

UNFN SHD03

The Unfinished City: Building Block

Our proposal at the scale of the Building Block considers all four topics (Food, Energy, Waste, Matter) and forms part of a wider vision for a circular district, driven by empowered residents through adaptable structures of highly participatory governance and decision-making. We imagine a digitally-enabled 'People's Parliament', with strong social connections fostered in the physical pursuit of growing, sharing and reusing in a productive hydraulic landscape and shared spaces made from repurposed materials and redundant building components.

Engagement with decision making on all scales, opportunities for training and career-making in critical high-skilled sectors, and the shared experience of quickly manifested results, galvanise the community around common circular principles.

In relation to the 'matter' of the buildings, we see the project as an opportunity to innovate, at scale, an investible model for circular development, in which the material embedded in existing buildings and new components designed in demountable layers (their entire histories recorded on a block-chain), are ascribed genuine financeable value derived from income generated through

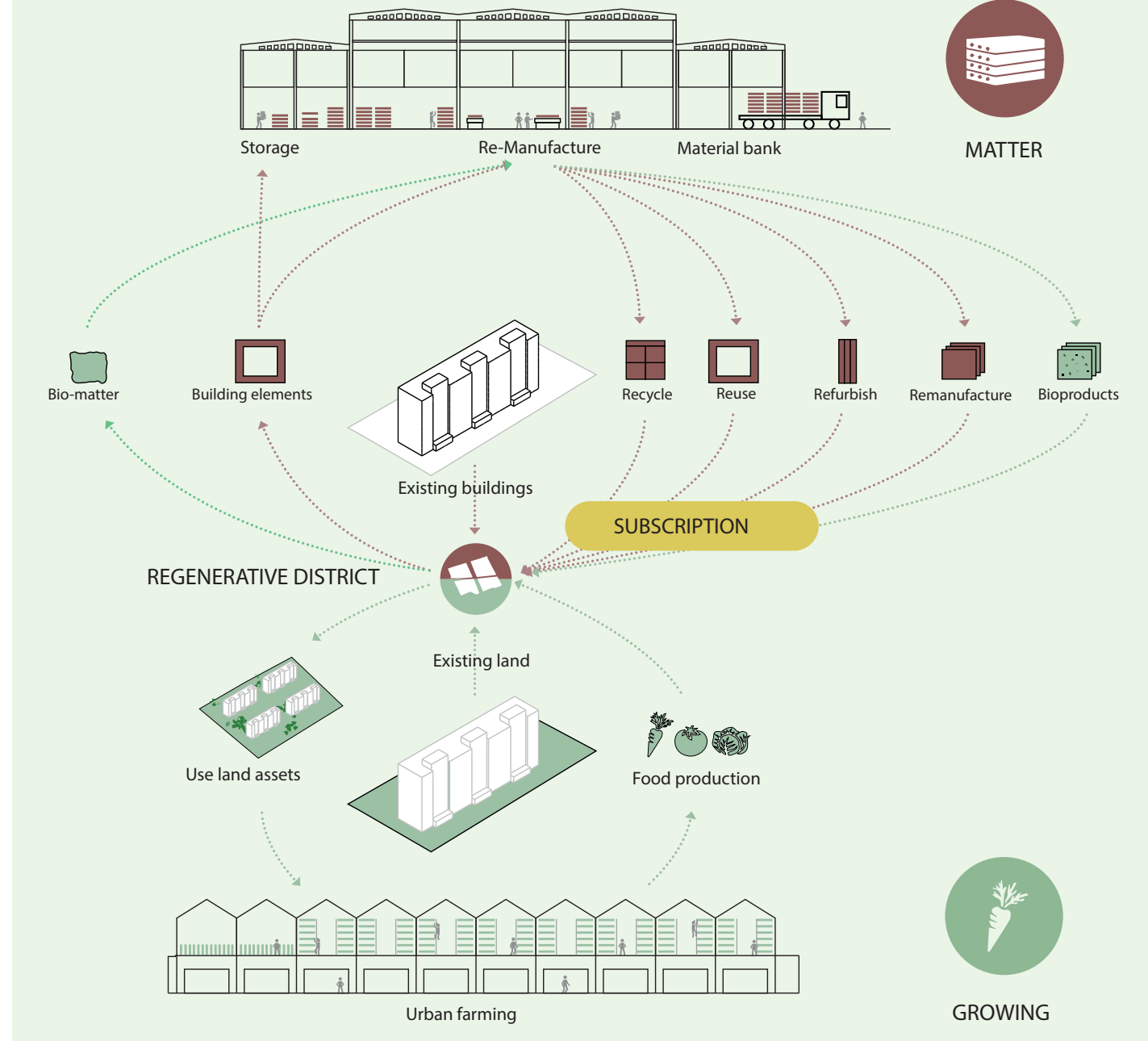
a subscription model in which manufacturers retain ownership and responsibility for performance during and beyond any conventional lifecycle.

Over time, existing residential buildings are 'unwound' to expose the structural frame, and a new envelope constructed, in a process supported by the district and led by residents in organisational groups as small as a single core. The new layers allow the buildings to negotiate improved connections to the ground and every home gains external space for growing and socialising. Additional internal space allows greater flexibility and for apartments to be exchanged or combined to generate a rich mix of household types.

The architectural proposition, topped with growing spaces and tanks for the storage of water, celebrates the infrastructure of circularity and adopts the verticality of the 'core scale'. The resulting impression is one of multiple buildings, intentionally reminiscent of the earlier architectures of Tallinn.

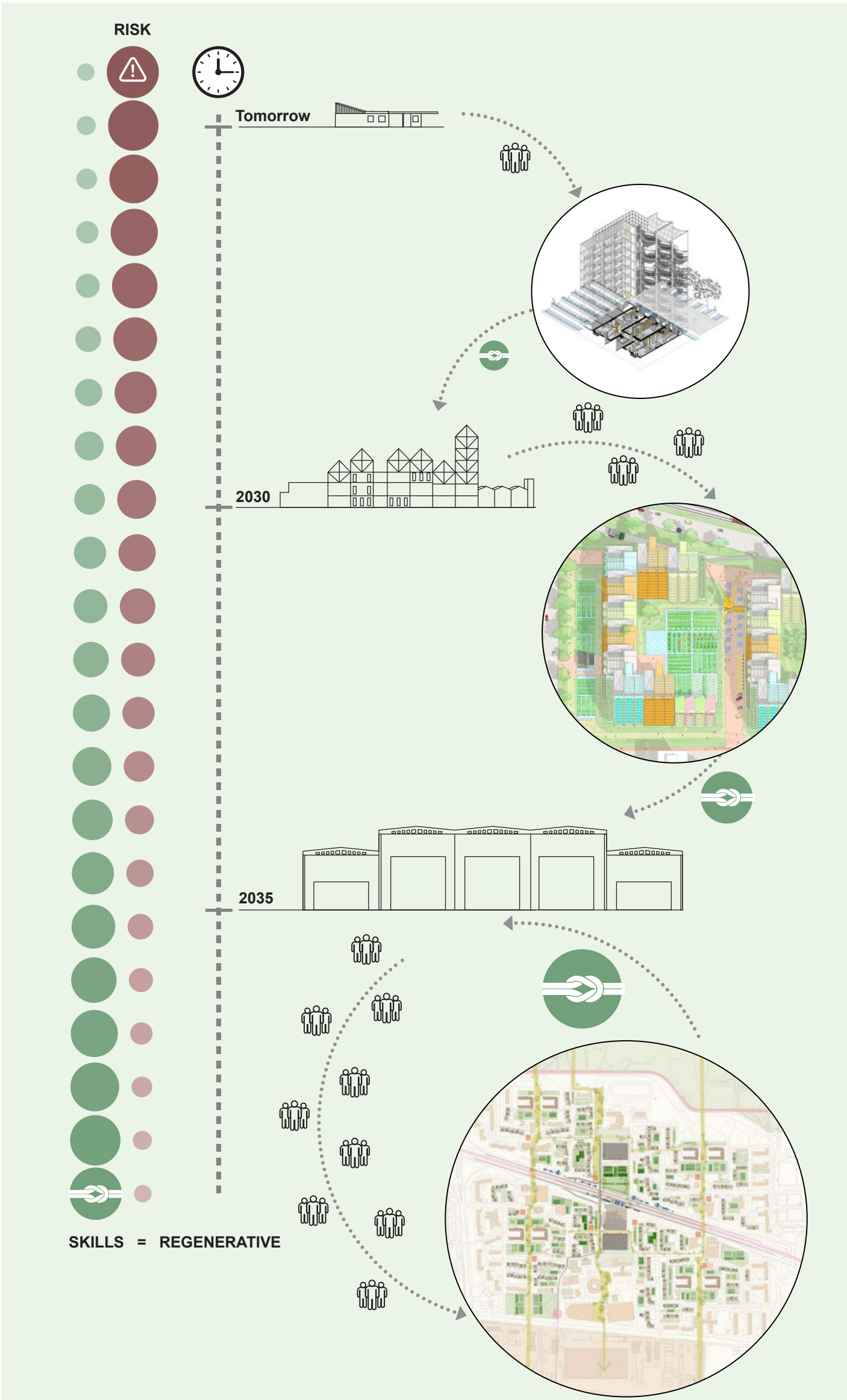


Giving control to residents

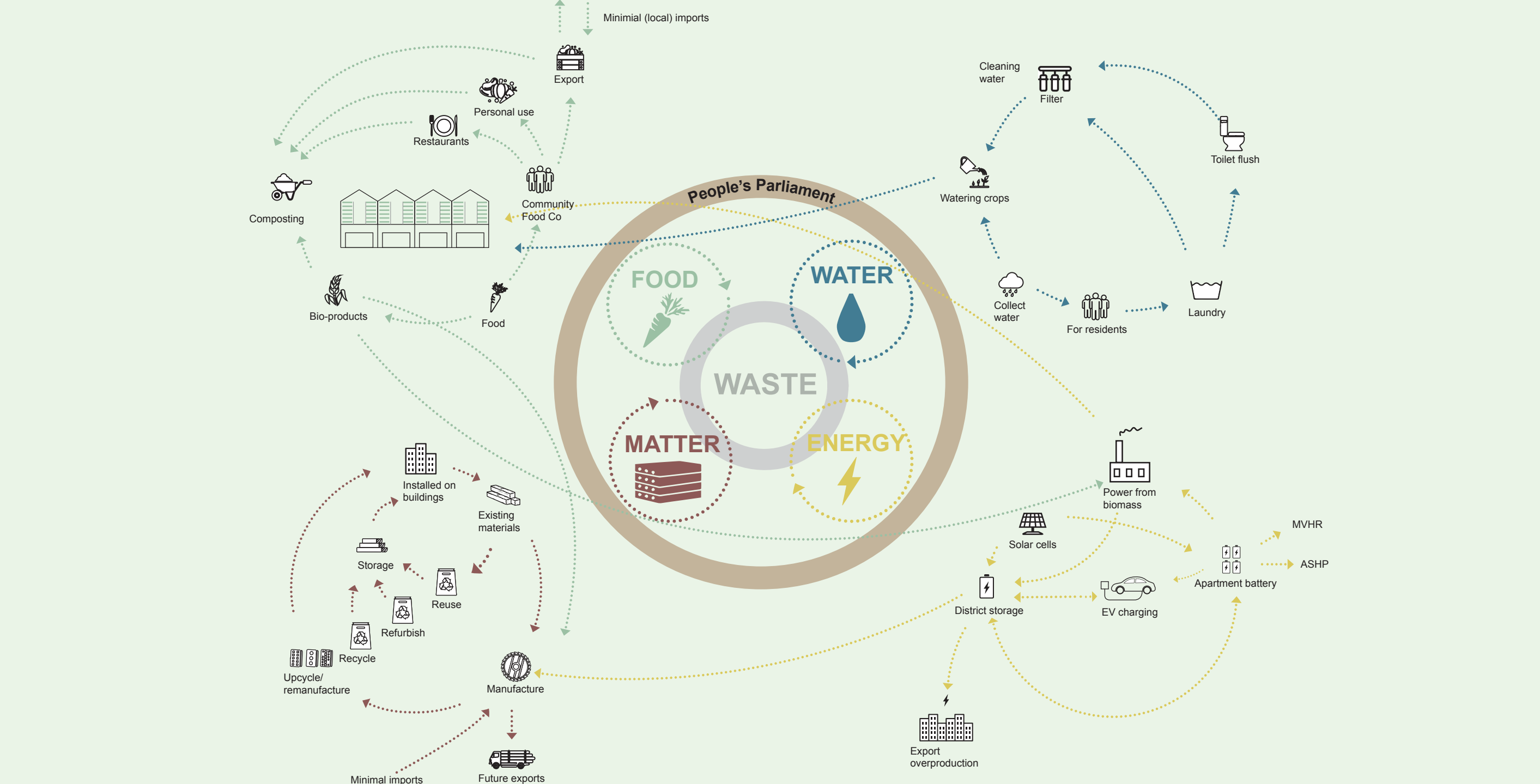


Applying the principles of the Circular Economy to this location

Note that subscription models are important to retain “cradle to cradle” accountability



The Unfinished City: The journey to regenerative



The Laagna Donut:

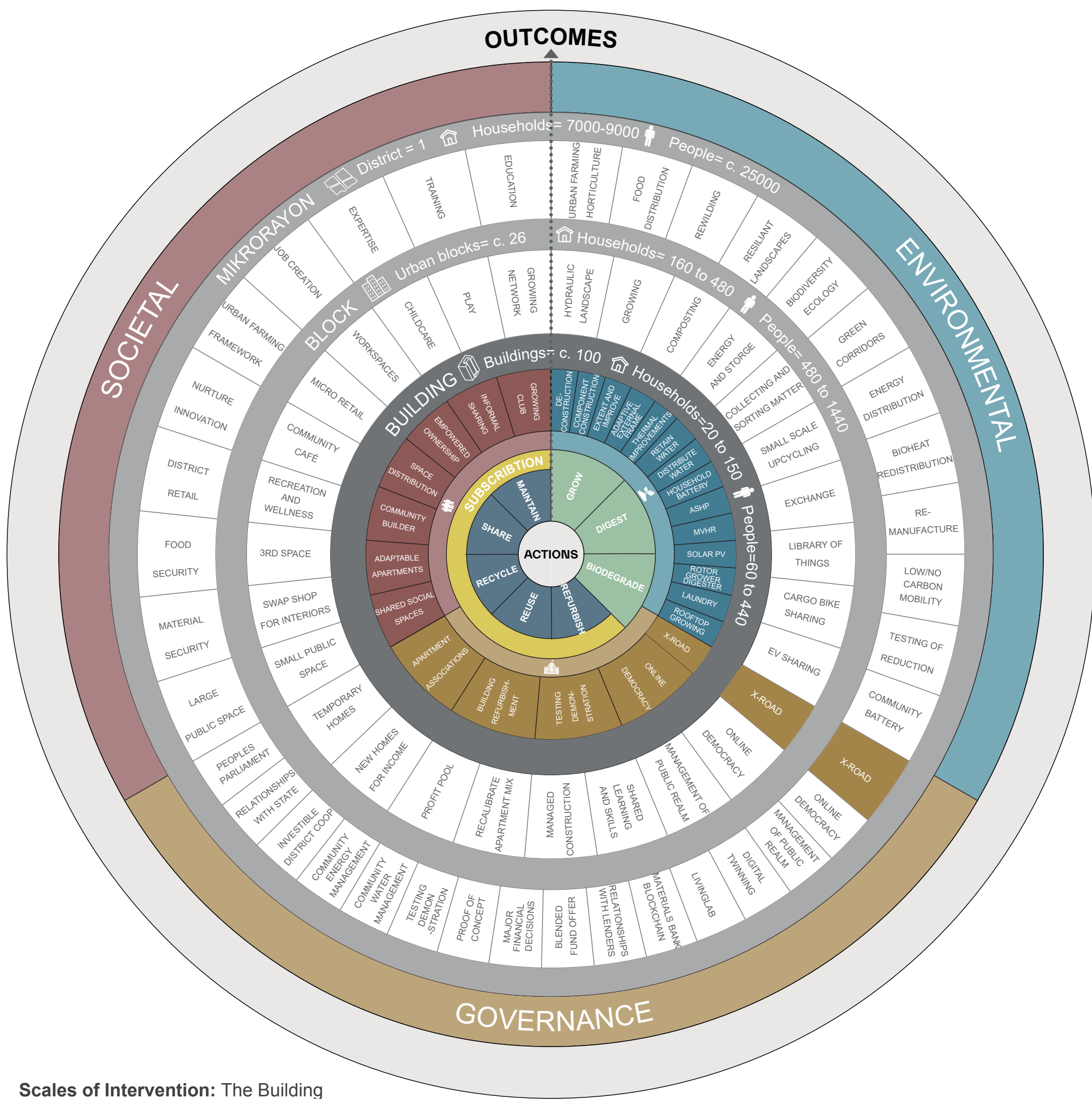
Creating a world with individual and collective control and without waste

"Community Builder" arranged around the core, providing for a mixture of homes for a variety of households.

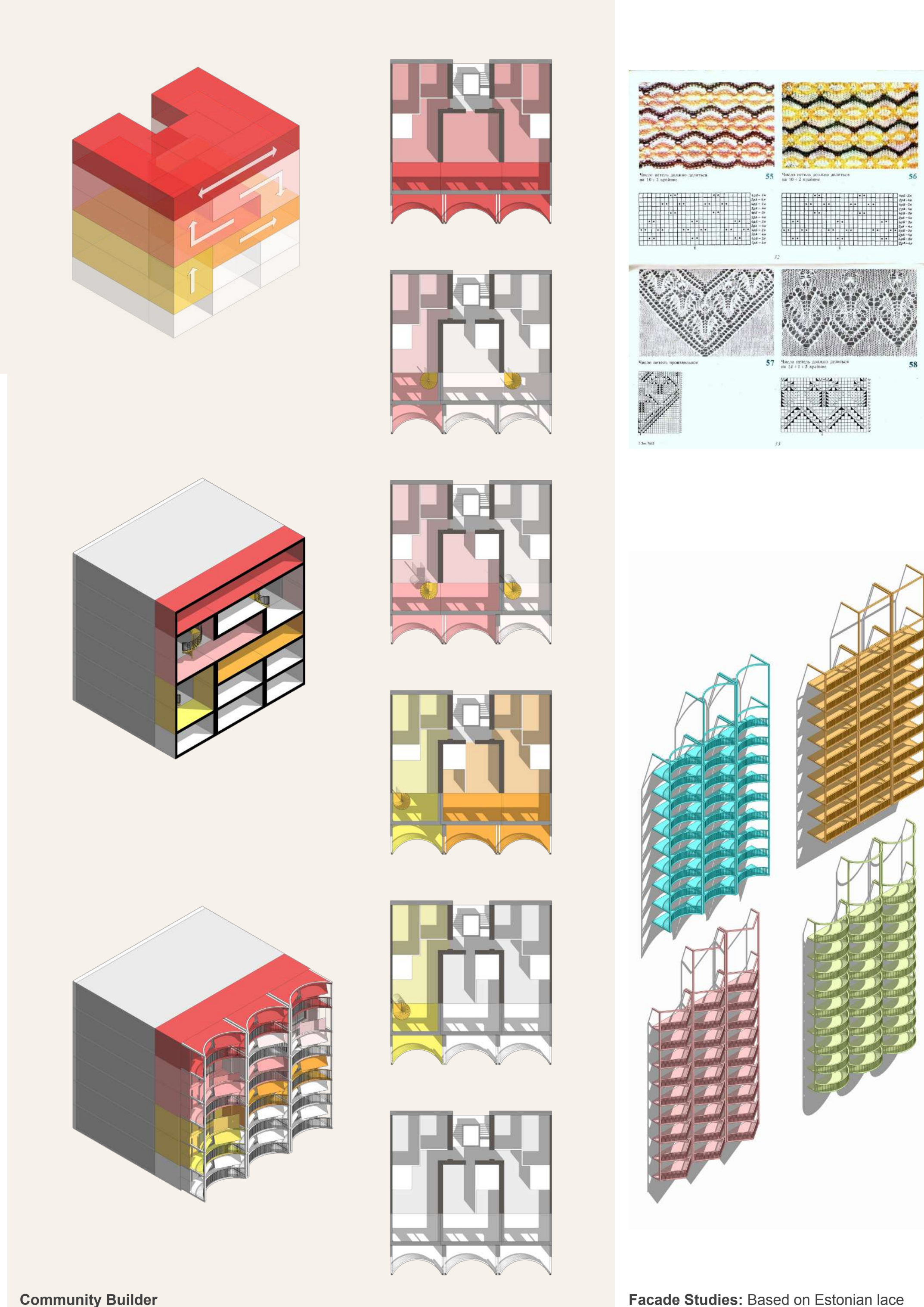
Many people will retain their existing demise, but some may wish to trade/combine their homes to form new communities.

Potential typologies: (refer to plans opposite)

6 bed lateral (small cohousing group composed of existing neighbours with space for student renters) - *red*
4/5 bed lateral duplex (live work space, extended family, multi-generational household, future flexibility) - *pink*
4 bed duplex (large family) - *yellow*
3 bed lateral (mid-sized family) - *orange*
2 bed (young family or couple) - *white*
1 bed/studio (young person or couple) - *white*



Scales of Intervention: The Building



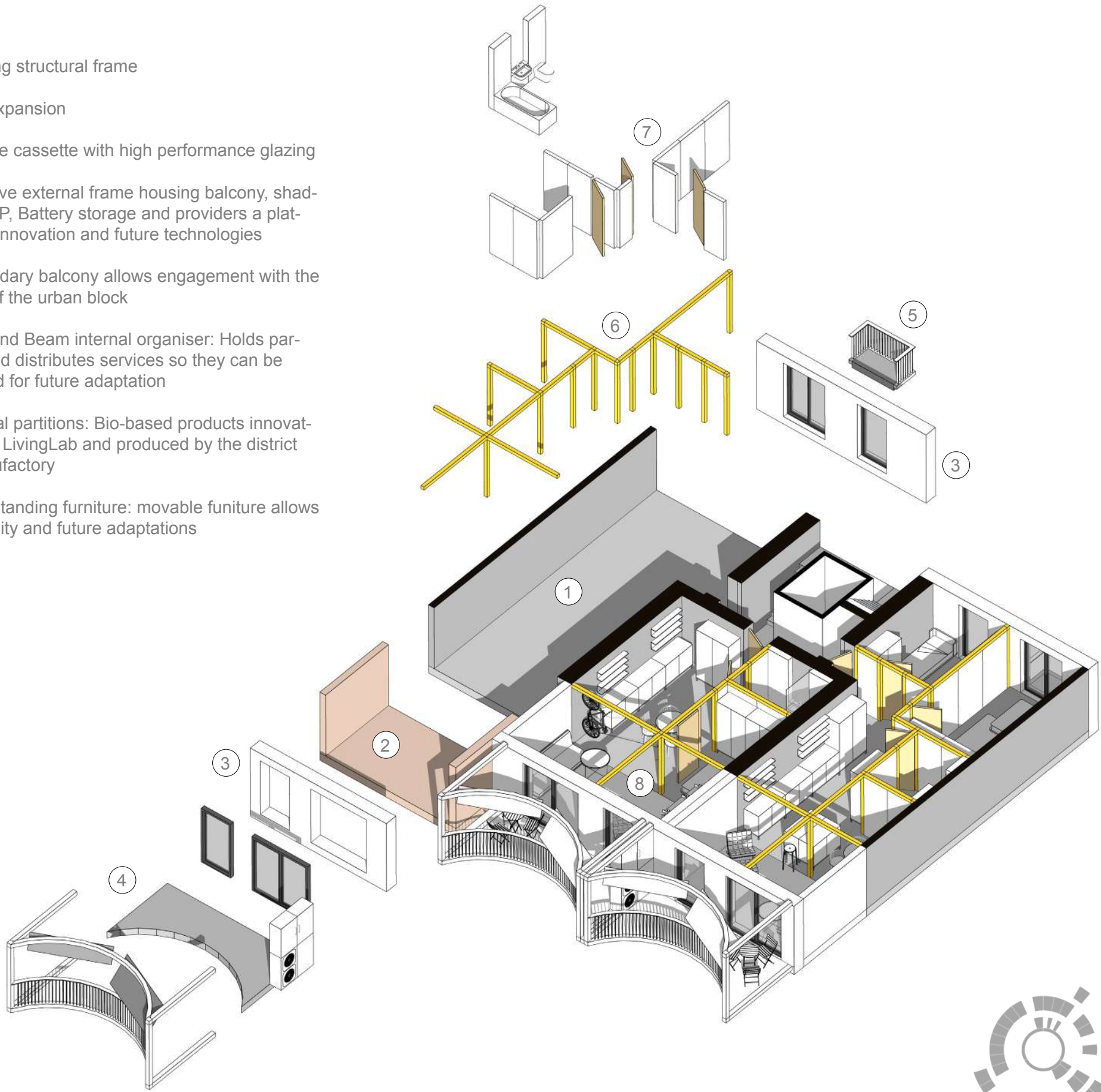
Community Builder

Facade Studies: Based on Estonian lace



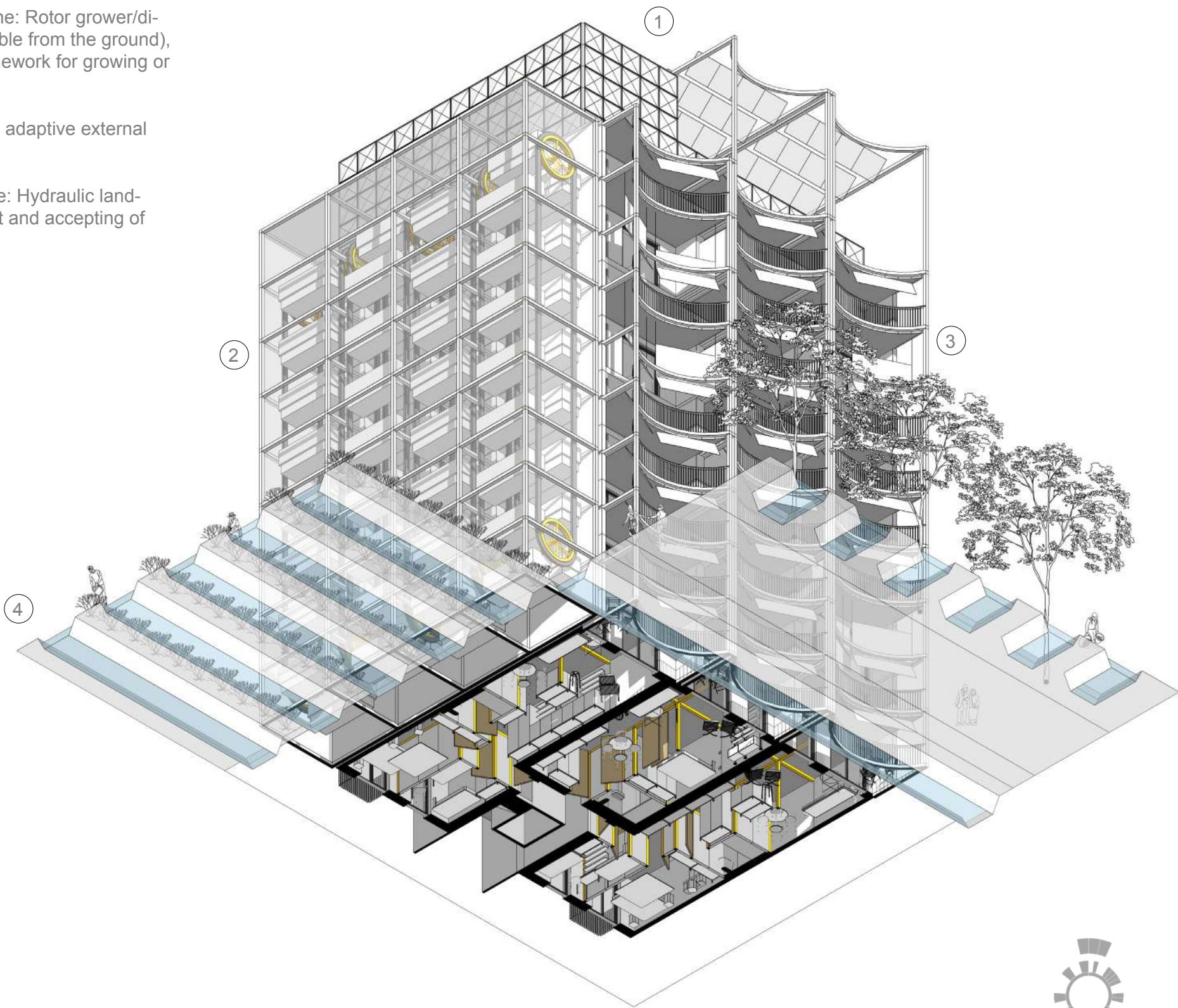
Building Block: A series of cores that are always inhabited, reinhabited and being re-made

1. Existing structural frame
2. CLT expansion
3. Facade cassette with high performance glazing
4. Adaptive external frame housing balcony, shading, ASHP, Battery storage and provides a platform for innovation and future technologies
5. Secondary balcony allows engagement with the interior of the urban block
6. Post and Beam internal organiser: Holds partitions and distributes services so they can be accessed for future adaptation
7. Internal partitions: Bio-based products innovated in the LivingLab and produced by the district Re-Manufactory
8. Free-standing furniture: movable furniture allows for flexibility and future adaptations



Exploded typical floor cluster

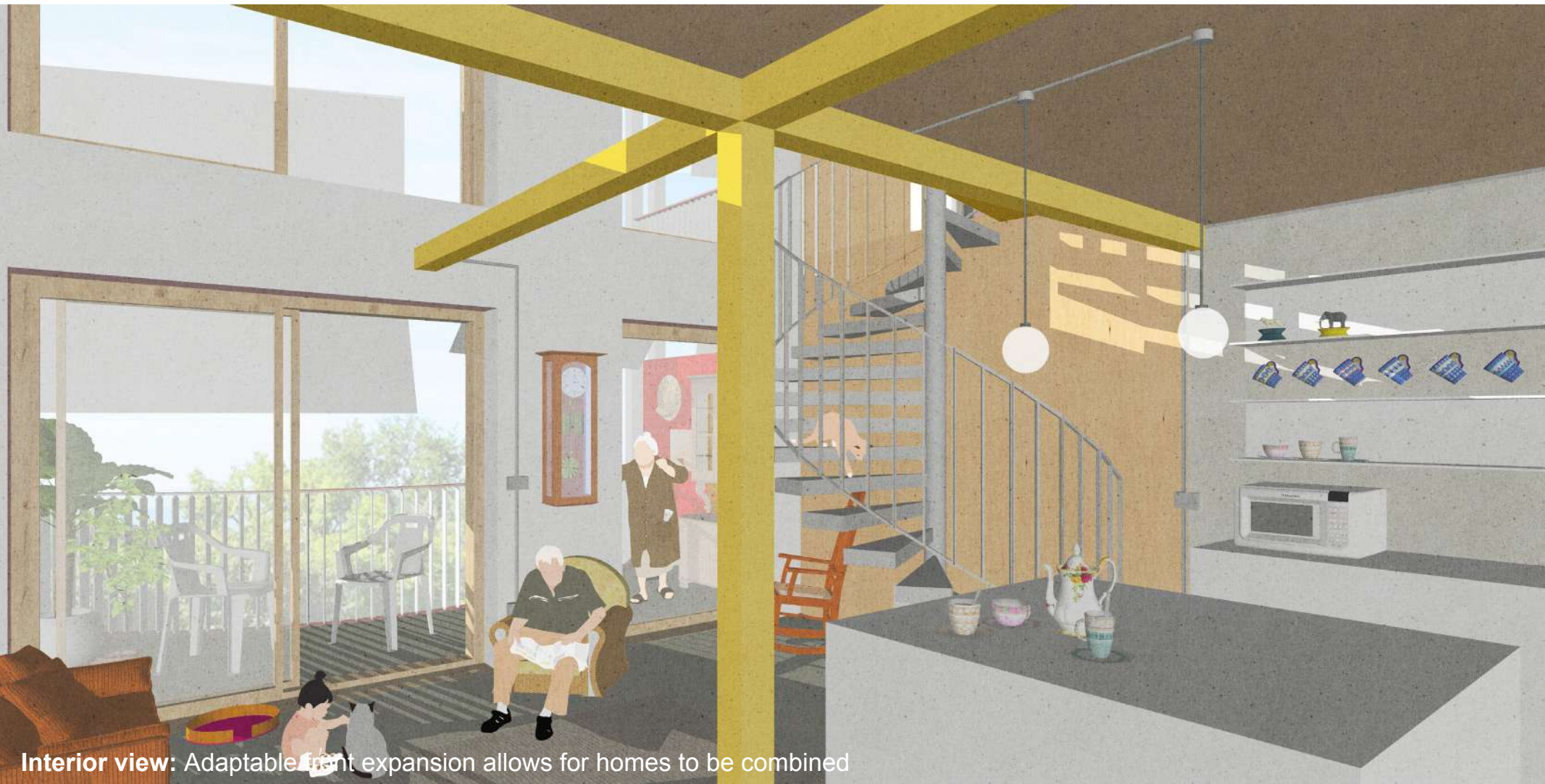
1. Roof plane: Water-tanks and PV for community energy micro grid
2. End wall plane: Rotor grower/digester (accessible from the ground), provides a framework for growing or bio-digestion
3. Main facade: adaptive external frame
4. Ground plane: Hydraulic landscape - resilient and accepting of water



Worms eye: The architecture of circular



Interior view: Expanded living space with "organiser" and biomatter partitions



Interior view: Adaptable front expansion allows for homes to be combined