



03/04/2024

PHASE 02

Creating a project

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PRECEDENT 01

C- MINE COMPLEX

51N4E
GENK, BELGIUM

The C-Mine Complex is an adaptive reuse project that revitalizes a large-scale abandoned industrial heritage site. The project represents a compelling fusion of industrial heritage preservation and contemporary cultural programming. Formerly a coal mine, this site has been revitalized by 51N4E into a dynamic hub of both historical significance and potential for modern expression.

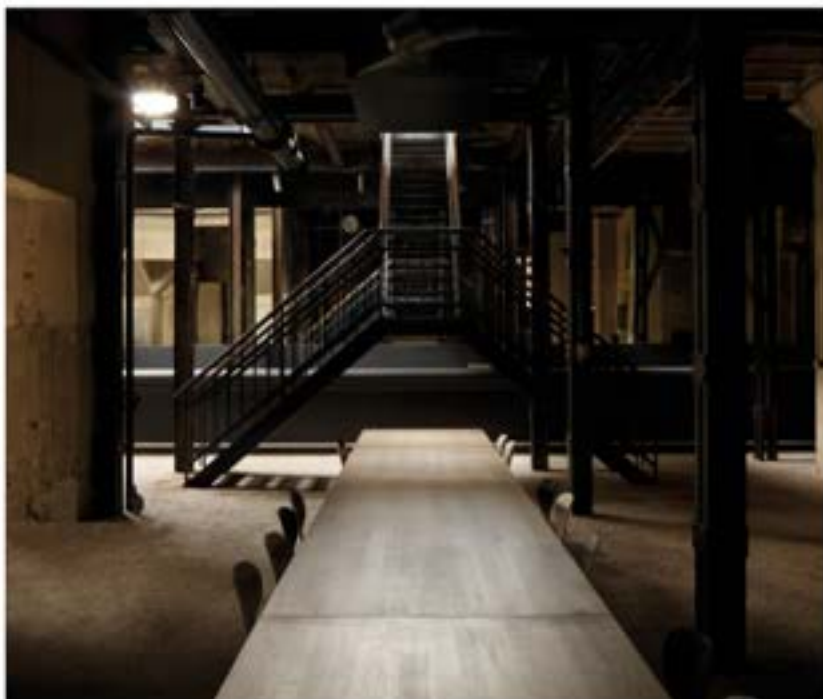
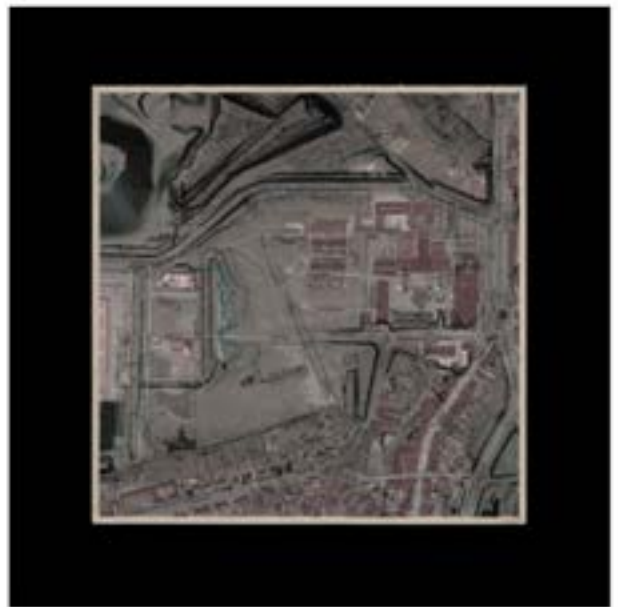
The core utilizes existing industrial structures to accommodate cultural and creative activities. Cultural facilities within the complex include theatres, galleries, and exhibition spaces. The venues host a wide range of performances, art exhibitions, and events. Design studios, coworking spaces, and maker labs serve as creative hubs supporting artists and entrepreneurs.

The spacious entrance and reception area create an orientation for navigation. The cultural facilities are housed in renovated industrial buildings. The theaters, performance spaces, and auditoriums host a diverse range of arts and shows. The galleries and exhibition spaces highlight the opportunities to display work and engage audiences.

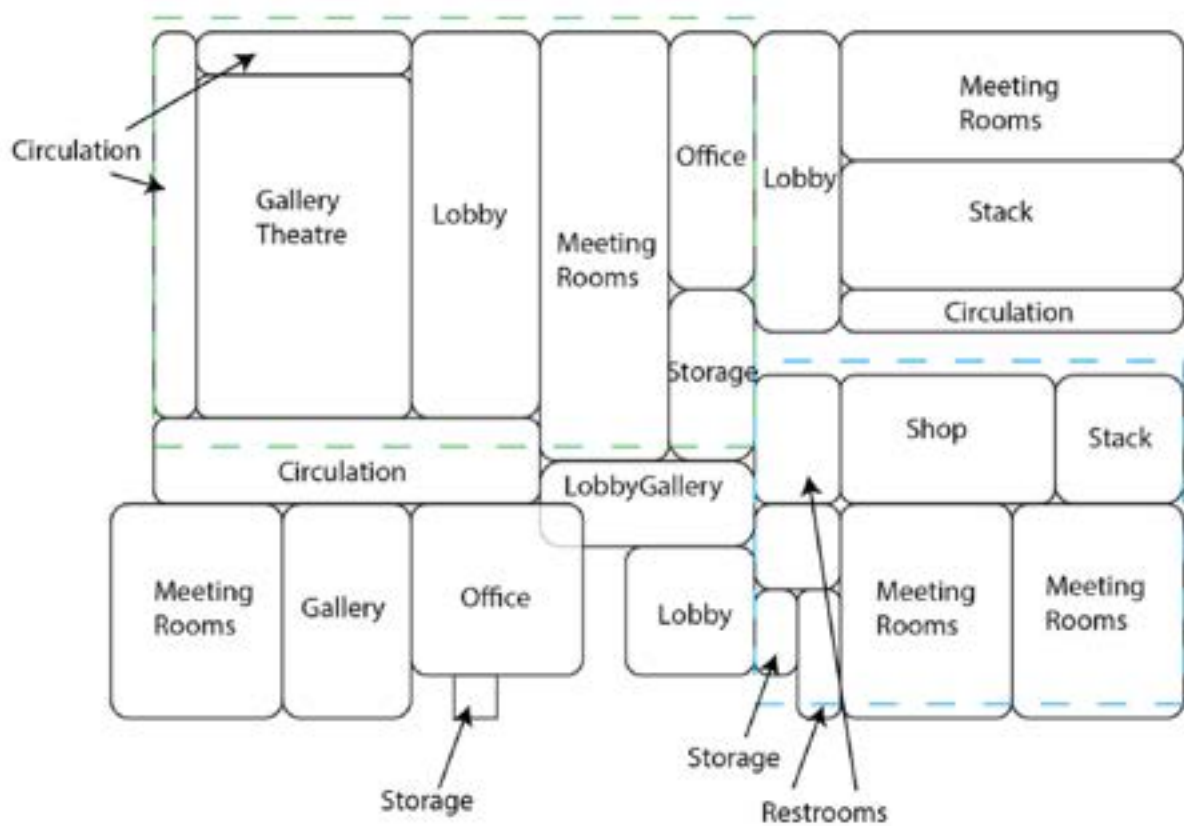
The creative industries zone is located within the factory buildings and functions as a central hub for collaboration. The design studios and workshops provide facilities and resources. Coworking spaces and shared offices foster networking and collaboration. The educational facilities provide learning resources and spaces for technology and tools to support learning and research activities.

The C-Mine Complex serves as a vibrant community gathering space. Public spaces, cafes, and outdoor amenities provide opportunities for social interaction. Education and learning are integral in offering opportunities for skill development and talent cultivation.

Overall, the C-Mine Complex highlights the transformative power of adaptive reuse for creative programming and social integration. It seamlessly blends heritage preservation with cultural and creative pursuits. It has become a symbol of regeneration enriching cultural, social, and economic fabric for its community.



PROGRAM ANALYSIS DIAGRAM



The Program of the C-Mine Complex is laid out within the industrial heritage site.



PRECEDENT 02 THYSSENKRUPP GSS

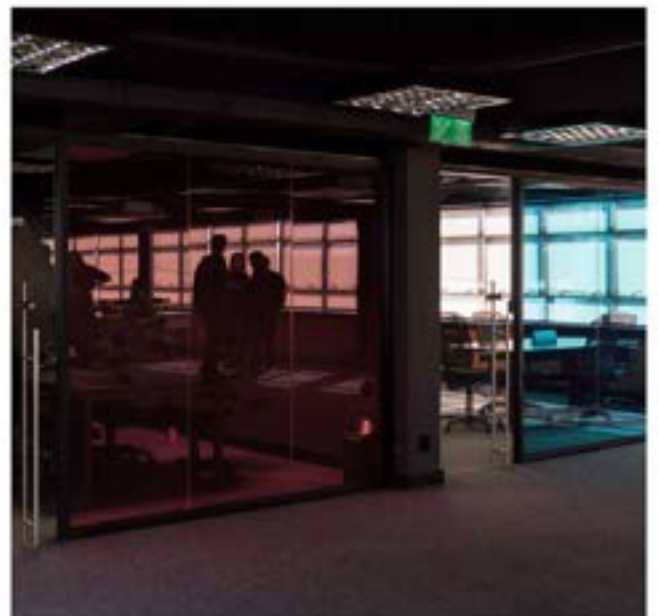
ARQUITETURA NACIONAL
SÃO JOÃO, BRAZIL

Thyssenkrupp company chose the site to establish its Global Shared Services division in Latin America. It aims to standardize and efficiently run administrative functions. The retrofit design was necessary to complete the planned occupation into three phases. The initial survey led to the proposal of demolishing the existing structure between the two buildings. This allowed the design of a direct connection between the buildings. The main entrance was housed in this space as a central construction much quieter and reserved from the previous entrance.

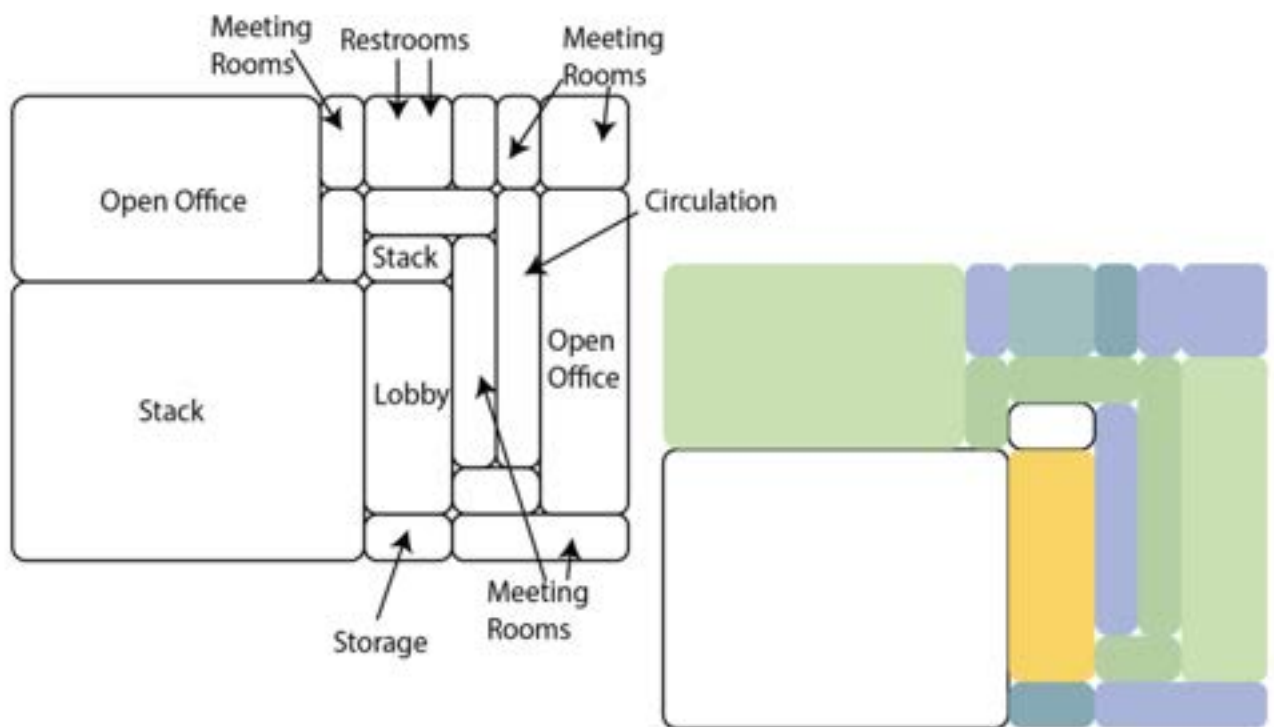
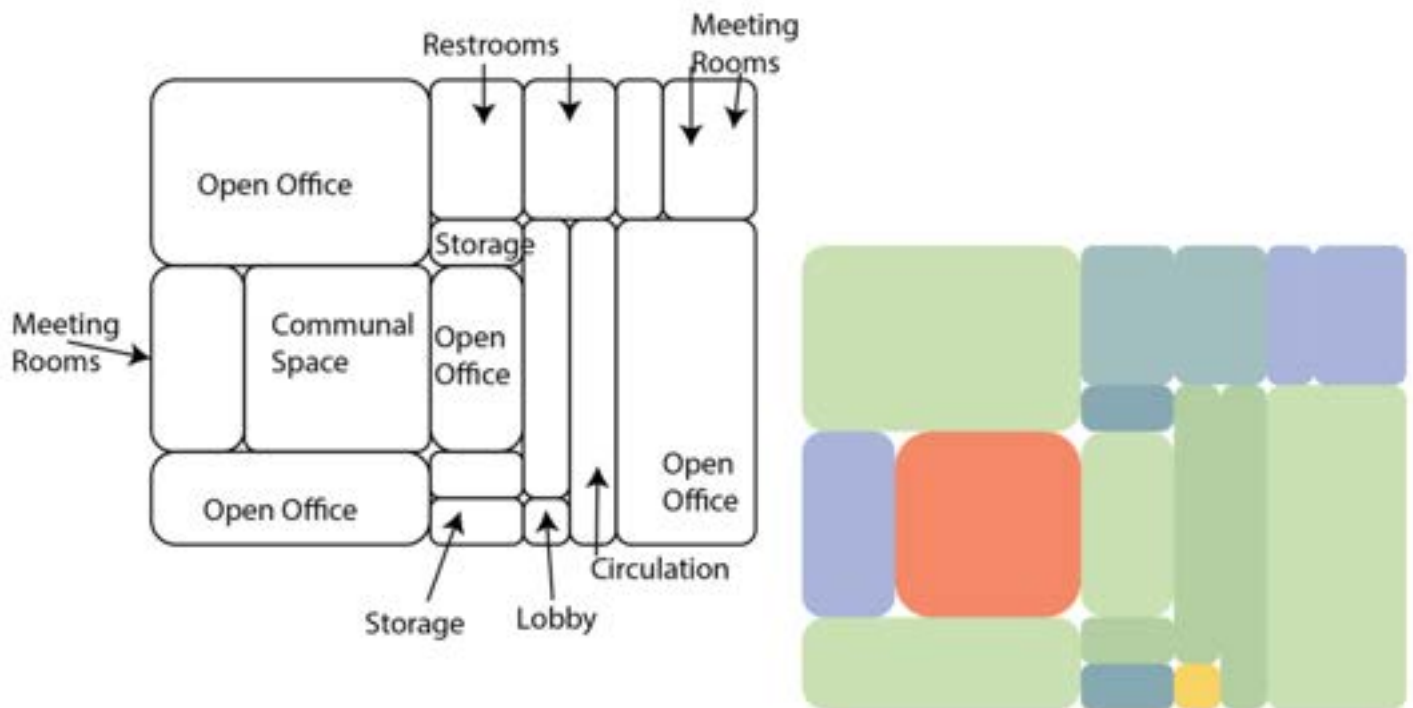
Collaborative spaces and meeting rooms are strategically placed to facilitate teamwork and creativity among employees. Dedicated training and development centers provide opportunities for employee learning. The new construction houses the restrooms and a technical area. Both existing buildings had a masonry quality that was maintained and enhanced by painting the original structure black. The ground floor was kept at a continuous level with a diamond-polished concrete finish. The ground floor was elevated by 10cm to allow the passing of infrastructure. There are closed meeting rooms, informal tables, a kitchen, technical areas, and a large multipurpose space.

The mezzanine floor was designed to increase the area available for workstations. The central construction connects the mezzanine and the second floor. The structure was continued in plans for expansion of the mezzanine floor. Wellness and recreational facilities promote employee health and well-being. Cafeteria and dining spaces provide a convenient and comfortable space for dining and socializing.

Lighting was designed to highlight privacy and still provide the desired amounts. All management rooms and meeting rooms used colored PVB to highlight the specialty and create a natural hierarchy within the larger space. Technology and innovation labs promote research and development. Customer experience centers and showrooms showcase the company's products, services, and solutions.



PROGRAM ANALYSIS DIAGRAM



The front structures connection to the warehouse to create collaborative workspaces is the primary focus.

PRECEDENT 03

LAKEHOUSE WENDELSTRAND

SNOHETTA

MÖLNLYCKE, SWEDEN

The Lakehouse Wendelstrand acts as a Garden City for innovative cultural and communal integration. It provides a variety of amenities on-site and ecological engagement.

The main entrance and welcome center act as a center for the community providing information, orientation, and amenities for guests. The recreation and leisure facilities offer waterfront promenades, parks, and sports areas.

The ecological restoration zones feature wetlands, habitats for wildlife, and native plant landscaping to promote biodiversity and environmental sustainability. The sustainable transportation infrastructure is central to accessibility across the site. Pedestrian-friendly pathways, cycling trails, and public transit options are integrated into the site's design. The site's design provides sustainable alternatives and reduces reliance on cars for accessing and navigating the complex.

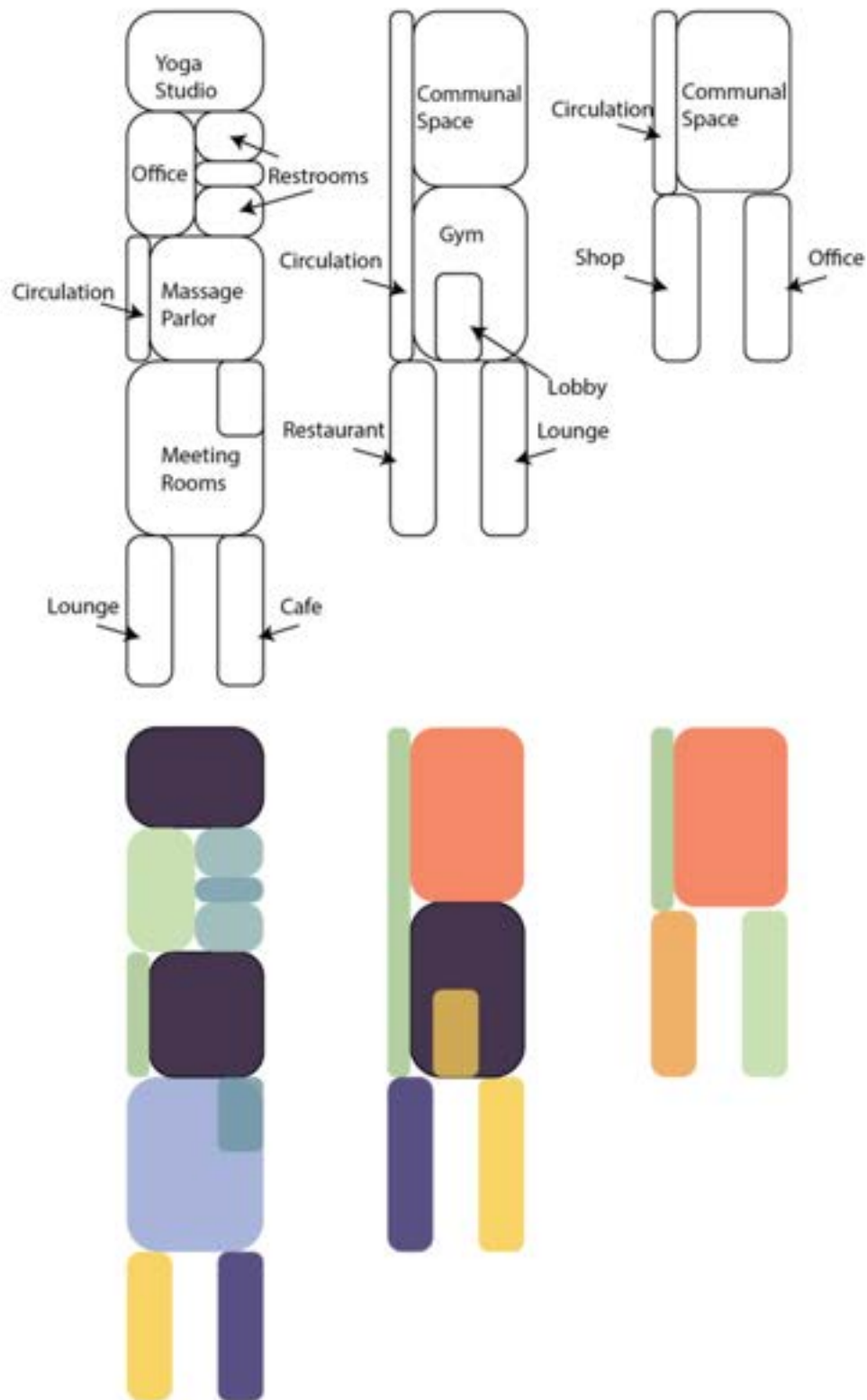
Community engagement spaces include public plazas, gathering spaces, and community centers that serve as hubs for social interaction. Cultural activities and events help foster a sense of community and belonging among residents and visitors. Educational and interpretive centers offer opportunities for learning and exploration. Overall, information, exhibits, and interactive displays educate visitors about local ecosystems, environmental conservation, and sustainability practices.

Artistic and cultural installations are integrated throughout the complex. Waterfront dining and entertainment offer dining options and entertainment experiences with scenic views.

The visitor accommodations and hospitality are available in eco-friendly lodges, cabins, or boutiques. Administrative and support services are located within the complex, offering operational, logistical, and administrative support for managing the site's programs and amenities.



PROGRAM ANALYSIS DIAGRAM



When Studying the Lakehouse, the layout of the primary community space and amenities.

Adaptive Reuse

PROGRAM

Brownfield
Revitalization

MASTER PLAN

PROGRAM LIST AND AREA

- Greenhouse: 3,000 sq ft
- Energy Production Field: 5,000 sq ft
- Cultural Gallery: 3,000 sq ft
- Educational Labs and Exhibits: 4,000 sq ft
- Training and Development Center: 3,000 sq ft
- Community Spaces: 4,000 sq ft
- Offices: 10,000 sq ft

PROGRAM ANALYSIS

The adaptive reuse of brownfield sites presents a unique opportunity to not only revitalize neglected urban spaces but also promote sustainability through the integration of diverse programs that address carbon dynamics. By repurposing these sites for multifunctional use, the environmental impact can be mitigated, promoting carbon sequestration, and contributing to the regeneration of urban ecosystems.

The heart of the project is the integration of a greenhouse and energy production field that serves as a center for sustainable agriculture and education. The greenhouse utilizes innovative technologies that can be used for production while also functioning as a carbon sink, capturing, and storing atmospheric carbon dioxide through plant photosynthesis. The greenhouse provides educational opportunities for visitors to learn about sustainable farming practices and the role of plants in carbon sequestration. Adjacently, the energy production field features renewable infrastructure that harnesses clean and renewable energy sources while reducing reliance on the municipality's energy. The reduction in fossil fuels and mitigation of carbon emissions will help promote cleaner air and promote better energy recovery.

The cultural gallery serves as a platform for artistic expression and cultural exchange, by highlighting exhibitions that highlight environmental themes and promote awareness of carbon dynamics. Through visual arts, installations, and multimedia technology, the gallery engages visitors in a thought-provoking conversation about the impact of human activity and the importance of sustainable living.

The training and development center helps provide resources and programming for professionals and community members interested in sustainability and carbon management. Workshops, seminars, and training sessions cover topics such as renewable energy, carbon accounting, and green building practices. This center seeks to empower individuals to incorporate sustainability principles into their work and daily lives.

Central to the project are the community spaces. They seek to serve as gathering points for residents, visitors, and stakeholders to connect, collaborate, and celebrate. These spaces promote social cohesion and civic engagement while providing opportunities for community-led initiatives focused on environmental stewardship and carbon reduction efforts.

The office spaces provide a hub for administrative and operational activities related to the project. By incorporating sustainable design features such as energy-efficient lighting and passive heating and cooling systems, the offices minimize carbon footprint while providing a functional and comfortable work environment. The office space is a center for collaboration and initiative.

Overall, the integration of these programs within the adaptive reuse of brownfield sites demonstrates a comprehensive approach to revitalization that prioritizes sustainability and carbon dynamics. By revitalizing these sites there can be a vibrant resilient community that contributes to a healthier and innovative framework for ecological revitalization.