Re:Isselt - Growing by Reuse

In today's world, the pursuit of endless growth is becoming increasingly unsustainable. New approaches prioritise sustainability, equity, and well-being over material accumulation, advocating for reduced consumption and environmental impact. Yet, the Netherlands continues to grow, making it imperative to find ways of progressing that also address climate change, resource scarcity, and social inequality. This calls for a shift towards a more resilient and balanced society. As architects, urban planners and landscape architects, we have a vital role to play by shaping environments that foster sustainable living and adaptability. In designing the new centre in Kop van Isselt, the crucial question is:

"How can the built environment support considerate material use, nature awareness and local engagement?"

New Circular Centre

With the principles of post-growth in mind, we design Kop van Isselt as the heart of a circular, resource-conscious neighbourhood, where the existing environment is respected. In the future, careful material use, reuse, and heritage preservation will be standard, with residents integrated into the local community. We see Kop van Isselt as a model for future neighbourhoods, thanks to thoughtful choices and strategies that foster long-term resilience. The development will be an organic, phased process, with each stage addressing key aspects of future society, gradually building toward a sustainable vision.

Building Blocks of a Circular Neighbourhood

The proposal focuses on five key aspects of circularity, encompassing physical, programmatic, and policy-driven elements, which are the following:

Heritage: Circularity and Material Reuse

With Heritage as a core element of the new neighbourhood, we ensure that reuse is addressed from the outset of each project in the area. This approach embeds concepts such as adaptation, reuse, and recycling into the design process from the very beginning, thereby increasing the likelihood of successfully incorporating circular solutions.

Economy: Building upon locality

The foundation of a thriving circular economy relies on fostering a supportive economic environment. We advocate for creating this climate by building a network of local stakeholders, including regional companies, material banks, waste management firms, artists, craftsmen, material distributors, and shops. By offering storage and workspace for rent in the refurbished halls and clustering these businesses together, we can facilitate the exchange of ideas among a diverse mix of managers, creatives, and executives. Simultaneously, all those companies can actively contribute to the construction process of Kop van Isselt by providing materials, know-how and craftsmanship. Such a collaborative environment with a real-life playground in direct vicinity will form a strong foundation for a highly specialised local economy. The economic potential is further strengthened by the proximity of the industrial park north of Industrieweg, as it offers opportunities to reinforce connections between soon-to-be-redeveloped VAK E and VAK C and D, which will, for the time being, stay industrial.

Built Environment: Adaptable Grid

The creation of a grid-like framework promotes circularity by allowing for various methods of reuse. The modular design offers flexibility, enabling the integration of diverse materials and ensuring the repurposing of existing materials within the neighbourhood in new structures. This framework also serves as a demonstration of circular principles at every scale, acting as a circular playground and a source of inspiration for future developments.

Nature: Designing Cycles

Nature is not an afterthought or mere amenity - it is a co-designer. Nature-driven design aims to restore balance between the built environment and ecosystems. Instead of maximising buildable land or property value, we prioritise ecological health, climate resilience, and community well-being. In this approach, nature is integrated from the outset. Open space is the foundation, not the leftover: first a space for regeneration, then a vital habitat for water, trees, biodiversity, and social life. By letting the landscape establish before residents arrive, the neighbourhood and local centre become mature, living environments from day one. Shared gardens, edible landscapes, and community spaces take precedence over excessive private lawns and car-centric layouts, fostering stewardship and connection. Designing with nature from the start allows us to restore degraded soils and create a vibrant ecological corridor linking the Groengordel Soesterkwartier, the Eem River, and nearby areas like Weerhorst and Coelhorst. It also helps transform formerly industrial or brownfield zones into a distinctive, nature-inclusive identity for this new part of Amersfoort.

The new Kop van Isselt centre will be measured not only by economic output but by the health of its ecosystems, the strength of its communities, and its capacity to adapt and endure. Nature-led design makes this vision real.

Community: Living Together

In recent years, the housing debate in the Netherlands has intensified. Platform Woonopgave - a coalition of designers, policymakers, housing associations, and other stakeholders - responded with a ten-point agenda for the future of housing. Relevant principles include: “focus on values beyond financial gain,” “put residents and quality of living first,” “make space for experimentation,” and “make public housing great again.” While 5–10% of Dutch people are interested in collective living, only about 10,000 such homes exist. Municipalities play a key role by providing affordable land and setting inclusive conditions. With our plot municipally owned, it offers a strong opportunity to lead in cooperative, community-focused development. Subsequently, building a strong community fosters sharing and material reuse, fueling the circular ambitions of Kop van Isselt.

Three Phases of the Neighbourhood Development

Each phase of the project engages with all five core themes while emphasising a specific building block to develop a complex, resilient, and circular neighbourhood gradually.

Phase 1: Laying the Groundwork

This phase lays the groundwork by focusing on the preservation of heritage, the establishment of circular workflows, and the introduction of principles for a robust natural system. Existing heritage and identity risk being lost if not addressed from the very beginning of the design process. The first phase serves as a preparatory stage, involving a thorough inventory of existing structures and materials, the establishment of local storage facilities, and the early engagement of local stakeholders. This ensures that what already exists is recognised, preserved, and integrated into future development.

Heritage: The local enterprise ROVA, which owns extensive premises adjacent to the site, offers a unique opportunity to lead the first phase of development in collaboration with the Municipality of Amersfoort. With plans for ROVA to relocate to Wieken-Vinkenhoef in the long term, its current facilities offer valuable potential for temporary reuse within the phased development of Kop van Isselt. Specialising in waste management, ROVA is well-equipped to manage demolition operations, including the inventory and cataloguing of reusable materials. Circular development requires ample space, and fortunately, the surrounding industrial lots provide just that.

The monumental ROVA Hall can be easily transformed into an exhibition and visitor centre, engaging future residents and the public, while other parts of the complex remain operational. This space could become a hub for education, interaction, and innovation in circular technologies, with the halls also serving as storage for reclaimed materials.

Nature: The new connection will serve people, but it also functions as an important natural pathway. Since natural ecosystems take time to develop, and because we want future residents to enjoy a lush, green environment from the beginning, this green connection becomes a defining feature of the area - an identity that will be carried forward through the subsequent phases of development. Through strategic demolition, land can be made available for ecological regeneration. To create a vibrant and healthy ecological corridor, it's essential to remediate the area. Natural methods such as phytoremediation (using native plants to absorb heavy metals from soil and water), mycoremediation (using fungi to support soil restoration), and microbial bioremediation (introducing beneficial microbes that can degrade contaminants in the soil) offer the potential to revitalise the soil from the outset. Landscape interventions - such as raised gardens, biofilters, and sponge planting - increase biodiversity and attract a variety of flora and fauna. Funding for the development of these green ecosystems can come not only from the municipality but also from local companies and enterprises looking to enhance their visibility and support their green ambitions (e.g., Wilco, Royal FrieslandCampina, VolkerWessels).

Built environment: To integrate the area into a larger network, the most efficient and impactful choice is to create a cross-connection, facilitating integration of the new development and Jericho and Soesterkwartier. In front of Rova Hall, on the site of the current guardhouse, a small pavilion will be built using leftover materials as part of the growing pergola grid. In the first two phases, it will serve as a local recycling point where residents can leave old furniture or appliances for others to take and reuse.

Economy: Circularity can often feel abstract or vague. That’s why making it visible and spatial is key to making it understandable and accessible. As the neighbourhood evolves, showcasing circular practices and technological innovations in real time can engage passersby, keep the public informed, and help shape a strong identity for the area from the outset.

Community: In the first phase, no housing will be built. Instead, the focus will be on involving local entrepreneurs and stakeholders in the development process, ensuring that their knowledge, networks, and presence help shape the neighbourhood from the outset. The early development of the landscape - establishing a green identity and introducing a path system with designated areas for meeting and gathering - fosters a sense of place. This becomes the first thread in connecting the two neighbourhoods through both landscape and a local centre.

Phase 2: Circular Economy Hub

Most attention shifts towards strengthening the local economy through stakeholder collaboration, real estate development, and the creation of workspaces. In this phase, the modular structural grid is introduced and tested, using the first buildings as prototypes for diverse material solutions.

Built environment: This phase marks the construction of the first iconic building in the area: **the Patchwork Block**, situated atop Van der Meiden Hall. Positioned at the neighbourhood's pivot point and visible from all access routes, this building will serve as a showcase for material reuse. The block consists of a robust grid of wooden structural elements filled with a rich variety of recycled materials as facade panels of individual units. These components not only reduce environmental impact but also tell a compelling visual story about new technologies and sustainable lifestyles, making circularity tangible and relatable. In doing so, the building aims to become a new urban landmark and cultural touchpoint. Its internal functions extend into public space via a designated spill-out zone that animates the area with outdoor workshops, terraces, seating areas, and small stages. To the west of the hall, adjacent to the future mobility hub, a two-storey pavilion housing a health centre and gym is proposed. This building helps frame and activate the park's edge. Although it reduces some green space, it adds urban value by providing a strong façade to the mobility hub and creating a more defined, functional backdrop for the hall.

Economy: The renovated Van der Meiden Hall, alongside Rova Hall, will boost the local economic climate. Its ground floor will offer a flexible layout with meeting rooms, offices, workshops, hot desks, and coworking spaces - providing rental options for both new users and current tenants from e.g. De Pionier. While Rova focuses on storage, processing, and showcasing, Van der Meiden will become an incubator for idea generation, exchange, and development.

Community: The decision to build a mid-rise block instead of a tower is rooted in community-building goals. A block form offers a clearer distinction between the lively public façades and the quieter, internal spaces. All apartments are accessed via internal galleries that strengthen the connection between residents and the hall. These wide galleries encourage personal use, with benches or chairs, while cut-outs ensure privacy. Every 6–8 apartments share a common room equipped with communal amenities like a large living area, meeting space, dining table, or space for music and yoga. The building features a mix of 1-, 2-, and 3-bedroom stacked duplexes, supporting a diverse and inclusive residential community.

Nature: In this phase, the landscape takes on its final character, forming three distinct parks: Isseltpark - an urban park featuring a grand lawn and sports facilities; Nijverheidspark - a green, multi-use park with a patchwork of pathways, spill-out spaces, and event areas, some of which are covered by a pergola; Eempark - a natural park with open, cascading water and a self-developing landscape where nature thrives and people are a guest. The renovated Rova Hall and Van der Meiden Hall will be connected by a welcoming public space structured around a pergola grid, visually linking the two separate buildings. Native climbing plants will grow along the pergola, bringing fragrance, attractive shapes, and seasonal colour to the area, while also attracting insects and birds.

Heritage: The Patchwork Block is set atop Van der Meiden Hall, yet it seeks to respect and emphasise the hall's identity. The original roof structure is preserved and echoed in the cornice line, marking the transition between the multifunctional podium and the residential top-up. A strong wooden grid forms the structural frame, while modular infill façades - composed of reused windows and brick panels - create a mosaic of materials that reflect Isselt's industrial heritage.

Phase 3: Living Together

Builds upon established systems of circularity, nature, and economy, turning toward the social dimension by fostering community engagement. This phase explores new forms of living, such as cohousing and coliving, to support a connected and inclusive neighbourhood.

Community: This phase emphasises diverse collective living models - forming an ensemble of communities with strong, resilient social ties. As development continues, this period offers a chance to co-create experimental housing concepts with

future residents, shaping a vibrant, mixed, and community-oriented development. It responds to the concept of 5 generations - bringing starters, young families and craftsmen, and the elderly into one vibrant place, where they can support and learn from each other.

Built environment: A new building block is added behind the NeNaFa Hall, combining community-focused living with workspaces. Facing the park, an urban villa will house a *woongroep* for students, starters, and single parents - offering studios and "twodios" arranged in clusters of 10 units per floor around a shared central room, adaptable to residents' needs. Independent units for elderly residents will also be included, centred around communal rooms and shared amenities such as physiotherapy. These homes open onto a common courtyard, enabling elderly residents to stay connected with the broader, intergenerational community.

Economy: The local economic ecosystem is further strengthened through the inclusion of small, locally-run businesses, often operated by individuals or families. By physically connecting the *woon-werk* units to the hall, these businesses gain visibility and access to the wider community. If the hall becomes part of the co-living ensemble, it can also serve as a shared income-generating space. This revenue could support building maintenance and, in the spirit of non-profit-driven co-housing, be reinvested into future initiatives, helping other groups finance and overcome the high upfront costs of construction.

Nature: With a strong foundation established in phases 1 and 2, nature continues to thrive. In phase 3, the focus shifts to introducing collaborative and productive landscapes, such as orchards and community gardens around Isseltpark, as well as a reed and natural water park with small islands. The water park creates vibrant ecological hubs that can be explored via nature paths and a boardwalk over the water. Additionally, as the development of the buildings continues, EemOever is being developed. In Nijverheidspark, the pergola structure is being developed alongside climbing plants, rainwater gardens, and lush vegetation.

Heritage: The reuse of NeNaFa and its integration into the community structure places heritage preservation at the heart of the neighbourhood, highlighting the role of society in the pursuit of circularity. By being part of this collective, individuals are encouraged to share, reuse, and exchange, fostering a culture of sustainability and community engagement.

Feasibility

Financial feasibility is ensured through a simple, resilient, and adaptable design, characterised by robust structures that gain their identity not through form, but through a community-focused approach. The project is grounded in realistic and environmentally conscious principles, with an emphasis on efficient material use, avoidance of overengineering, and the selection of low-CO_2 materials to reduce embodied carbon and transportation costs.

While the average apartment size is reduced, this is compensated for by the creation of extensive, high-quality common spaces. This approach allows for a higher number of housing units while maintaining the required gross floor area. Efficient gallery typologies further enhance spatial layout and simultaneously contribute to the quality of life by fostering interaction among residents.

The application of circular design does challenge traditional planning permit processes, as it offers less predictability at the outset, both visually and structurally. These challenges are addressed through the implementation of a clear structural grid, generous façade depth, and a modular infill strategy. This approach provides strong visual predictability from the beginning, while allowing greater flexibility for the reuse of components such as windows, façade materials, and interior finishes, without compromising visual integrity or structural safety. The framework offers a stable and coherent base, while the infill elements allow circular materials to be integrated effectively. The structural integrity remains unaffected by the use of recycled materials. Significant cost savings are achieved by sourcing façade finishes and fit-outs - typically major cost components in traditional construction - from recycled and reclaimed materials. As a result, CO_2 emissions are reduced, circularity is enhanced, and safety is maintained.