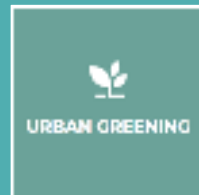




Sustainable Living Space
Smart & Green City
Synergy - What Connects Us



The future does not come – The future is made

Sustainable means „protection the livelihood of future generations“

Gateway to
Sustainability



Creation of a common innovation & evaluation space to achieve environmental protection and climate goals within the liveable city

It is not about the rhetorical question, which already gives the answer, how we will live, but about the open-ended & participatory discussion of how we want to live. The entire cosmos of possibilities for the goal of the vital, resilient and literally growing city & community in rural areas is integrated into a total of ten fields of action.

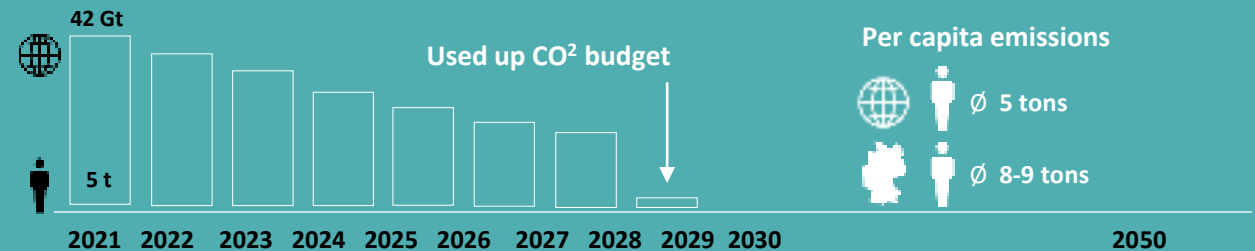
SmartCity is an important aspect, but not the only answer to global challenges. The SmartCity stands for the intelligent & networked city, and the GreenCity stands for the sustainable, natural and above all livable city - from these two directions of thought, previously considered independently of each other, a holistic & modular overall concept of regenerative (cycle-based) & ecological building planning is to be developed, and thus sustainability is given a face and urgency. It is about innovative solutions in which new things are discovered, but also old knowledge is rediscovered - in addition to technology and digitization, also craftsmanship, aesthetics and tradition, because innovation arises at the edges and interfaces of different specialist and knowledge areas.

It's about the connection in many ways - about the digital networking but also about the connection back to nature, which is the largest „patent office“ in the world.

It needs an open & neutral innovation space in which the actors who offer an answer to change can network, and it also needs experimentation areas and open-air laboratories for ideal solutions that are tangible and invite people to imitate - when skills complement each other – it takes a good communication.

We have to create facts through positive examples of successful transformation and comprehensive cooperation in order to carry knowledge into society and current debates.

- The pressure to act is enormous - for the 1.5-degree limit, humanity was still able to emit around 420 gigatons of carbon dioxide from the end of 2017 - Since it currently emits up to 42 gigatons per year, it now has even less than that left at the beginning of 2021 seven years until this budget is used up - Our maximum emissions budget in Germany is still around 6.7 gigatons of CO².
- According to this, the world has to live in a climate-neutral way, which means that the new emissions and what can be absorbed by nature or the oceans have to be in balance.
- Less than eight years to accomplish what is probably the greatest economic, technological and social transition in history.
- So why not solve the great challenges of our time where most people live and take action where most emissions and resources are wasted?



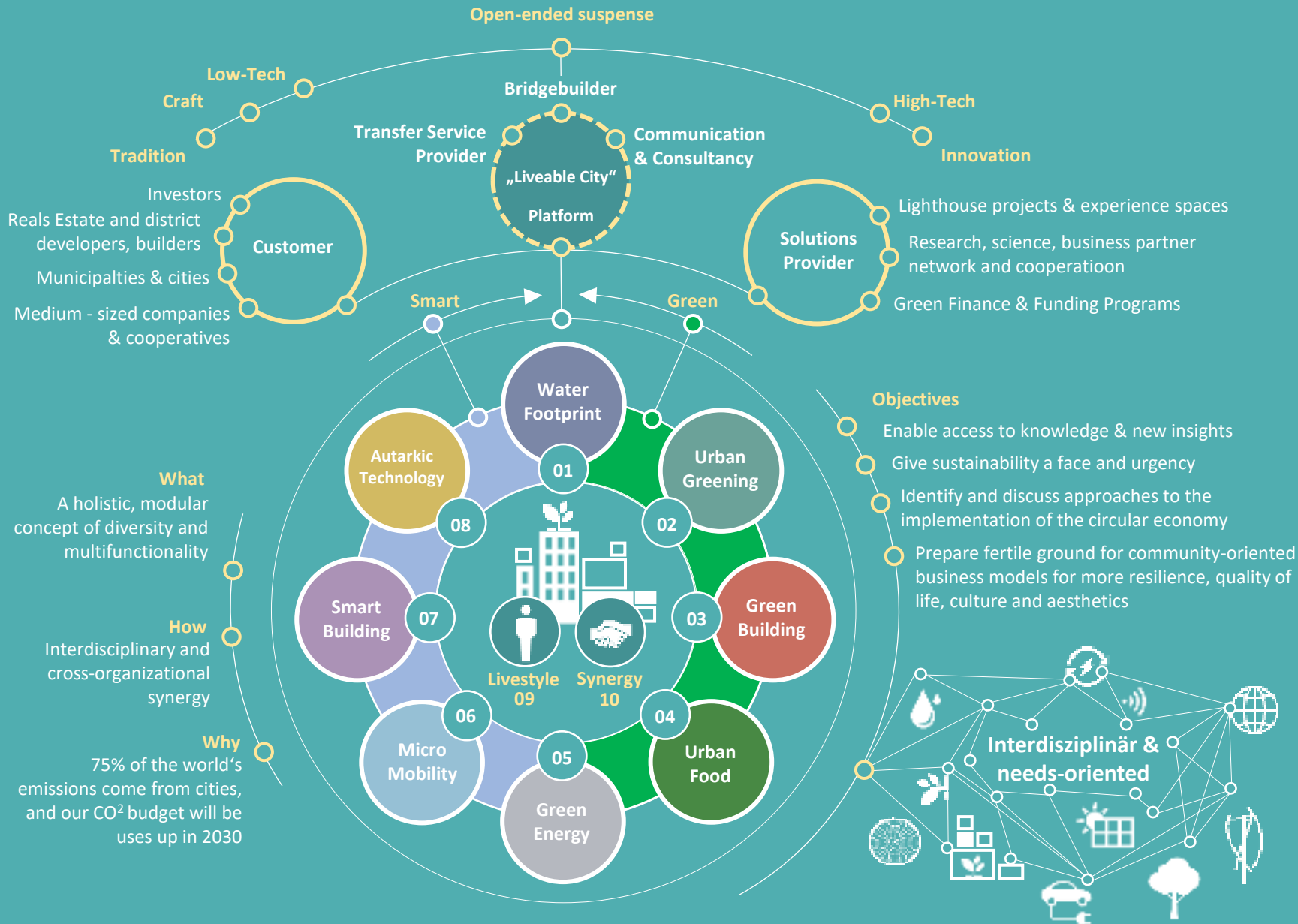
- Atmosphere of departure: If you want to build a ship, don't drum up the men to get wood, assign tasks and divide the work, but teach the crew to long for the wide, endless sea.

Antoine de Saint – Exupéry

Common Innovation Space – Smart & GreenCity

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What connects us

- 01 Intelligent irrigation and drainage, rainwater management, savings and storage
- 02 Building-integrated greening (vertical, roof, indoor) for good air, temperature and quality of stay as well as a pleasant microclimate
- 03 Ecological buildings from materials ("gray emissions"), consumption, multifunctional use to life cycle consideration (circular principle)
- 04 Hyperlocal and building-integrated production for self-sufficiency via decentralized networked forms of agriculture (diversity as a solution)
- 05 Building-integrated generation of renewable electricity from the environment such as sun, wind, water, soil (energy conversion)
- 06 Micro mobility infrastructure & management for the intelligent networking of local, individual and public mobility offers (sharing economy)
- 07 Intelligent data supply (platform) and digital services (smart home) for control, optimization (comfort, participation, security) and networking of decentralized units
- 08 Locally networked and self-sufficient systems for the supply & storage of electricity, heat, cold for self-sufficiency & resilience (energy use)
- 09 Healthy & enjoyable lifestyle and consumer behavior with awareness of global & long-term effects
- 10 Recognition of synergy potential and added value from the development of crossover perspectives and partnerships

The Bauhaus Scoring Design – Local Living Space

Development of cross-industry evaluation criteria & alternatives

Radius



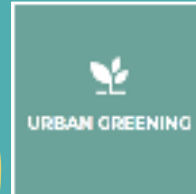
LIFESTYLE

- Conscious action & decision-making
- Resource-intensive products
- Professional communication & knowledge
- Needs orientation
- Healthy lifestyle
- Neighborhood concept
- Common good orientation
- Degree of identification (feeling of unity, happiness index)
- Ideas competitions (CO2 savings)
- Participation (how do we want to live)
- Regional foods
- Waste (energy, packaging, food)
- Product life
- Local jobs
- Waste & Sustainability Management
- Interior decoration & materials



WATER FOOTPRINT

- Water consumption
- Use of precipitation
- Rain retention Use of domestic water
- Infiltration capacity
- Groundwater protection
- Rainwater storage tank
- Sewer infrastructure
- Water management (Drinking and service water)



URBAN GREENING

- Compensation areas (roof, facade, interior)
- Green roof index
 - Roof gardens for local recreation
 - Biodiversity
 - Combination of PV & green roofs
- Heat islands
 - Microclimate in summer
 - Air quality (humidity, temperature)
- Particulate matter pollution
- Noise absorption
- Renaturation
- Water surfaces (natural & artificial)
 - Tree population
- Sustainable maintenance & green maintenance (new jobs)
- GreenCity concept



GREEN BUILDING

- CO2 emissions
- Power consumption
- Dismantling concept
- Construction waste
- Life cycle consideration
- Renewable, local, reused building materials
- Built-in pollutants
- CO2 intensive building materials
- Recyclability
- Aesthetic architecture
- Diverse architecture
- Preservation of the existing building
- Flexible use
- Modular adaptation
- Apartment management (vacancy)
- Multigenerational
- Serial renovation
- Wood content (hybrid)
- Further training offer
- R&D circular economy
- Mixed quarters
- Common areas
- Service quarters
- Cooperative models
- Roof usage
- Stilt construction (double use of the soil)
- Daylight quality
- Healthy indoor climate



URBAN FOOD

- Urban farming (local supply)
- Rooftop farms
- Greenhouse (building integrated)
- Aquaponics (fish farming)
- Farm shop
- Direct marketing
- Self-sufficiency (resilience)
- Regional products & brands
- Construction straw as insulating material for buildings (funding)



GREEN ENERGY

- Mini power plants
- Environmental energy (wind, sun, geothermal energy, water)
- Vertical & roof areas (new area potential)
- P2P energy trading (prosumer)
- Organic solar films



MICRO MOBILITY

- Local store structure (short distances)
- Bike infrastructure (parking space, bridges, paths)
- Accessibility of public transport
- Shuttle services
- Public transport costs
- Car sharing
- Bike sharing offers (cargo bikes)
- Traffic noise
- Shared mobility software (prosumer - mobility provider)
- Connection between town and country E-infrastructure
- Hydrogen infrastructure
- 15-minute city concept



SMART BUILDING

- SmartCity concept
- Digital services & apps (convenience, control, participation, data)
- Digitally connected buildings (eco rating at district level)
- Acquisition & analysis of consumption data in real time
- Sensor-based control (building automation)
- Digital twin of a city, district, house
- Environmental management
- Accessibility
- Digital collaboration (interdisciplinary innovation network)



AUTARKIC TECHNOLOGY

- Simple building technology (intuitive minimal technology)
- Reduction of building technology (use of waste heat)
- Energy without transport routes
- Storage systems (heat, electricity, water)
- Self-sufficiency (resilience)

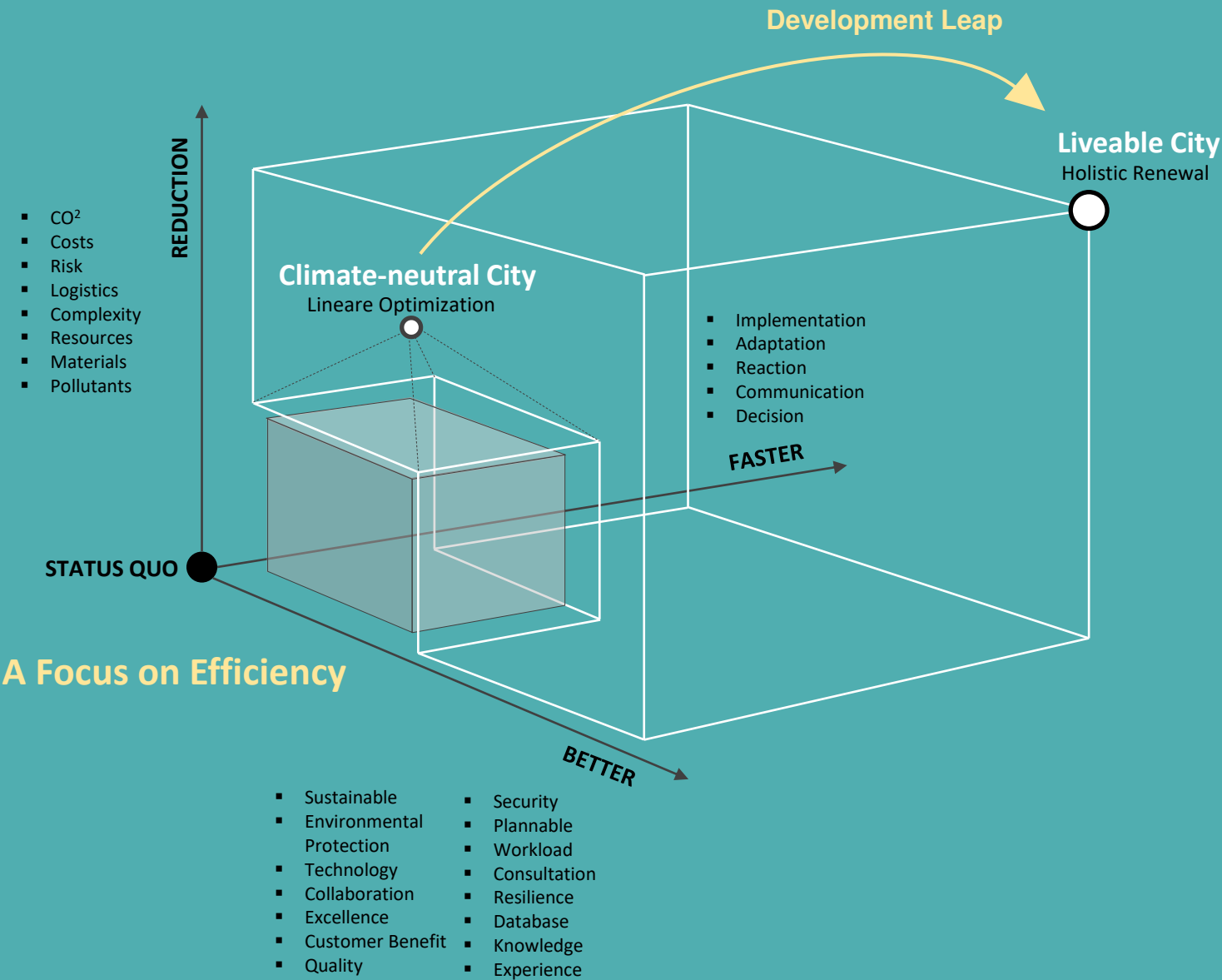


Local Scoring – Renewal from the middle of society

Instead of concentrating on just one sector when it comes to saving CO2 and thereby overburdening it, the relevant elements of a successful sustainable transformation are recorded across all areas. The overall assessment of the local habitat (radius e.g. 1-3 km) is based on a point system. What counts is the team performance in the region - what counts is the holistic view of the search for inspiring and specially developed alternatives.

Decision Making Space – How do we want to live

Demand for a better or the ideal solution



A Focus on Efficiency

B Focus on Diversity & Synergy



Bauhaus



Scoring

Design

What connects us - Common innovation space

To secure the basic human needs & livelihoods of future generations

Gateway to
Sustainability



An innovation space means creating a place to think about new things - not just to improve the familiar.



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