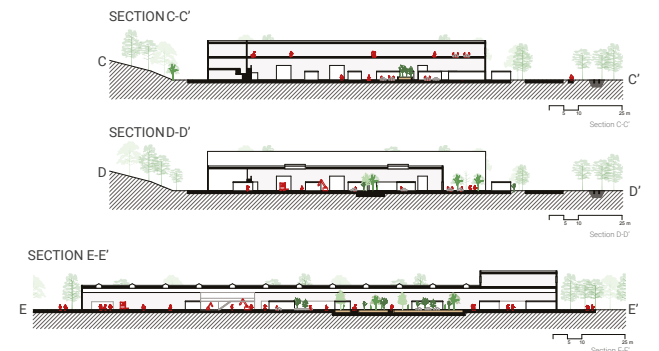
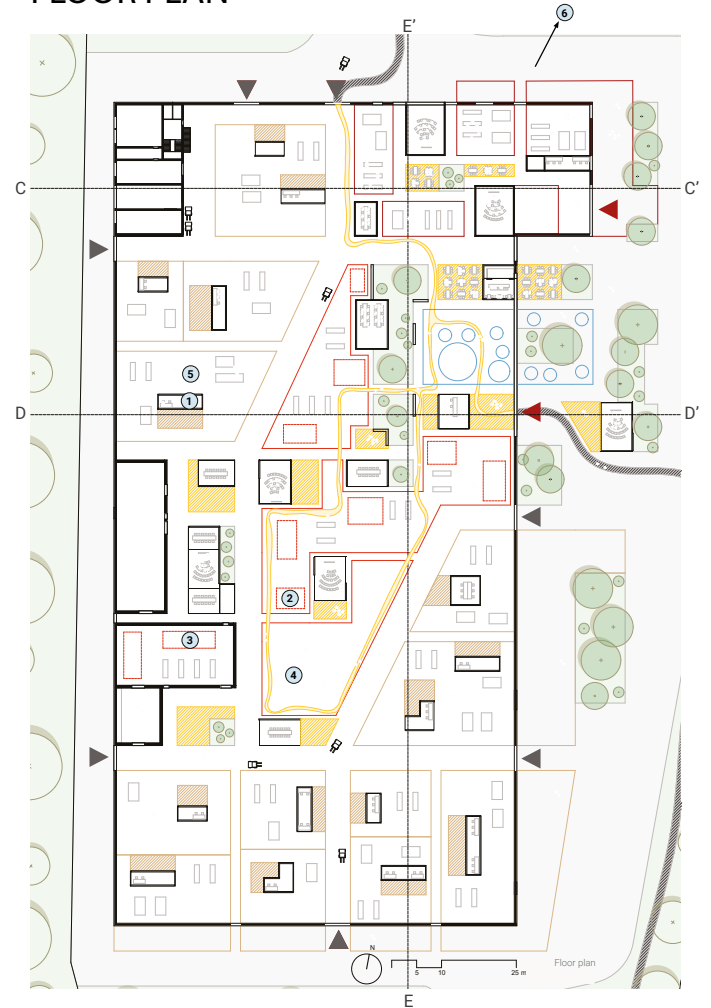
## SPACE-FORMING ELEMENTS



## ZONES



## FLOOR PLAN

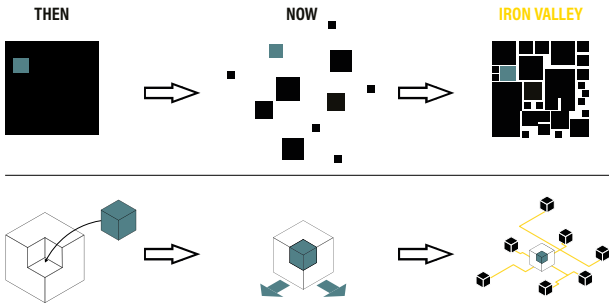


# IRON VALLEY

*Josefine Mochar  
Niklas Kirstein  
Magdalena Oppel*

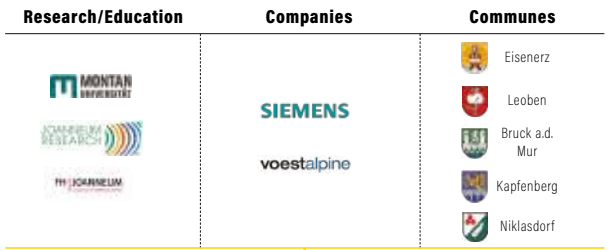


**EISENERZ AS A CENTER FOR A STRONG REGION**



Eisenerz could once be seen as an important piece in a very prosperous and dynamic region that included other communes deeply involved in the montane sector. As of now, this connection seems lost and each town finds itself in a battle for survival. Therefore the overall goal must be reconnecting the region and thereby reducing individual dependencies on single resources. A strengthened Eisenerz can act as a central location and anchorpoint for a strong network, branded as **IRON VALLEY**.

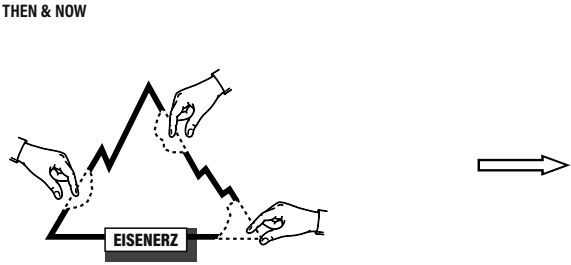
**THE IRON VALLEY ORGANISATION**



**IRON VALLEY RESEARCH AND DEVELOPMENT**

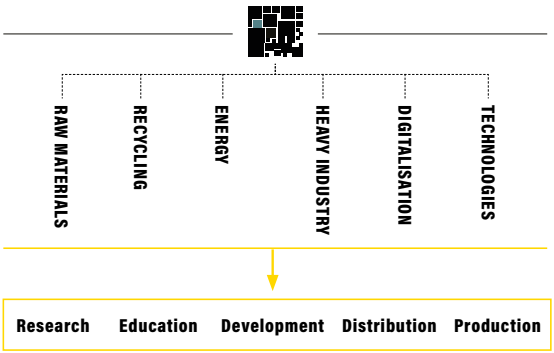
To further emphasize the regional and sectoral connection, key players of the surrounding area will make up the main core of a newly founded research and development organisation, based in Eisenerz. This organisation will work on the elements of resource production and processing, with the main goal to help transition the sector into a bright and sustainable future.

**THE MONTANE FUTURE**

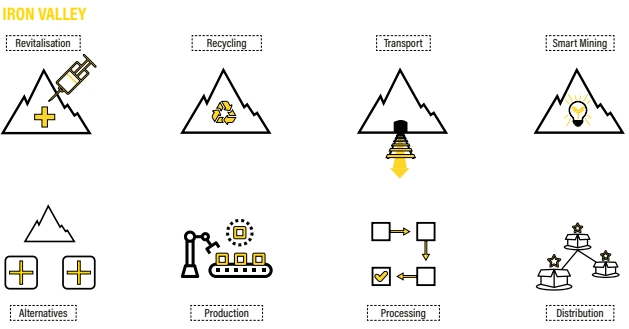


Upon further reflection the montane sector is deeply embedded in the regions identity and self-conception. But up to this point in Eisenerz' history the main focus in this field seems to lay on the mining and dismantling of the iron sources - a state that is neither sustainable for the environment, nor does it provide a reliable perspective for the town itself. The end of iron mining in this region is foreseeable. Nevertheless, the montane know-how and location of

**STRUCTURE AND ORGANISATION**

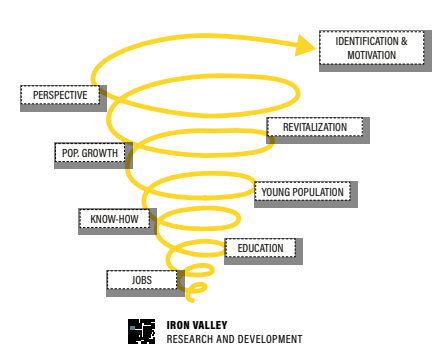


The Iron Valley Organisation is structured in six **main fields** that derive from the expertises of the included players. Five **divisions** further structure the organisation to cover a broader and more sustainable business approach.



Eisenerz and the "Iron Valley" allows for a much brighter future, a future that provides **smart solutions, sustainability, efficiency, longevity** for the montane sector and connected production and processing chains. A future that needs to be discovered and spread into the world.

**AN UPWARD SPIRAL**



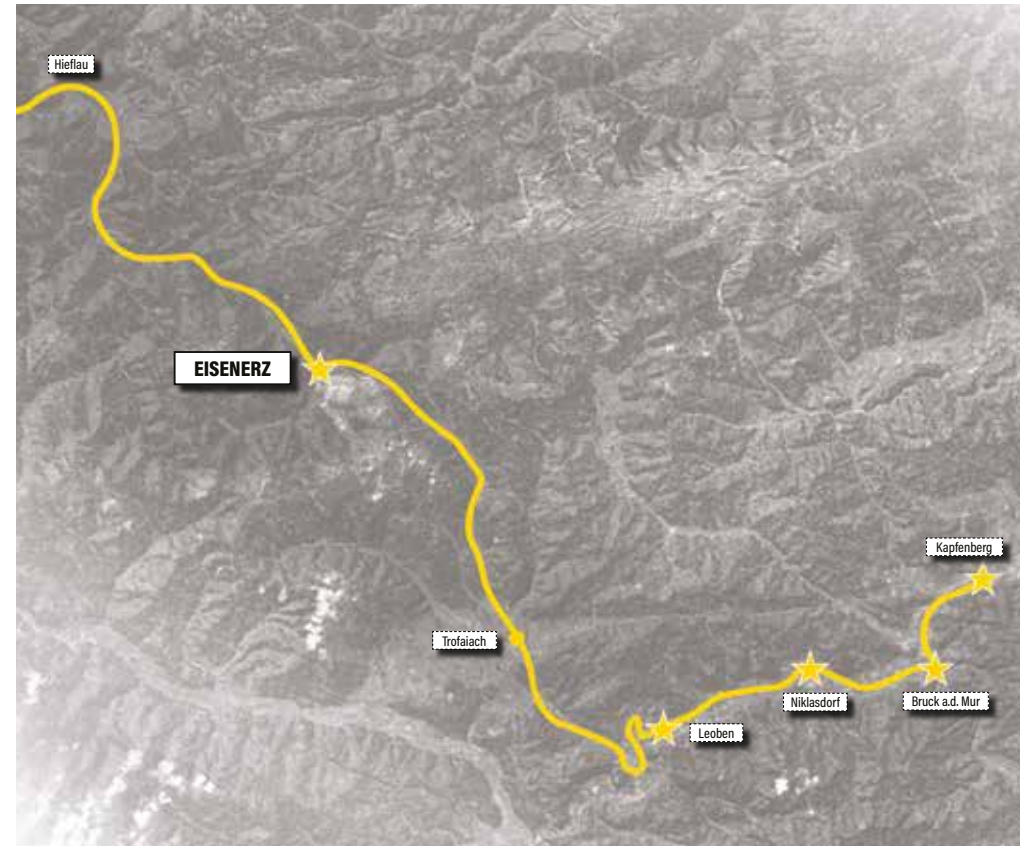
By implementing the IRON VALLEY ORGANISATION local and regional synergies and effects will occur and strengthen Eisenerz both in the short and in the long run. This will not only affect the infrastructure and economy but also the demographical and social stability.



As proposed, the infrastructural connection between the mentioned communes is of utmost importance. Eisenertz, as the projected center of the IRON VALLEY, should therefore be a role-model in regional and local transport. On a regional scale, the newly integrated and technologically advanced automated busservice **VALLEYWAY** grants simple and pleasant commute for inhabitants and visitors alike.

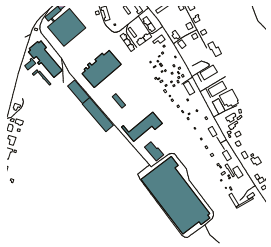
The local **ERZBERGTRAM**, a modern homage to the abandoned Erzbergbahn, reuses the existing railway system for a quick, easy and accessible linkage between relevant town structures. Additionally an extensive bike-sharing system completes the local mobility system.

**THE CONNECTED REGION**

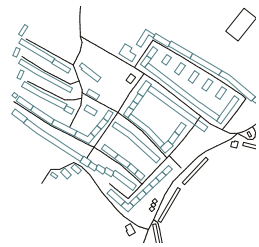


On closer examination of the city of Eisenertz three built structures are eye-catching. These dominating and prominent structures are directly connected to the rich history of Eisenertz itself, as they are rooted in the industrial production and the historical uprising of the town. Each of these structures enables a unique interaction with spatial situations. As the incorporation of the mentioned key players is very important for the further development of Eisenertz, the industrial structures serve as a starting point for business and research activities. ▶

**ANALYSIS AND APPROACH: THREE TOWN STRUCTURES - THREE PHASES OF DEVELOPMENT**



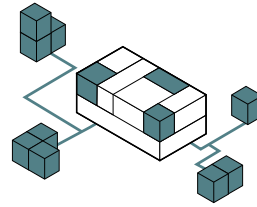
EXISTING STRUCTURES OF INDUSTRY



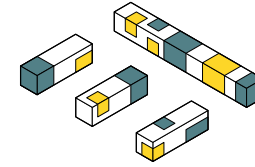
EXISTING STRUCTURES OF WORKERS' HOUSING



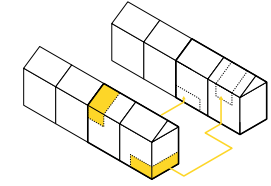
EXISTING STRUCTURES OF THE CITY CENTRE AND OLD TOWN



REACTIVATING EXTINGUISHED INDUSTRIAL STRUCTURES



RENOVATING AND REACTIVATING EXISTING HOUSING STRUCTURES



SYNERGIES REVITALIZE OLD TOWN STRUCTURES

**TIMELINE**

**PHASE 1**

Renovating the industrial structures | Additional Buildings; Headquarter and office buildings | courtyard design | Regional and local infrastructural connection

**PHASE 3**

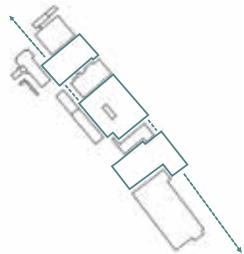
Renovating and refurbishing old town structures and objects | Integration of small businesses and young start-ups | Integration of retail and gastronomy



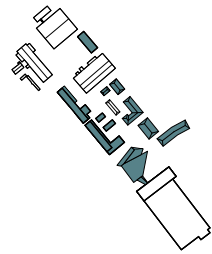
Reuse of touristic apartments | Renovating the old worker's housing structures | Landscape design | Shuttleservice

**PHASE 2**

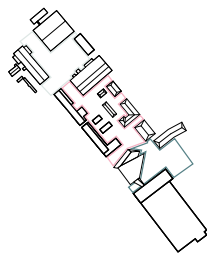
**PHASE 1 - A NEW QUARTER FOR THE IRON VALLEY ORGANIZATION | WORK AND RESEARCH**



STEP 1 - MAKING USE OF/ACTIVATING ALREADY EXISTING COURTYARDS



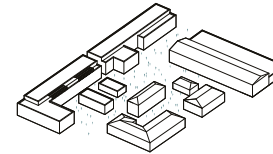
STEP 2 - CONSTRUCTIONAL ADDITIONS STRENGTHEN THE 3 COURTYARDS



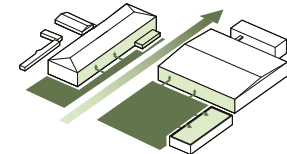
STEP 3 - DISTINGUISHING SPACES THROUGH UNIQUE QUALITIES



COURTYARD I - THE QUARTERS ENTRANCE AND INFRASTRUCTURAL HUB

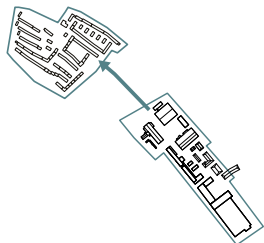


COURTYARD II - URBAN DENSITY AND URBAN QUALITIES

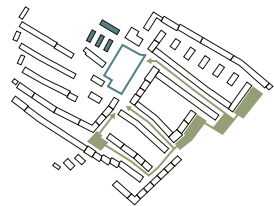


COURTYARD III - GREEN EXIT CONNECTING PHASE I AND PHASE II

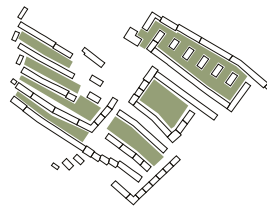
**PHASE 2 - RECYCLING OLD STRUCTURES WITH EMPHASIS ON LIVING AND LEISURE**



STEP 1 - CONNECTION TO PHASE I ALONG SLAG MOUNTAIN

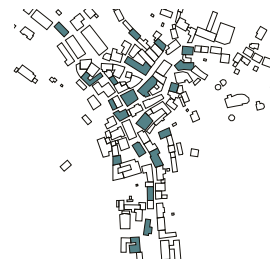


STEP 2 - CENTRAL SQUARE SUPPORTED BY NEW BUILDINGS AND PUBLIC GREEN SPACES



STEP 3 - DESIGNING NEW PRIVATE SPACES FOR LEISURE AND RELAXATION

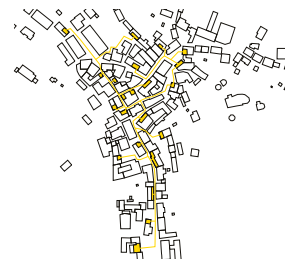
**PHASE 3 - REVIVING THE OLD TOWN WITH YOUNG BUSINESSES AND PUBLIC USAGE**



STEP 1 - IDENTIFYING VACANCY AND POTENTIAL UNITS



STEP 2 - RENOVATING UNITS AND ALLOWING YOUNG START-UPS/RETAIL TO MOVE IN

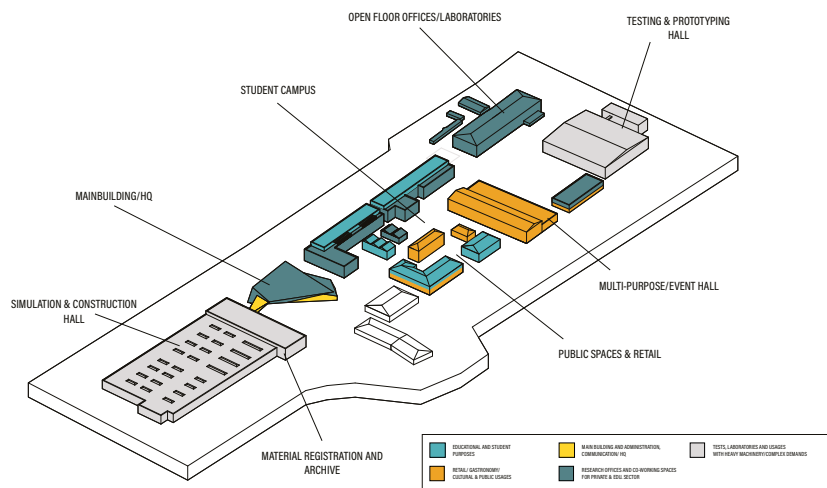


STEP 3 - VARIETY OF BUSINESS AND SHOPS CREATES A VIVID TOWN NETWORK

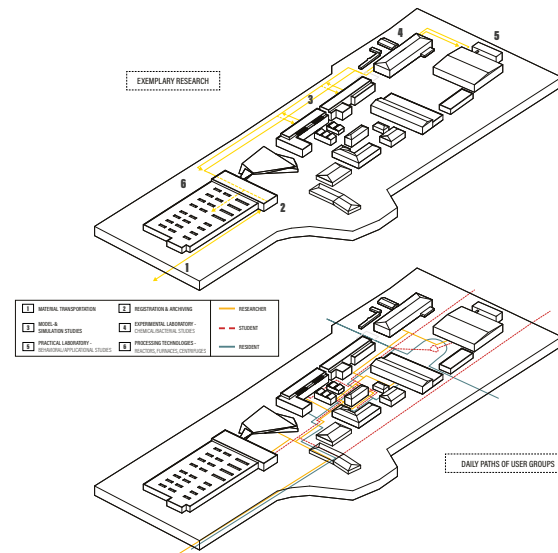
**SITE PLAN**



**USAGES & FUNCTIONS**



**EXEMPLARY RESEARCH // DAILY PATHS OF USER GROUPS**









**FLOOR PLAN - SIMULATION & CONSTRUCTION HALL**

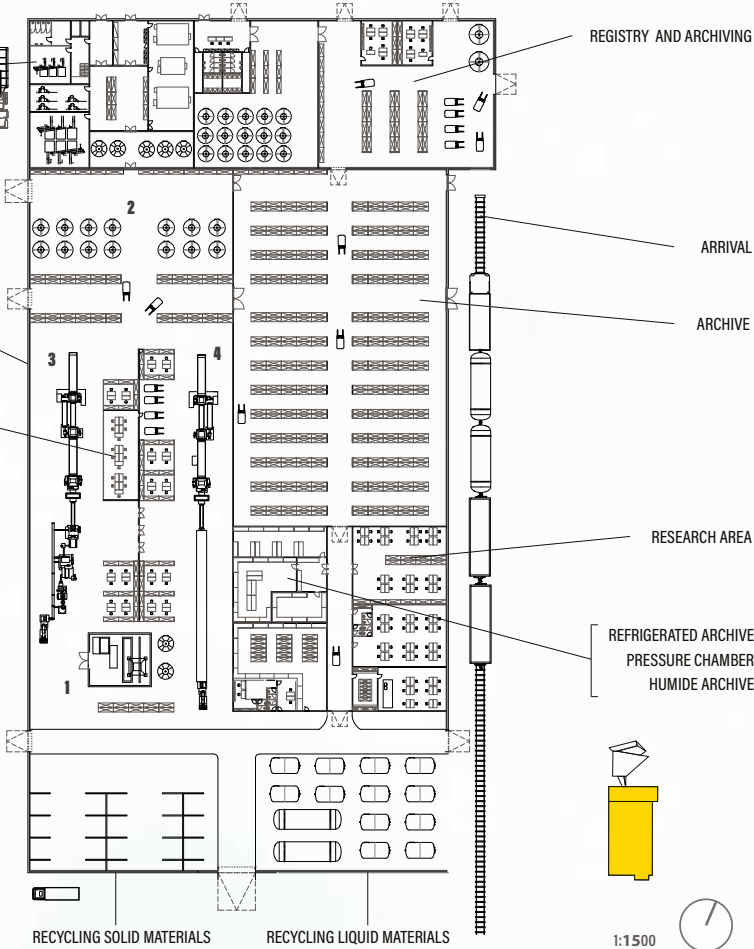
HOUSE TECHNOLOGY

TREATMENT AND PROCESSING TECHNOLOGY

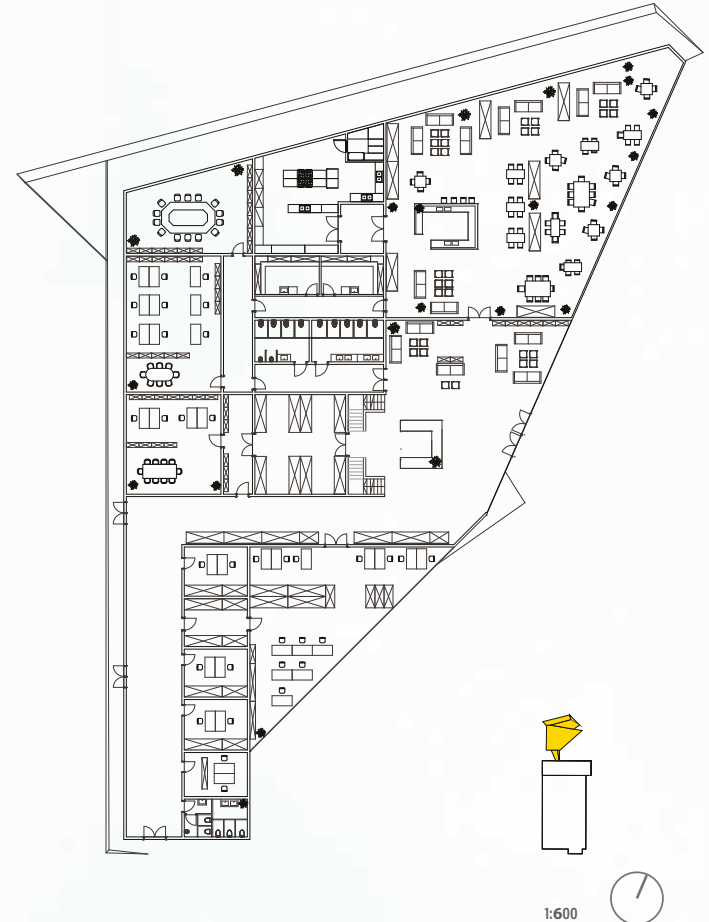
SIMULATION LABORATORIES

**EXEMPLARY MACHINERY**

<p><b>1</b> BLAST FURNACE</p> 	<p><b>2</b> REACTORS</p> 
<p><b>3</b> CRUSHING MACHINE</p> 	
<p><b>4</b> MECHANICAL SHAKER</p> 	



**FLOOR PLAN - HEADQUARTER BUILDING**



SECTION - COURTYARD 1  
1:600



# RE&UP CYCLING THE CITY

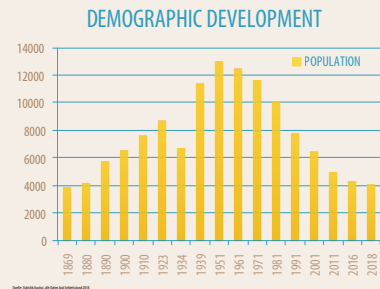
*Philippe Kayser  
Anita Kafka  
Guillaume Fenard*



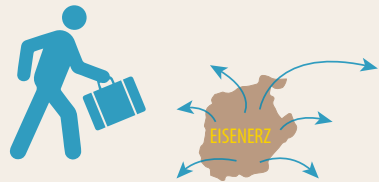
# RECYCLING THE CITY

## UP

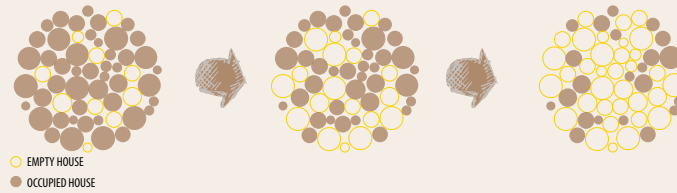
### THE SITUATION



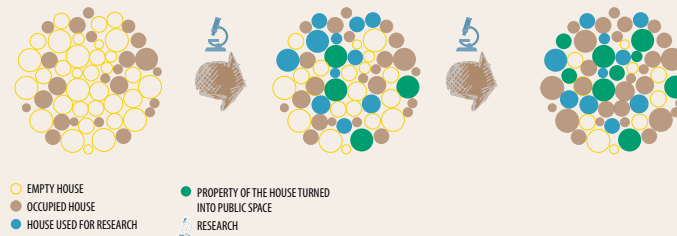
OLDEST TOWN IN AUSTRIA



### THE PROBLEM



### THE SOLUTION



### THE SITE AS INITIATOR

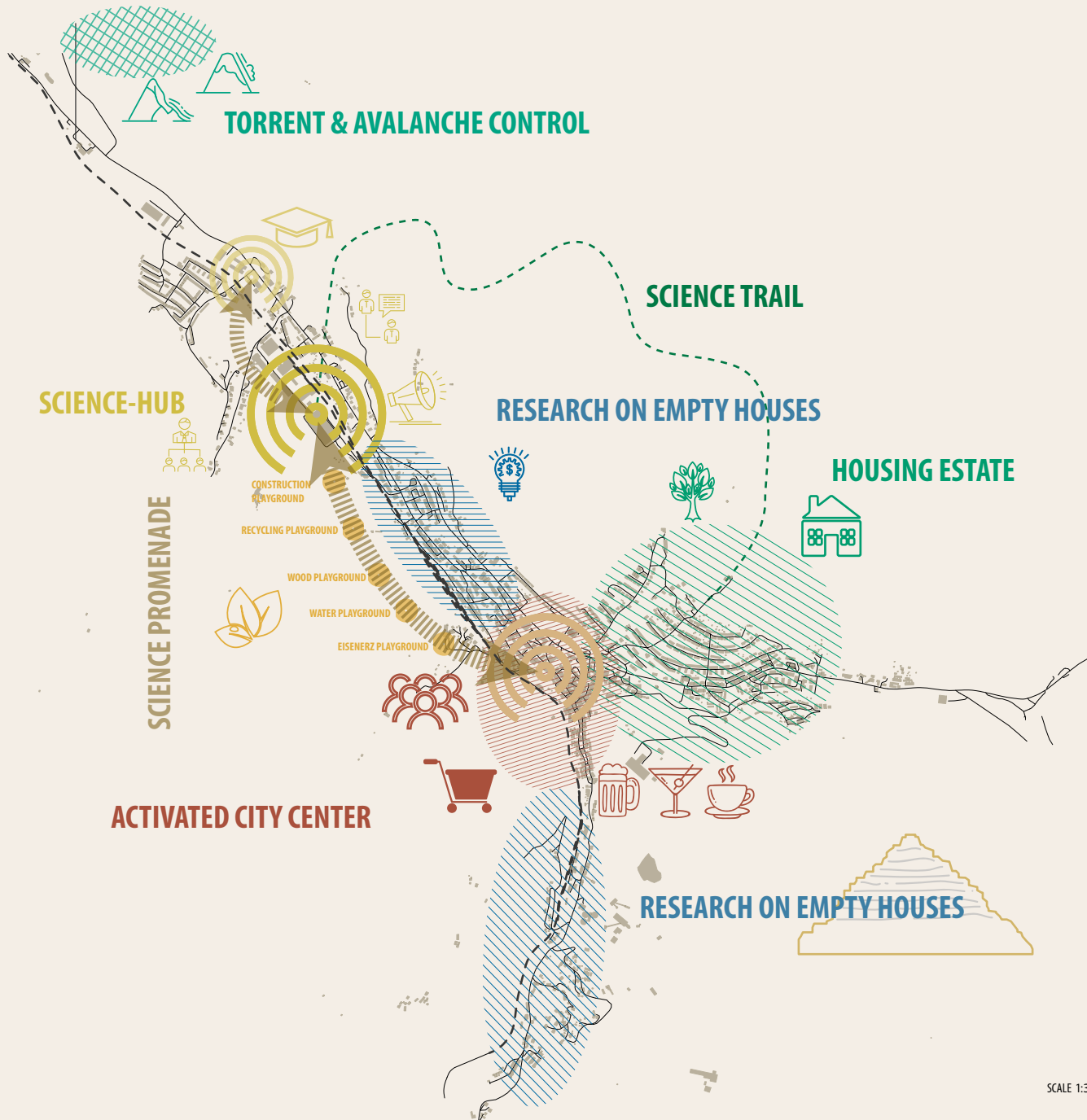


### WHERE?



With the drastic demographic changes Eisenerz has encountered during the last years, abandoned houses and shops determine the atmosphere of the city. As the iron production is not as flourishing as it used to be, Eisenerz lost a large amount of workplaces since a big part of the production has been replaced by machinery. As a consequence, a lot of people are leaving Eisenerz for Leoben, Graz or even Vienna because the work market is much more attractive and the cities have more to offer than empty stores and a city centre that is far away from its prime days. Our concept sees the implementation of research as the first part of the solution. As the development plan of the city defined two different zones, where on one hand one gets funding for the destruc-

tion of houses and on the other hand one receives money for the renovation of houses. We see the bundle of vacant buildings as a huge opportunity. Lots of people are already researching in a field called „recycling architecture“ and have the goal to discover new ways of how to renovate houses, improve the methods of destroying houses and recycle the material. Further we want to combine that knowledge with the experience from people of Eisenerz as well as tourists. Therefore we want to transform the AIL into a new Knowledge-HUB, where people can meet, discuss, experiment and have a good time. As we are creating new perceptions from old buildings and are bringing experts and inhabitants together, we name our project RE&UP CYCLING THE CITY.



THE CATEGORIES

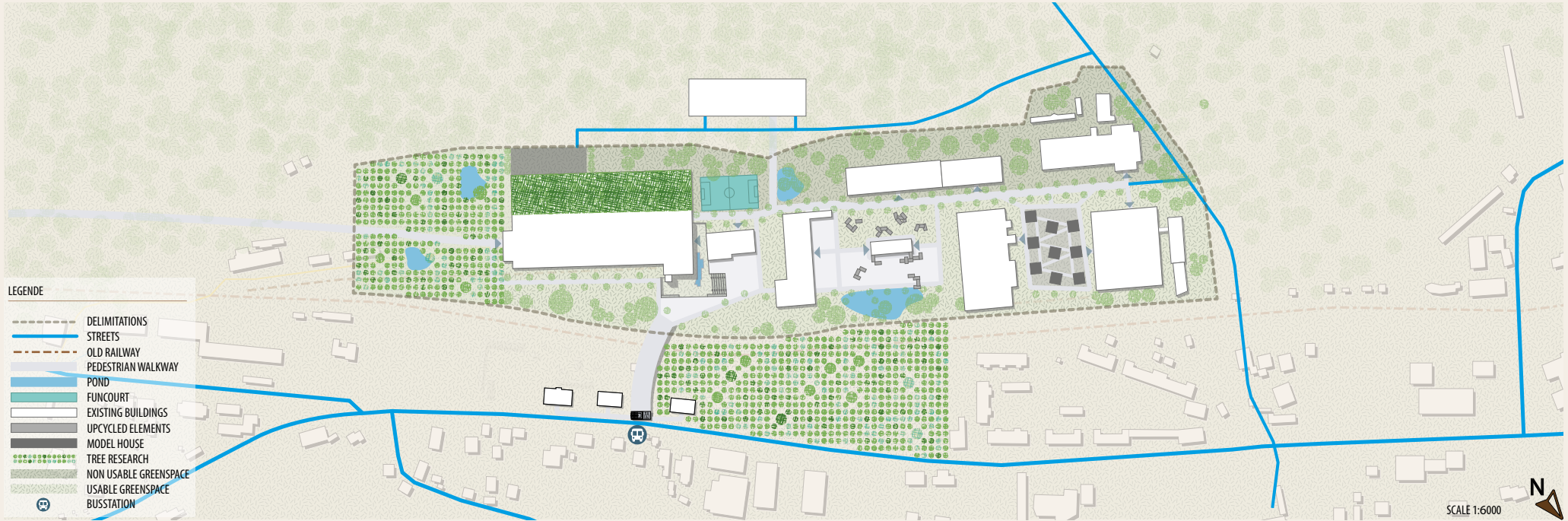
PRESERVING FOR THE CITY		DESTROYING FOR THE CITY	
<b>REVITALIZATION</b>		<b>EXPLOIT</b>	
Buildings for researching new technologies for revitalization and aesthetic demands, as well as new usages.		Buildings for research only that will be kept intact until all possible research is concluded and then destroyed (flood testing in cellars, strength of walls, etc.).	
<b>CONVERSION</b>		<b>RECYCLING</b>	
Buildings for researching the change of existing static structures for new usages.		Even old buildings contain material that have longer life cycles than the building itself and can be reused for further projects or even research. In order to gain access to these materials we need to destroy the building.	
<b>STABILIZATION</b>		<b>MAKING SPACE</b>	
To keep empty buildings from losing up to 5% value each year, companies can research here how to preserve the building's integrity and implement their findings on abandoned properties around the world.		The destruction of buildings will create space in already developed areas for new buildings designated for research and exploring new concepts (urban garden, etc.).	
These buildings are in the zone already designated for funding for revitalization and the remaining costs will be supplied by the companies testing here.		These buildings are in the zone already designated for funding for destruction. Companies can buy a house for testing new technologies intended for renovation which need further research that could weaken the buildings structure.	

THE EVENTS

MONTH	EVENTS	SEASONS	SCIENCE-CENTER	SCIENCE TRAIL	WORKSHOPS & TEAM BUILDING SEMINARS TOGETHER WITH CITIZENS
DECEMBER					
NOVEMBER					
OCTOBER					
SEPTEMBER					
AUGUST		AUTUMN AUG - SEPTEMBER	SCIENCE-CENTER	SCIENCE TRAIL	
JULY					
JUNE		SUMMER MAY - JUNE			
MAY					
APRIL					
MARCH		SPRING JANUARY - MARCH			
FEBRUARY					
JANUARY					

DECEMBER: WEIHNACHTSWUNSCHKONZERT: 15.12. SPECKMESSE: 26.12. KRAMPUS/NIKOLO SNOW-MAN-COMPETITION  
 NOVEMBER: AGV Stadchor: 11.10. TOTENGEDENKFEST: 31.10. OPEN-DOORS EISENERZ ROSTFEST: 16.08. - 17.08.  
 OCTOBER: ADVENTURE DAYS AM ERZBERG: 20.7 - 27.7. OSWALDRIKTAG: 4.8. GLOBETROTTER RODEO: 23.8. - 25.8. ERZBERGRODEO: 30.05. STADTFEST: 29.6.  
 SEPTEMBER: OSTERMARKT: 13.4. FASCHING MARIAZ, WALLFAHRER WOOD-CUTTING-COMPETITION SCIENCE-DAYS  
 AUGUST: HIKING & HIDING BOAT ON THE LAKE EISENERZA "RT MUSIKVERBUND, BERGKAPELLE & CHOR KULTURELLE VERANSTALTUNGEN ERZBERGGRABAU  
 JULY: SKIING  
 JUNE: SKIING  
 MAY: SKIING  
 APRIL: SKIING  
 MARCH: SKIING  
 FEBRUARY: SKIING  
 JANUARY: SKIING  
 WINTER: NOVEMBER - DEZEMBER  
 AUTUMN: AUGUST - SEPTEMBER  
 SUMMER: JUNE - JULY  
 SPRING: JANUARY - MARCH

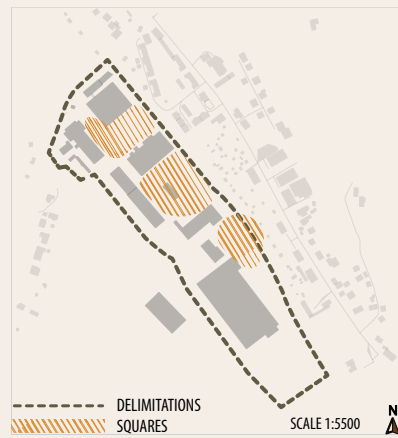
SCALE 1:30.000



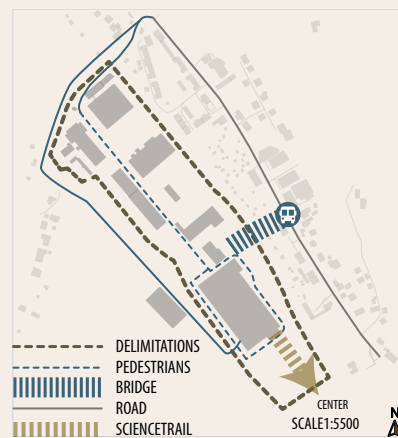
GREEN SPACES



SQUARES



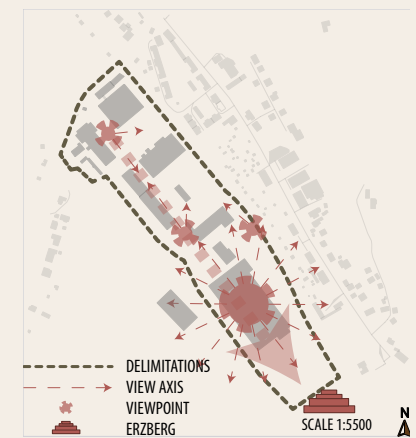
CONNECTIONS



ENTRIES



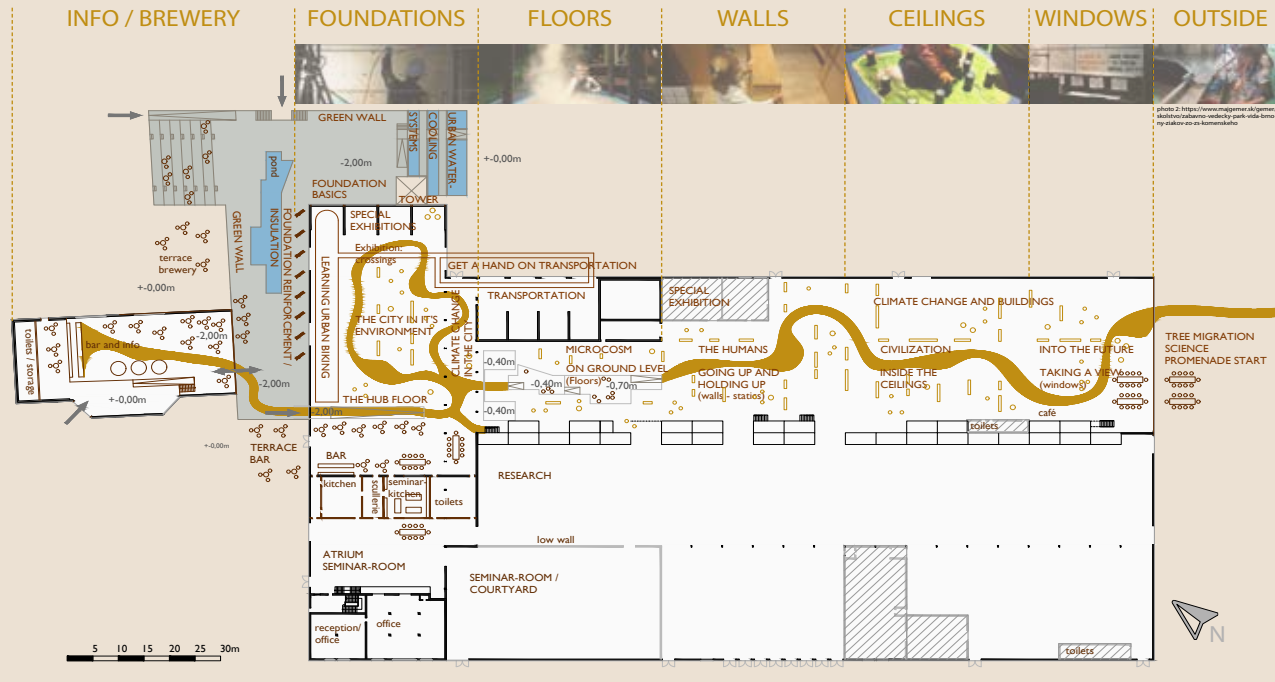
SIGHTLINES



## THE SCIENCE CENTER

### BUILD YOUR KNOWLEDGE FROM THE FOUNDATION UP AT THE SCIENCE HUB!

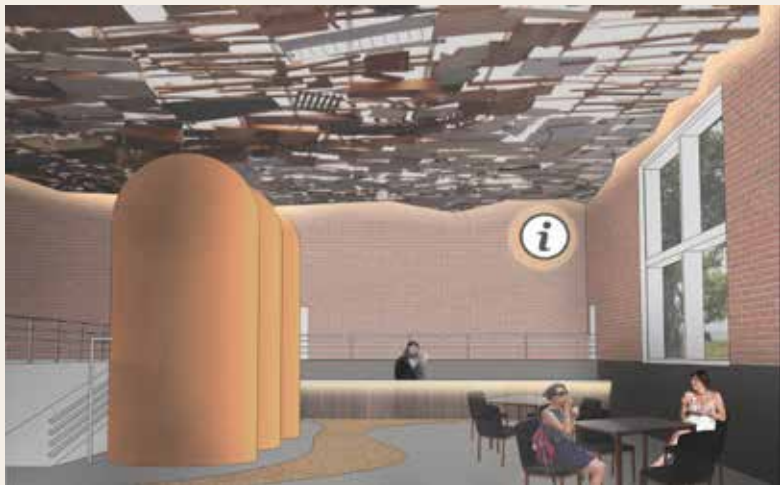
Starting at the construction and upgrading of foundations - an outdoor exhibition right at the walls of the hub - you will get your information at the brewery, and can then choose to walk through the hub via the buildings-path (from the floors, walls, ceilings to the windows and right to the science promenade towards the city) or combine your visit to learn about the wide range of science at large: from the basics of human life in it's built environment (from housing, to cities and states), as well as it's natural environment (it's workings as well as the changes to come due to climate change and the plans for disaster control) to learn about your own life inside the buildings, the city, and the world.



## THE RECYCLED ROOFTOP AND INTERIOR



## THE INFOPOINT WITH BREWERY



## THE MATERIAL CONCEPT

	<p><b>ALL THE WOODEN DOORS</b></p> <p>In small workshops the old wooden doors from abandoned houses are being manipulated to form a new ceiling panelling.</p>		<p>Residents and visitors are coming together to give the new ceiling their individual touch in an at first very simple structure, and learn from old and new techniques of woodwork.</p>	
	<p><b>RETHINKING STATICS</b></p> <p>There are new forms to be found with the old abandoned wooden beams and girders as the new tower of the science center is designed.</p>		<p>The workshops explore statical systems for conventional housing and renovation as well as going to the limits of statical constructions when creating life-size art installations.</p>	
	<p><b>WINDOWS ON THE LOOSE</b></p> <p>It takes the knowledge of old techniques and new demands to upcycle the glass of old buildings.</p>		<p>Professionals find new ways as residents try to merge memories forged by looking through the windows of the town into a large structure bringing in the light to the new science hall.</p>	
	<p><b>FUN WITH FURNITURE</b></p> <p>Bring in all of the old stuff, and learn to renovate or reuse it or completely go nuts by finding functions you didn't think possible with the furnitures that were left in the old apartments.</p>		<p>At the science center old materials and furnishings are being explored for their possibilities. Be it restoration or going to the limits of their qualities. The brewery revels in it's unique style made in Eisenerz.</p>	

photos taken in Eisenerz in march 2019

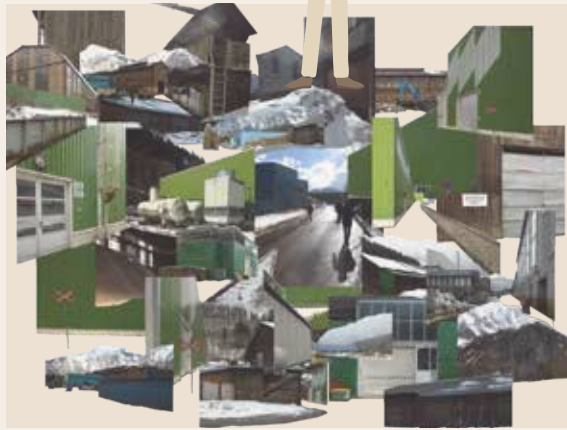
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<https://magnum.photography.com/stock-images/interior-view-of-a-modern-building-with-a-unique-wooden-ceiling>  
<https://www.shutterstock.com/image-vector/interior-view-modern-building-2019-10>  
<https://www.shutterstock.com/image-vector/interior-view-modern-building-2019-10>  
<https://www.shutterstock.com/image-vector/interior-view-modern-building-2019-10>



I heard so much about the new Science HUB in Eisenerz. Let's go and see what they have to offer!

## THOMAS' STORY AT THE HUB



The science hub is slowly coming into shape as Thomas visits the site for the first time. The first exhibition to see is the still working aluminium-recycling-center next to the old hall, but the hub is already collecting and evaluating old materials and furnishings found there as well as in the abandoned apartments of the city. From the newly erected tower, made out of the old windows of part of the roof of the hall, he is able to watch the revitalization of the building and the construction of the new roof, made out of recycled material.

While the first seminars are being held in the research-part of the hub, citizens and researchers are sorting the old materials to establish the focus of the historical exhibition.

There is a lot to be found and older residents start to share knowledge they formerly deemed uninteresting, as kids and visitors alike start to ask them about craftsmanships and remnants of living conditions found at the research-houses.

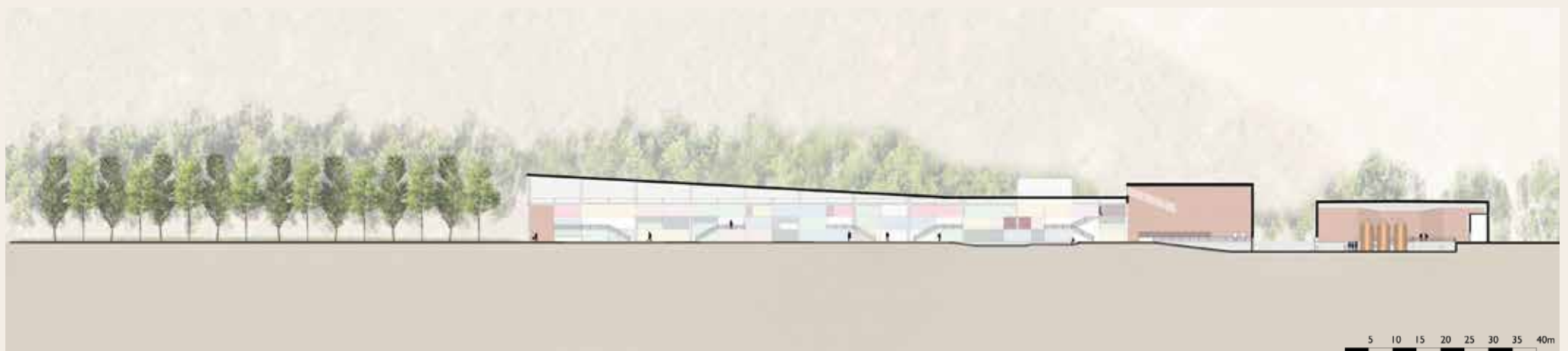


Only a few months later, the kids have first hand possibilities to learn about the construction and renovation of houses, while the hub around them is morphed into an exhibition area. With knowledge, every detail of the old hall becomes an expedition of it's own, and while improvised structures - like the brewery - turn into lasting, revitalized focal points where visitors and residents meet over the course of the day, new challenges make for new exhibitions.

More and more Thomas's knowledge widens, with his family's spreading interests and exploration of the science hub, forming new friendships and conversations.

After all these years coming here, the hub has become for Thomas a well known old friend, with every detail familiar, and yet still up to surprise one with new facets being highlighted with every exhibition and the evolving seminar's held, attracting speakers from around the world.

## SECTION OF THE HUB



## PLAYGROUND REFERENCES



CONSTRUCTION PLAYGROUND

EISENERZ PLAYGROUND

WATER PLAYGROUND

THE STORY OF THE PLAYGROUNDS

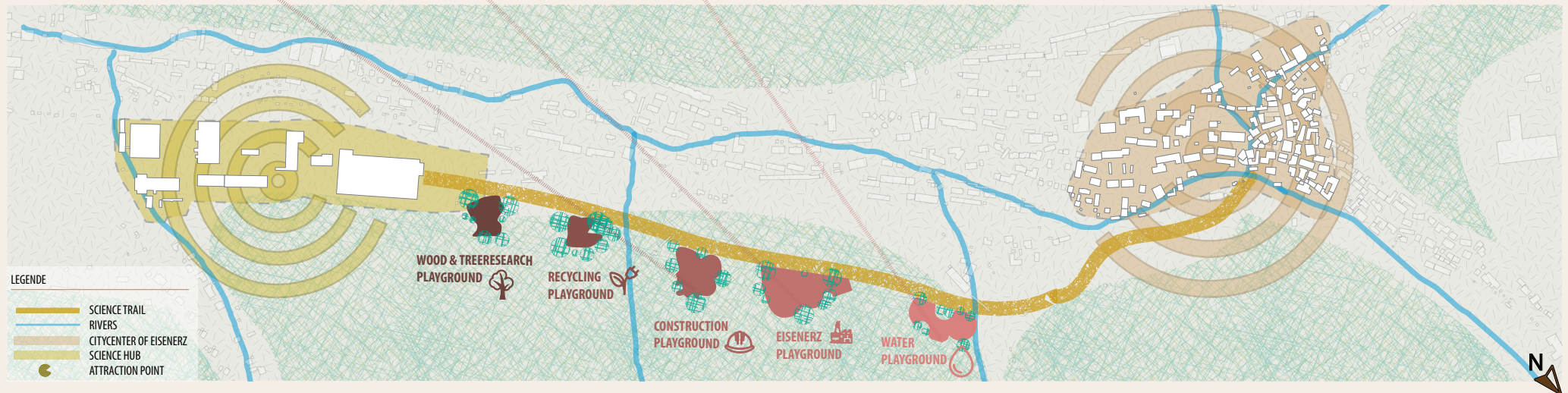


The science promenade makes a link between the science center and the city. Playgrounds and experiments conduct the visitor from one point to the other with fun and knowledge. These different areas are the result of much research and are teasing what we can find in the science hub.

With all of their senses activated, my children are learning more easily about the world. This time the challenge is to combine the knowledge to recycle material into playgrounds with the wisdom of how to keep kids entertained and educated, as well as the knowledge of science in the fields of history, water-economics, construction sites, biology, and recycling itself. It is important that the sites still stay playgrounds that the kids can also enjoy without having the stress to learn something or pass a test, but rather having the opportunity to choose between fun and learning or finding combinations of both for themselves.

As with most education for kids, it is very often the parents and grandparents that also get engaged in the playgrounds designed for learning, and these sites provide them with a relaxed way to refresh their knowledge or engage once again with the wonders of science.

## THE SCIENCE TRAIL







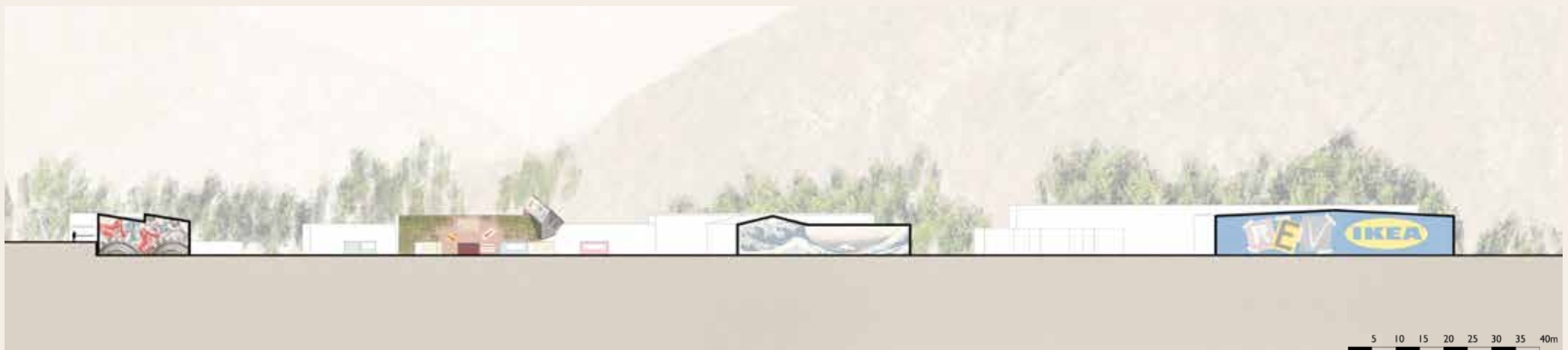
### EISENERZ; MOVING ON TO 2050

With every new generation the focus on the qualities of Eisenerz shifts, and the knowledge brought into and born out of the city let's it's citizens rediscover their home. In 2049 formerly unnoticed houses have been renovated and have become a new attraction to the city, while others constant exploration has become a visiting point in their own right, like the excavations in Pompeji. Only this time people do not only come here to learn about the past, but both, the past's craftsmanship in this region as well as the state of the art research developing at the moment. In this moment in history, the old generations have to team up with the younger ones to learn about their mountains and forests from the start again, as tree population is being adapted to the fast changing climate. This can also form a stronger bond between them again. It can be a first step to prepare yourself for the challenges coming due to climate change, so that your house (or city) remains the one standing after a hurricane like the one on mexico beach in Florida.

But like the owners of the mexico beach house, Eisenerz opens up on it's research, and collaborates with other cities and homeowners to learn itself and teach others about the solutions and problems they found, so that not just solitude families remain, but whole changing and evolving societies in an increasingly faster morphing natural environment. In this way established communication between neighbouring cities gain new depth, as one faces a lot of similar problems, and through connecting with foreign cities the region becomes aware of the possible challenges of entering a new climate zone, already well known in other regions of the world. It takes the combination of established knowledge from different viewpoints as well as the quality to adapt to a world which will be different from anything we have yet met as humans, to shape a resilient city one enjoys to live in.



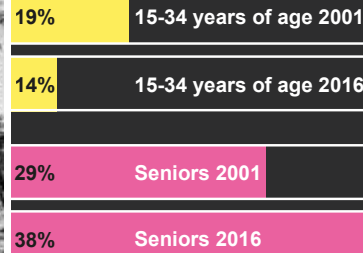
### SECTION OF THE HUB



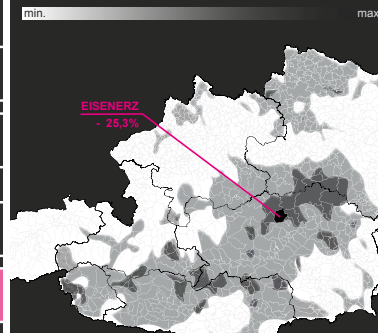
# DESIGN THE DECLINE



## MIGRATION OF THE YOUNG



## SHRINKING IN AUSTRIA 2006 - 2016



The Erzberg is a memorial of industrialization and the ruthless use of resources. Today's side effects are **job losses** through automation and therefore **huge emigrations**. It shows a way of life that is no longer compatible with today's conceptions of sustainability.

This emigration leads to a desolidarized aging society. **Vacancies, unused infrastructure, deserted streets and lanes and public spaces** left to cars draw a picture of hopelessness and dreariness that has extensive media coverage.



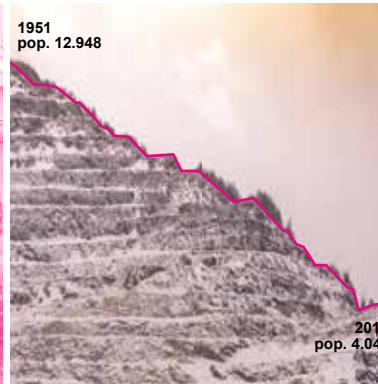
## LOSS OF JOBS



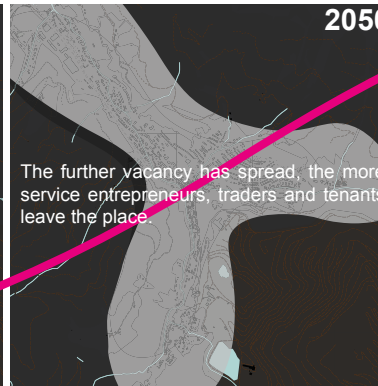
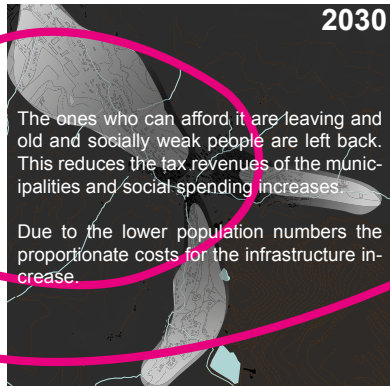
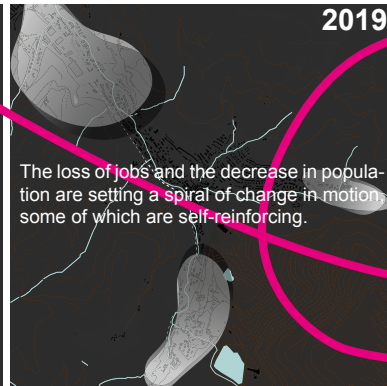
## BUDGET DEFICIT



## WASTE OF RESOURCES



- AGING SOCIETY
- MIGRATION
- LOSS OF RENT
- REVENUE DECLINE
- VACANCY



- PERFORMATIVE PARTICIPATION
- ACTIVATION OF THE YOUNG
- STRENGTHENING THE REGIONAL IDENTITY

## RESTART

Involvement of the entire community in the reconstruction is the only way to strengthen the image to the outside. And more importantly: Only by actively involving residents in the transformation, their identification with the community can be strengthened.



## PERFORMATIVE PARTICIPATION

This particular participatory approach is characterized, firstly, by its **action-oriented** approach. Secondly, by its very **location on the sites** within urban public spaces. Participation, hence, is no longer limited to a communicative exchange on urban spaces, carried out amongst different stakeholders at local community centers. Rather, participation is executed as an immediate **physical influence** and **shaping of public spaces** through tangible on-site interventions led by local citizens or planning experts.

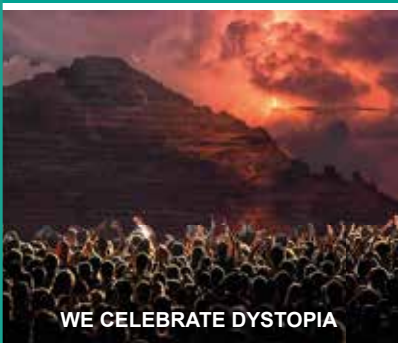
### THE ROSTFEST AS AN IMPULSE FOR CHANGE

The main issue of the demographic development of Eisenerz is the **exodus of the youth**. The **Rostfest**, however, is a weekend where thousands of art lovers, emigrated "Eisenerzer" or people from outside come to the town. Now a **contemporary infrastructure** that motivates young Eisenerzer to stay is to be created and creative people, whether with connection to the Rostfestival or external, is to be created.

This infrastructure serves everybody in town and provides a framework that enables creative people throughout the year to produce, exhibit and consume art and culture.

This means that the revival of the city will be extended from a few days to the whole year.

### THIS IS HOW THE TIMETABLE COULD LOOK LIKE ▶



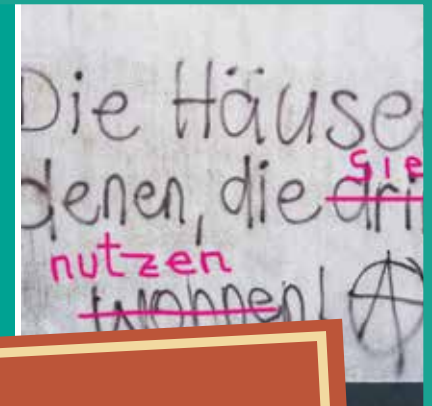
Jan.	Feb.	Mar.	Jan.	Feb.	Mar.
Apr.	May	June	Apr.	May	June
July	Aug.	Sept.	July	Aug.	Sept.
Oct.	Nov.	Dec.	Oct.	Nov.	Dec.

**EISENERZ 2019** (left side) and **EISENERZ 2025** (right side) are indicated by yellow text in the center of the calendar grid.

The creative work of the Rostfest is used and a **program** designed around the main themes of **job loss, shortage of money and waste of resources**.

This presentation of the problem fields will be the **starting point and trend reversal** at the same time.

Towards active performative participation and activation of youth, as well as the resulting increased identity of residents with their community.



## ROSTFEST #DYSPHORIA #EUPHORIA



**16. - 18.8.2022**

## TIMETABLE

### DAY 1

**no jobs for no one**

Performance:  
**Robots - how technology makes us redundant**

Lecture:  
**Who is losing his job next? It might be you!**

Workshop:  
**Work like in the old days - an insight into mining**

Lecture:  
**New ways of working - a discussion**

Workshop:  
**You are needed - alternative ways of work**

### DAY 2

**no money for no one**

Workshop:  
**Destroy what destroys you - rebuild eisenerz**

Lecture:  
**The beauty at the decay**

Workshop:  
**Occupy vacancy - a guide**

Lecture:  
**Movies 2022 - Let's build a cinema**

Workshop:  
**We reuse the ruins and bring them to life**

### DAY 3

**no nature for no one**

Workshop:  
**World record - We build the highest garbage dump**

Performance:  
**The yellow lake - we color the Leopoldsteinersee**

Lecture:  
**Mining. How we destroyed our planet**

Workshop:  
**Upcycling lost buildings. What to do with old roofs**

Walk:  
**On the trail of the Eisenerzer ecosystem**

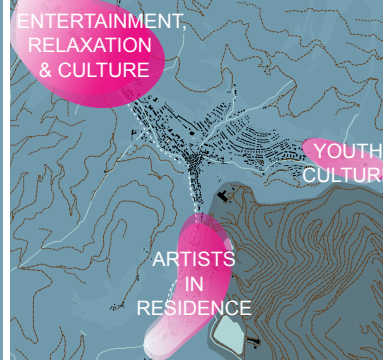
# DESIGN THE DECLINE

## UTOPIA



In 2005, the "redesign Eisenerz" development concept identified three zones that are no longer to be developed further. It is precisely these areas that make it possible to develop contemporary art and youth infrastructure.

Why? the financial affordability, the large space, the given proximity to the center and the possibility of accurate noise intensity.



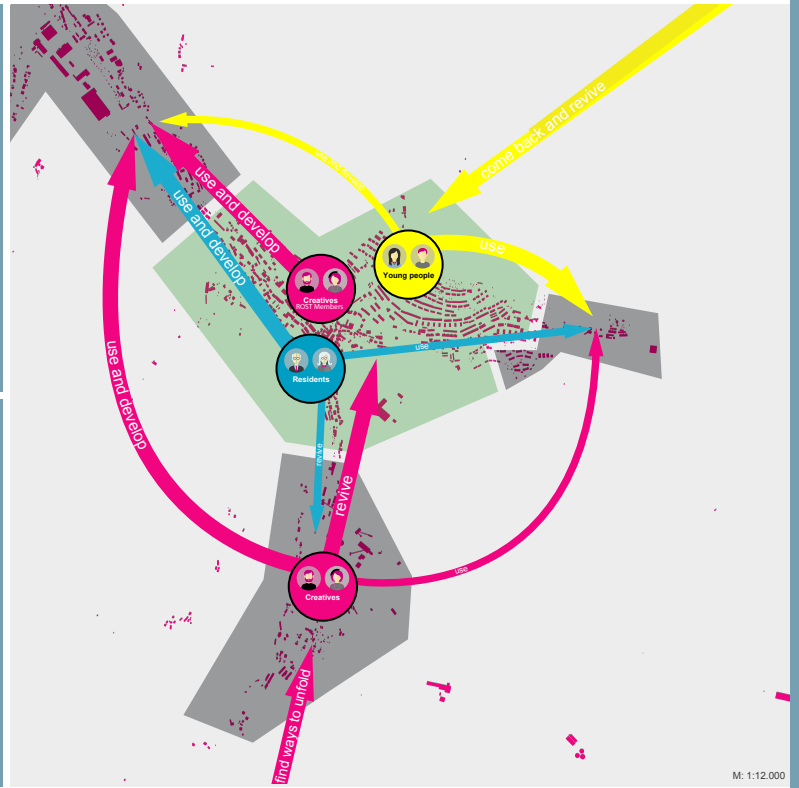
Without great investments these vacant buildings in these heavily affected areas are to be opened up for temporary use in the field of culture.

The revival of these areas also leads to a revitalization of the city center. Here, planning changes and smaller investments should lead to new impulses.

### THE THREE ZONES AND THE PLANNED FOCAL POINTS

#### FOCUS ENTERTAINMENT, RELAXATION & CULTURE

- CAFÉ
- ROSTFESTIVAL, EVENTS
- EXHIBITIONS, ATELIERS
- WORK



#### FOCUS

##### YOUTH CULTURE

- ARTHOUSE CINEMA
- BAR
- YOUTH CLUB

#### FOCUS

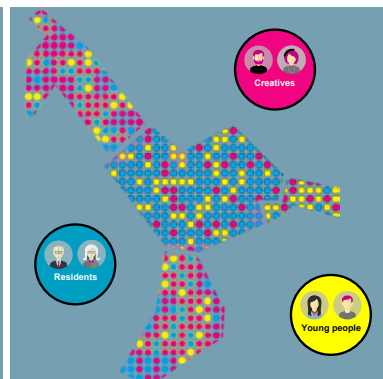
##### ARTISTS IN RESIDENCE

- SUMMERCOLLEGE
- ATELIERS
- WORKSHOPS
- LIVING SPACE
- COMMUNITY GARDENS

#### FOCUS

##### REVIVAL OF THE CENTER

- RENOVATION OF TOWN SQUARES
- TRAFFIC CALMING MEASURES
- MARKETS
- ATELIERS



Creative people are increasingly looking for experimental space and creative scope in the countryside. There, they push for domino effects, free up the power of innovation, bring resources to light that hardly anyone has perceived in the face of gloomy prognoses for the future.

This brings together people who rouse rural regions from the shock of demographic change. This also brings us closer to what seemed barely compatible in the past, rural knowledge of the origin and the potential of new technologies.

## THE EMBEDDING OF THE HALL

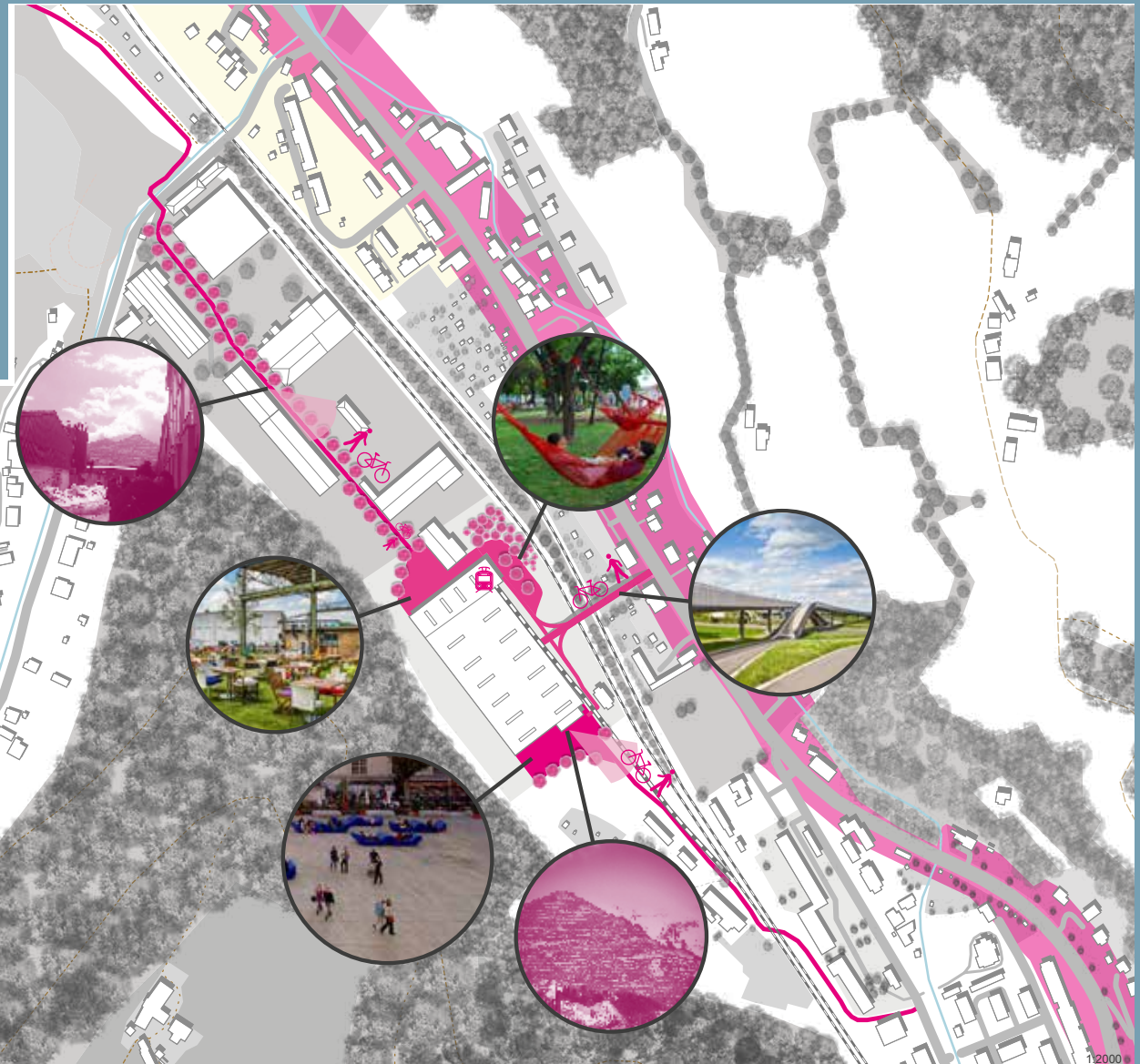
A central point in the realization of the concept is the integration of the northeast of the center located, today vacant industrial hall.

The hall will be embedded in the existing city structure. The current connection to the holiday area in the north is attracted by an alley. The southern connection to the city center is newly created and partly led away from the main road. The given visual axis to the Erzberg brings Eisenerz to the center of the viewer.

From the west, the hall is accessed by a pedestrian and cycle bridge.

In the northern area, a space situation is created in front of the hall, which offers a high degree of open space quality due to its green design and small-scale use. The current planning stands as a contrasting element to the space situation adjacent to the south of the hall.

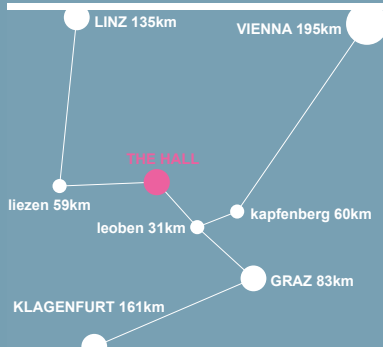
This allows for a generously proportioned and freehand design that extends the hall structures to the outside.



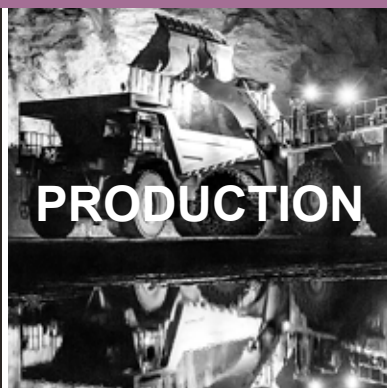
## DISTANCES



	25 min.	5 min.
BERGMANNPLATZ	25 min.	5 min.
ERZBERG ALPIN RESORT	14 min.	3 min.
ARTISTS IN RESIDENCE	26 min.	6 min.
YOUTH CULTURE	39 min.	9 min.
LEOPOLDSTEINERSEE	34 min.	9 min.



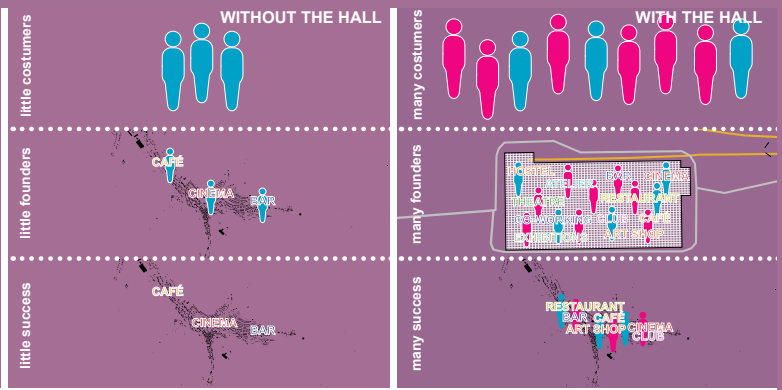
# DESIGN THE DECLINE



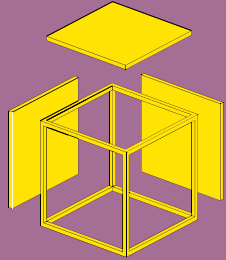
## PRODUCTION

### WHY IT NEEDS THE HALL

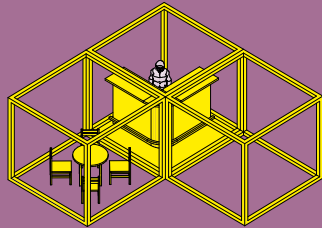
The barely existing pedestrian frequency and the associated missing customers make it almost impossible for artists, service providers and tradesmen to realize projects in the long term. This dilemma is counteracted by creating a production facility for ideas and infrastructure facilities. The bundled collection of different concepts creates an attraction that brings new audiences to the city. If the concepts work, the next step must be to establish them in the city.



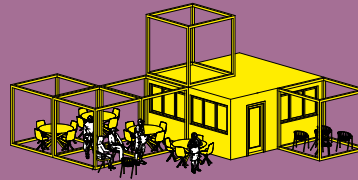
1.



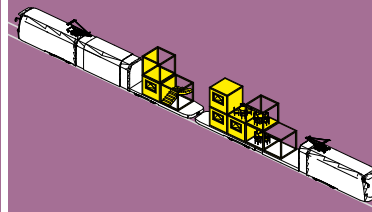
2.



3.



4.



5.



DO YOU HAVE  
AN IDEA FOR  
A PROJECT?

JOIN US AND  
START YOUR  
PROJECT.

WE OFFER  
SPACE,  
KNOW-HOW,  
AND VISITORS.  
LET IT GROW!

IT WORKS?  
WE BRING IT  
TO YOUR  
LOCATION.

DONE!  
YOU ARE  
READY TO  
MAKE IT  
EVERYWHERE

### ESTABLISHMENT OF CONCEPTS

The concept is to test ideas in the hall, develop them further and continue the finished, functioning projects outside the hall. This means that ideas can be introduced and implemented. Synergy effects and know-how of other project initiators and an art-affine audience provide a safe space for experimenting with the concepts. In this context, the last step can be taken from a good idea to an established brand.

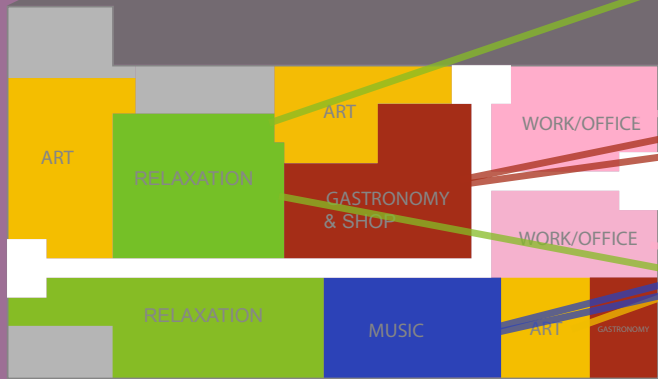
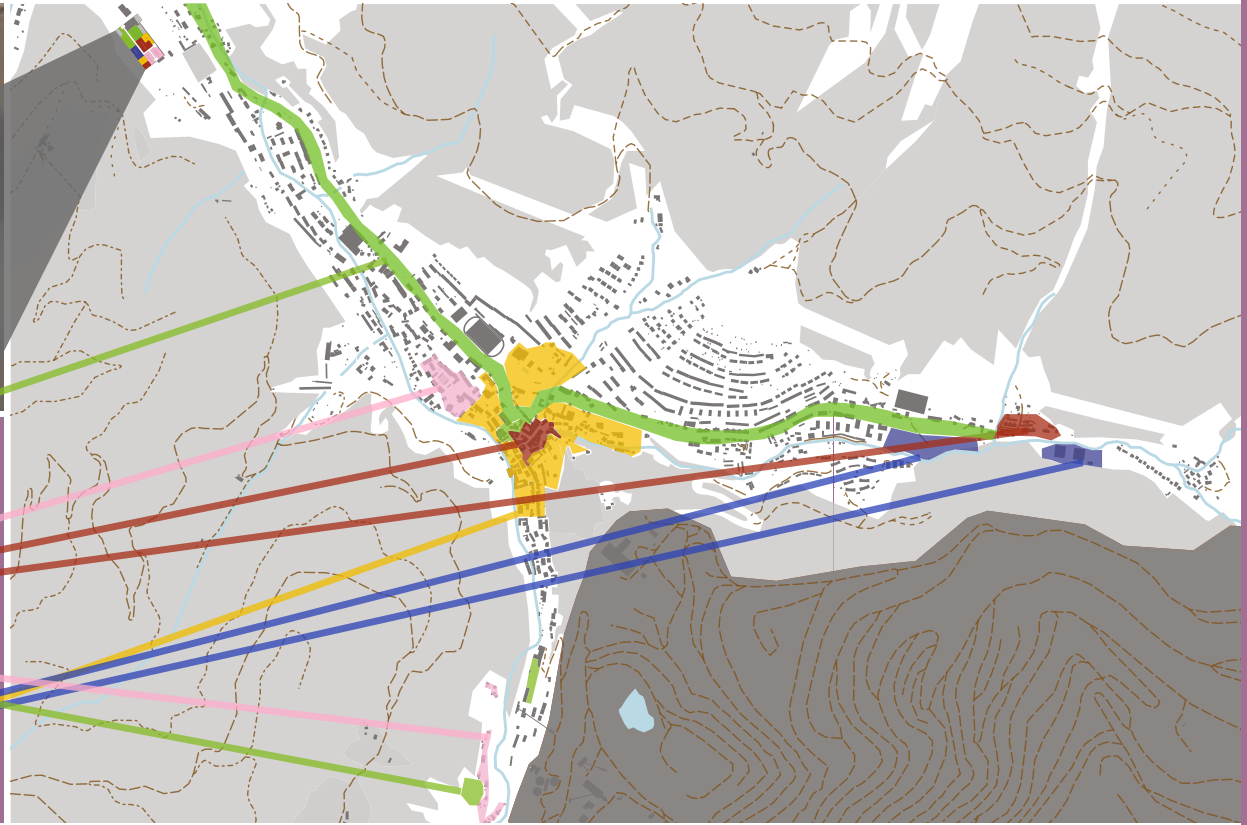
### FROM THE HALL TO THE CITY

The necessary structures for the projects consist of 2.5 x 2.5m cubes. These can be arbitrarily combined, moved and reassembled.

The existing railway line enables these modular volumes to be transported to Eisenerz but also to any other desired destination.

Daily Coffee





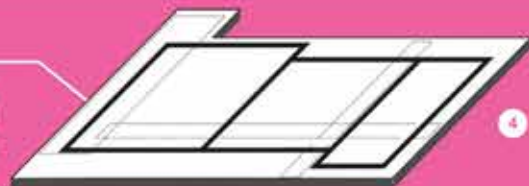
# DESIGN THE DECLINE



The former production hall presents itself as a playful structure, without a programme. There is only a frame with the internal "infrastructure" in it, but everything else can be moved, adapted, destroyed, dismantled and reassembled in order to fit the specific and momentary needs of the user at any given moment. Everything is modular, except important structuring elements and zoning that pinpoint specific uses. This represents a contrast to the current situation where the old rigid buildings cannot adapt to the shrinkage of the city.

## SKYWALK & CRANES

The main road network is complemented by a skywalk. The view from above on the different structures of the hall shows new perspectives on bars, shops, art installations, studios etc. A crane can move the modules and bring them to the loading point.



## MODULAR STRUCTURE

In these structures, the modular cubes can be arranged arbitrarily, combined and stacked, resulting in a variety of uses. In addition, these can also be taken out of the hall to any place.



## PERMANENT STRUCTURE

The network of paths, two points a central meeting point at the base of the inverted Erasing and some structural elements are not modular due to planning considerations.

The office area is pre-built, but can be customized.

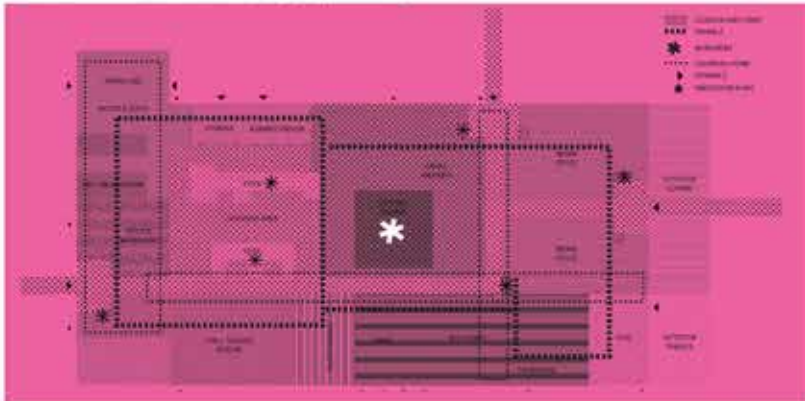


## BINDING ZONES

A usage plan that zones the hall into different areas. Small-scale and highly frequented uses are located around the central main square, area-intensive uses at the edge of the hall.



In order to make it easier to build the smaller structures that accommodate the needed functions, a modular system was adopted. The frame of the wooden cubes - 2.5m in edge length - are the building blocks. For the successful implementation of the project, it is important that people participate. It needs to be made by them in order to feel as it belongs to them.



## CATALOG

A catalogue has been put together with variations of structure possibilities. It serves as a guideline for the first assemblies that populate the hall.



OFFICE/WORK



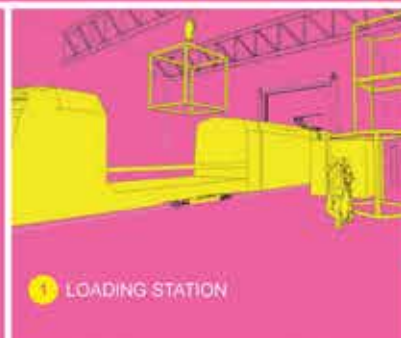
NATURE CORNER



COFFEESHOP



EXHIBITION



1 LOADING STATION

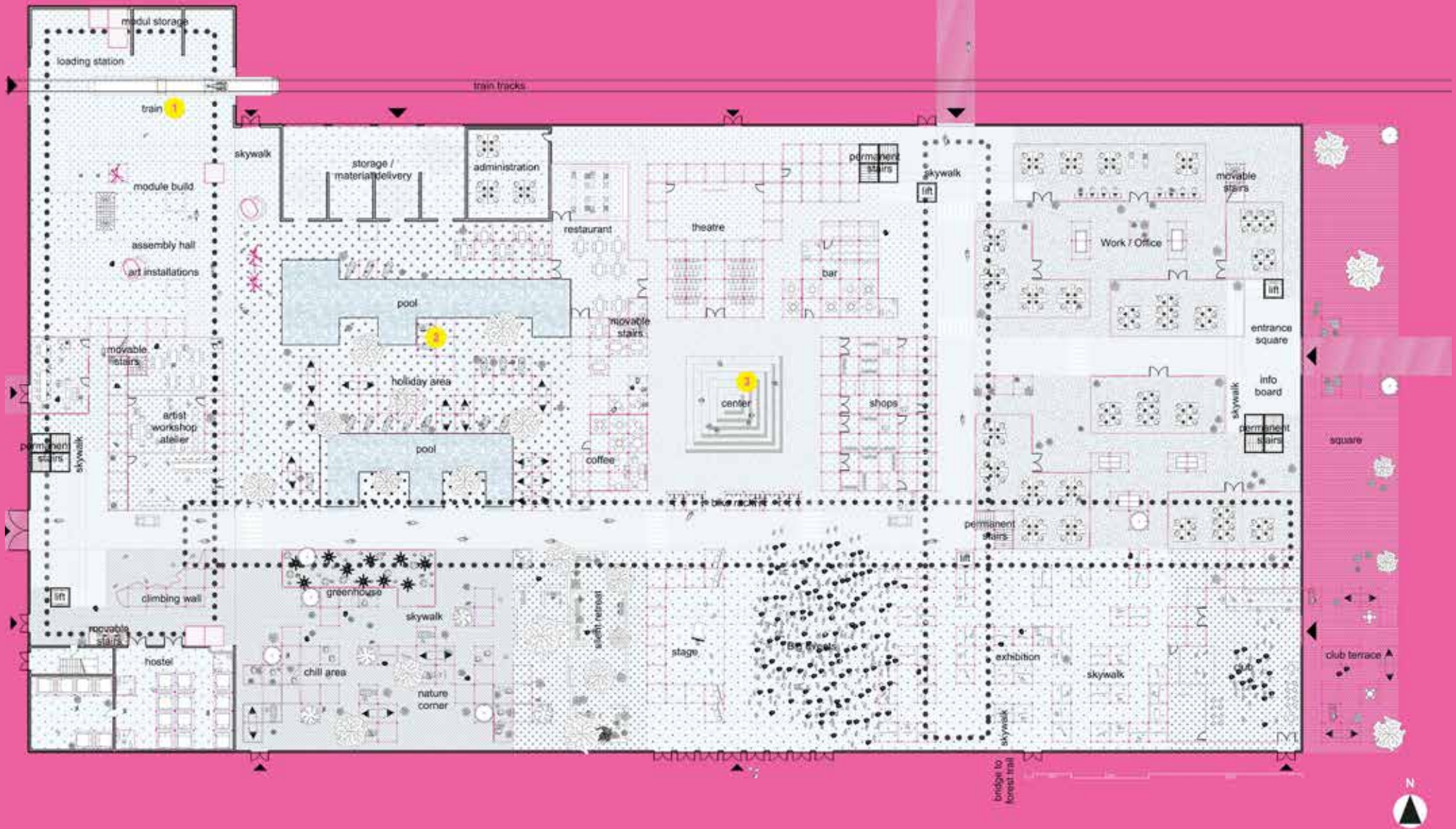


1 HOLIDAY AREA



1 THE CENTER





## INSIGHTS AND RECOMMENDATIONS FOR THE FUTURE

The highlighted development paths and the discussions with local and regional representatives in the context of a workshop in May 2019 allowed the planning consortium to summarize recommendations for action and necessary steps for the obsolete area and region, which can initiate a comprehensive use of the area:

- The environmental and tourism compatibility as well as the ecological and economic sustainability in the transformation process have highest priority.
- The use of local resources (raw materials, space, knowledge, networks) should be strengthened.
- The diversification of the economy is necessary. Not only the search for big companies as in the past, but also the attempt to attract small and medium-sized businesses can be useful.
- The transformation process has to be seen as a long-term development, profits will take place at different times (maybe not in the first few years, but after some time the transformation projects can be profitable).
- The unique feature of the fallow is the size of the area - the large halls can be attractive for uses with high space requirement.
- A combination of different paths has been seen as a good way for future development - e.g. deconstruction and restoration of parts of the site, new use of the remaining buildings; combination of small cultural uses with a focus on industrial culture and industrial use – mixture of different sectors.
- Research and educational institutions should be seen as important resources and stakeholders - all kinds of future uses can be linked to education.
- The creation of an investor brochure was an essential step; the site and the empty warehouses need a good marketing strategy and advertisement to attract the attention of investors.
- A participation process for the local population must accompany the transformation process. Only then the acceptance of the inhabitants can be guaranteed.
- Thinking about the deconstruction of parts of the site should be allowed (dismantling is often seen as a worst-case scenario) because not everything can be preserved for the future. Characteristic and unique structures should however be preserved as they have great potential representing the community/region and give the place its identity.
- Due to the large number of owners, it needs a „provider“ or an „operator“ for the industrial area - someone who coordinates the various actions and uses on the site (umbrella organization).

The municipality is currently working on a new mission statement and is therefore defining fixed development goals. The resulting strategic directions can also be helpful for transformation processes in the industrial sector.



## BIBLIOGRAPHY

Bätzing, W. (2003): Die Alpen. Geschichte und Zukunft einer europäischen Kulturlandschaft. (Munich, Verlag C.H. Beck)  
trALLs, official project website. ULR: <https://www.alpine-space.eu/projects/trails/en/about>, (21.05.2019)

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