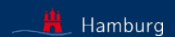


6th December 2019 | Site Visit by Delegation from Taiwan  
 Uwe A. Carstensen, Expert Guide HafenCity Hamburg GmbH



## HafenCity: Sustainable Urban Transformation



### HafenCity: Inner-city Brownfield in the 1990s Radical Transformation of Underused Harbour and Industrial Space



2



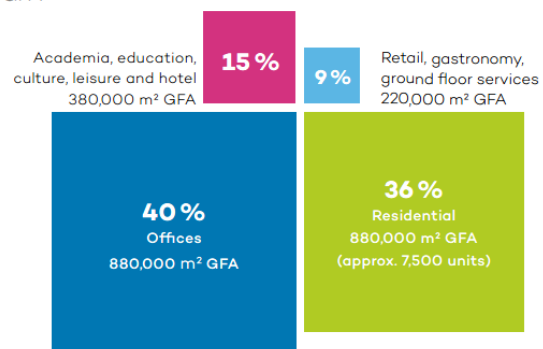


### HafenCity: Distribution of Building Space

730 Companies already / 45.000 Jobs & 15.000 Residents after completion



Total: approx. 2.5 million m<sup>2</sup> GFA



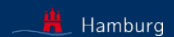


## HafenCity: Development Pipeline 2019



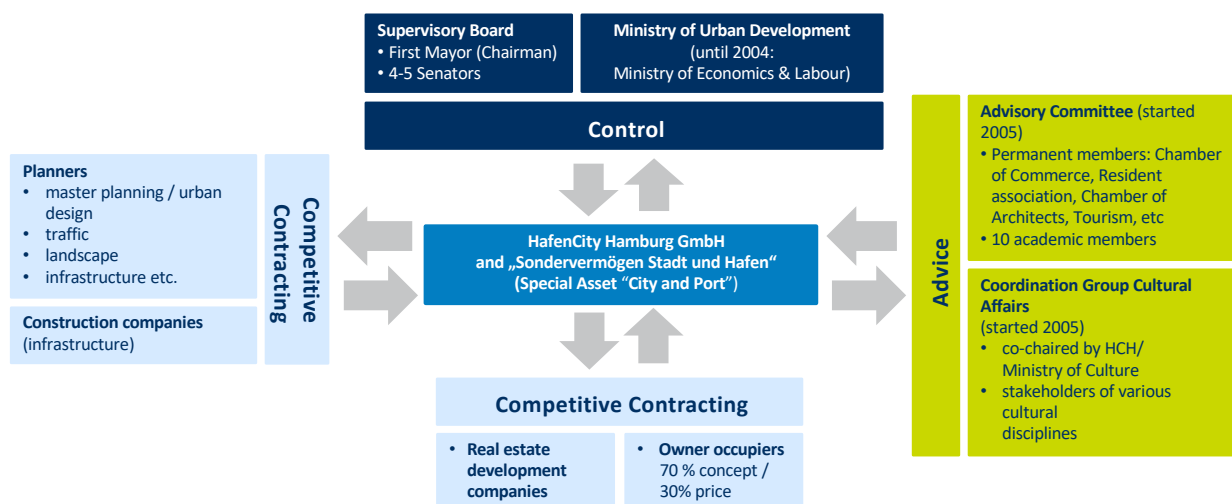
■ Completed
 ■ Under Construction
 ■ Exclusive Option
 ■ Available
 ■ Area Preparation

5



## HafenCity: Urban Transformation

### The Functional Embeddedness and Operation



6

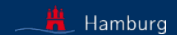


## HafenCity: A Strong Urban Design Foundation

### Levels of Design (Planning) in the Transformation Process



7



## HafenCity: A Strong Urban Design Foundation

### The Evolution of a Flexible Masterplan



Masterplan 2000



Masterplan Revision 2010



Updated Urban Design (April 2019)

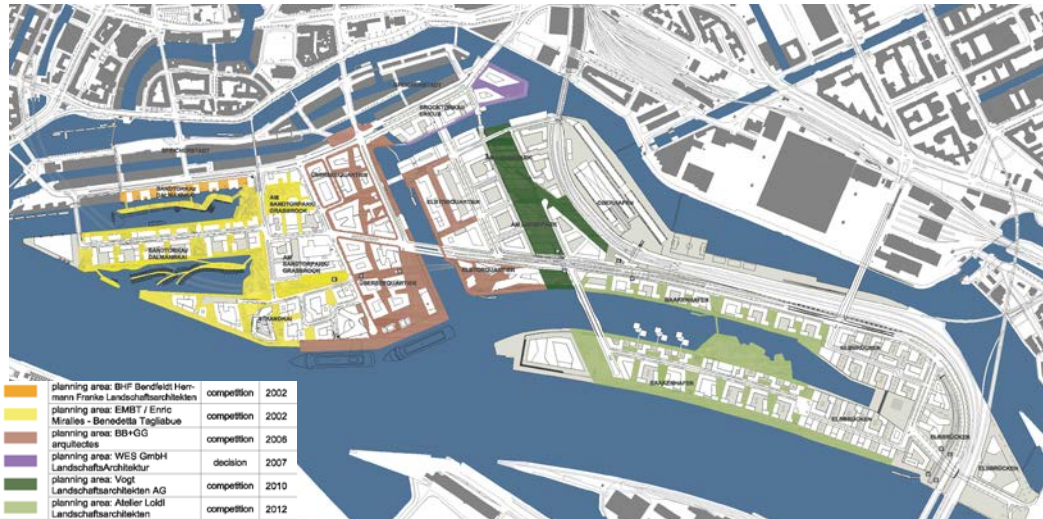


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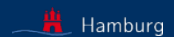


## HafenCity: Landscape Design

### Quality and Diversity of Open Spaces



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## HafenCity: Creation of Competitive Innovative Market Framings

### The Development of Inductive and Transformative Matching Markets



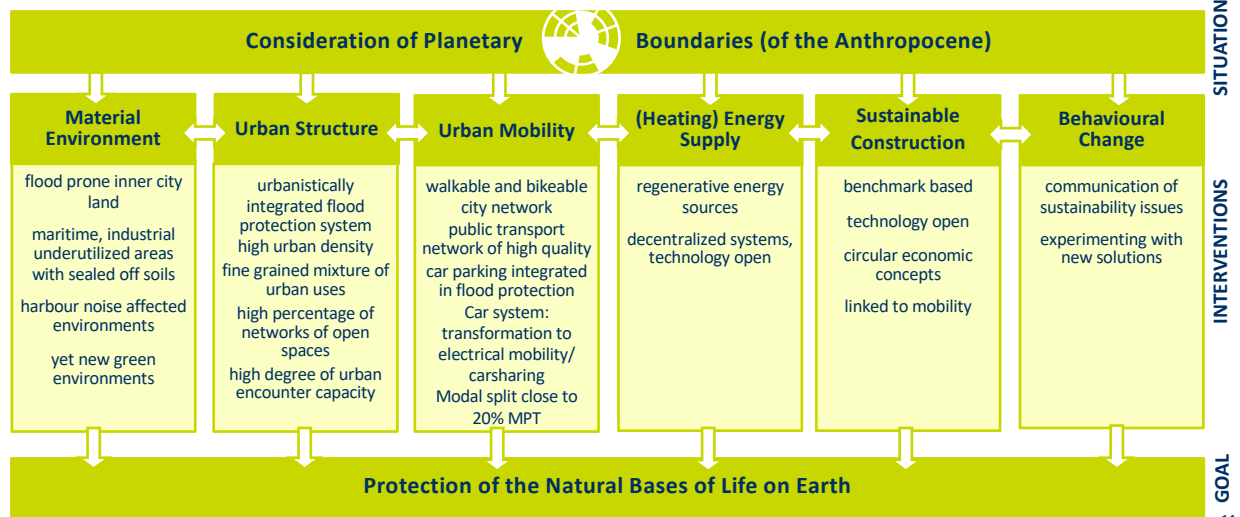
Processes	Instruments	Values
<b>Market Mobilisation</b> <ul style="list-style-type: none"> <li>Based on target concept (place-specific)</li> <li>What makes sense strategically?</li> <li>What is missing?</li> <li>What could be innovative?</li> </ul>	<ul style="list-style-type: none"> <li>Management of expectations</li> <li>Target group presentations and information documents</li> <li>Public discussions of expectations</li> <li>Leading by example</li> </ul>	<b>-&gt; Generating Density of Knowledge</b> <ul style="list-style-type: none"> <li>Risk reduction</li> <li>Matching markets/ future markets</li> <li>Generating „dense“ markets</li> <li>Creating matching environments</li> </ul>
<b>Tendering</b> <ul style="list-style-type: none"> <li>70% concept / 30% price</li> <li>Different prices for different uses (€ sqm GFA)</li> </ul>	<ul style="list-style-type: none"> <li>Tender document</li> </ul>	<b>-&gt; Competition Process</b> <ul style="list-style-type: none"> <li>Based on concepts</li> <li>Generating idea-based offers</li> </ul>
<b>Granting Exclusive Options</b> <ul style="list-style-type: none"> <li>18 to 24 month;</li> <li>Developing the product quality (form architectural competition to building permit)</li> </ul>	<ul style="list-style-type: none"> <li>Exclusiv agreement (binding option)</li> </ul>	<b>-&gt; Cooperation Process</b> <ul style="list-style-type: none"> <li>Stabilizing matching environments and ideas</li> </ul>
<b>Sale of Land (Freehold)</b> <ul style="list-style-type: none"> <li>Based on detailed contracts</li> <li>Start of Construction</li> </ul>	<ul style="list-style-type: none"> <li>Sales contract</li> </ul>	<b>-&gt; (De-)Commodification Process</b> <ul style="list-style-type: none"> <li>Closure of results and creating resilience of public goods</li> <li>Stabilizing matching environments and ideas</li> </ul>

10





## HafenCity: Dimensions of a Sustainable Urban Transformation



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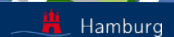


## HafenCity: Creating Place-based Identity

A Compact, Mixed-used City (354 jobs and 110 inhabitants per ha)

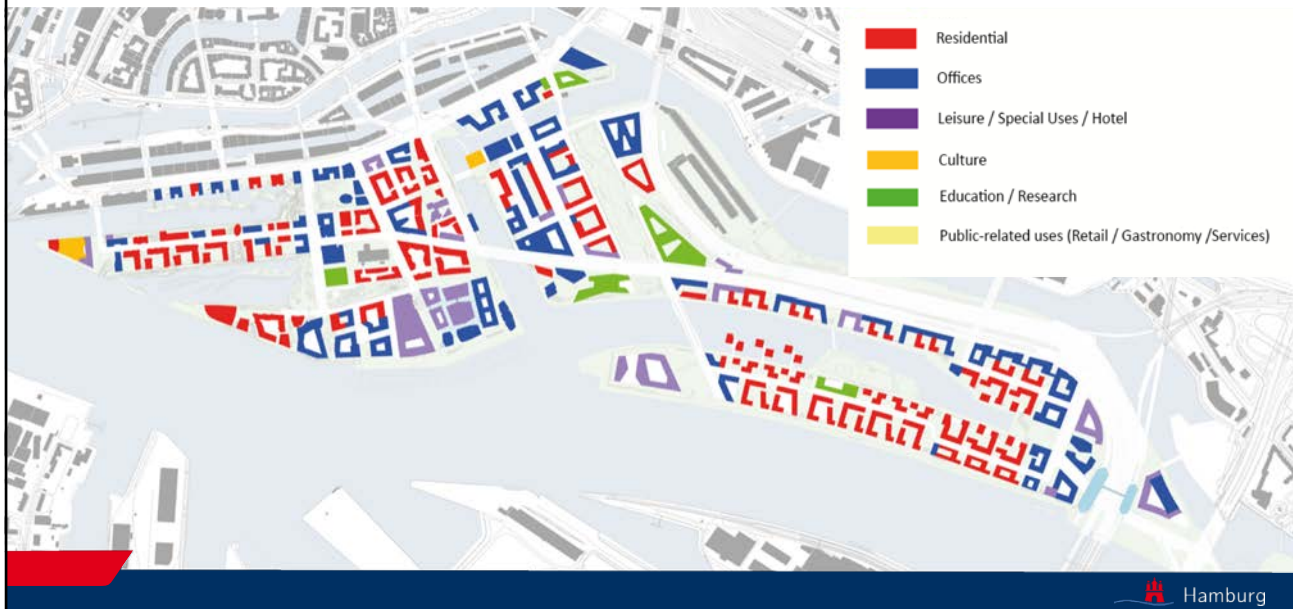


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## HafenCity: Urban Structure

### Land Use – 1st Floor and Above



## HafenCity: Urban Structure

### Land Use – Public-related Ground Floor Uses



## HafenCity: Neighborhood Management

### Financing secured through Sales Contract



#### Urban planning level:

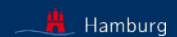
- Neighbourhoodhouse close to a park, approx. 250–300 qm

#### Legal level:

- Financing based on an allocation of the land owners
- Hedging over land charge in land registry
- Amount of monthly payments is limited to 0.07 € per m<sup>2</sup> chargeable base area for apartments and limited to 0.10 € per m<sup>2</sup> for other uses.
- Quarter Management Board manages the finances and commissions suitable parties to carry out certain tasks



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## Dimensions: Urbanistic Flood Protection Concept

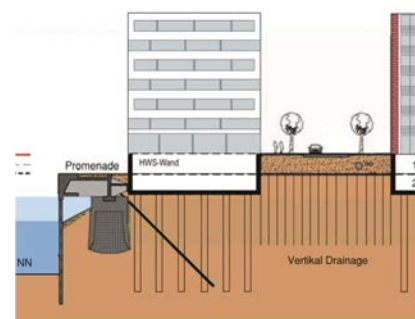
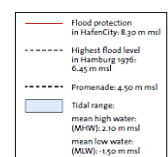
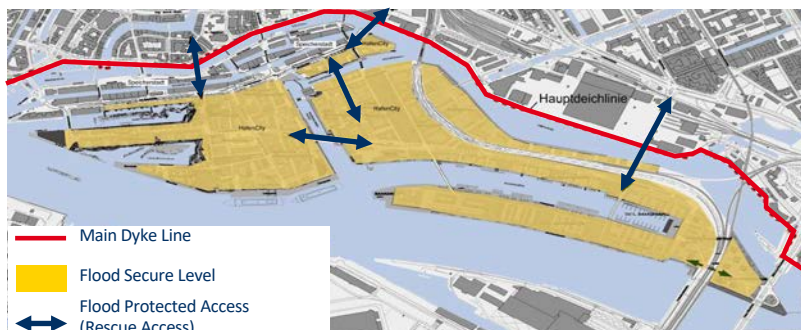
### Considering Climate Adaptation / Double Use of Infrastructure (Parking)



Normal Situation



„Controlled Flooding“ rarely, short-term



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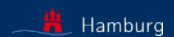


## HafenCity: The Good Urbanistic Flood Protection System

### New Topography : Wharf Concept – Streetscape / Waterscape



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## HafenCity: Nature-based Solutions

### Near-natural Spaces in the Inner City



#### Near-natural Embankment

- Increasing biodiversity
- Protected vegetation
- Bird nesting places
- Monitoring of biodiversity



#### Diverse Planting and Permeable Surfaces

- 100% rain water filtration
- Permeable surfaces
- High degree of planting (500 trees und 20 tree types incl. fruit trees)
- Habitat for animals, shading, protection from noise and wind
- Protected near-natural areas
- Reduction of maintenance



#### Health, Well-being and Social Aspects

- Diverse options for an active life
- Planting and typography separate sport facilities
- Use of parks by sport clubs, and urban gardening groups etc.
- Integration of deportation memorial

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## HafenCity: Nature-based Solutions Green Vertical Facades...

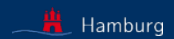


- ... reduce temperature and associated strain for residents.
- ... stores water and reduces the impact of heavy rain.
- ... reduce noise immission.
- ... are habitats for animals and increase biodiversity.



kadawittfeldarchitektur

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## HafenCity: Urban Mobility Public Transport

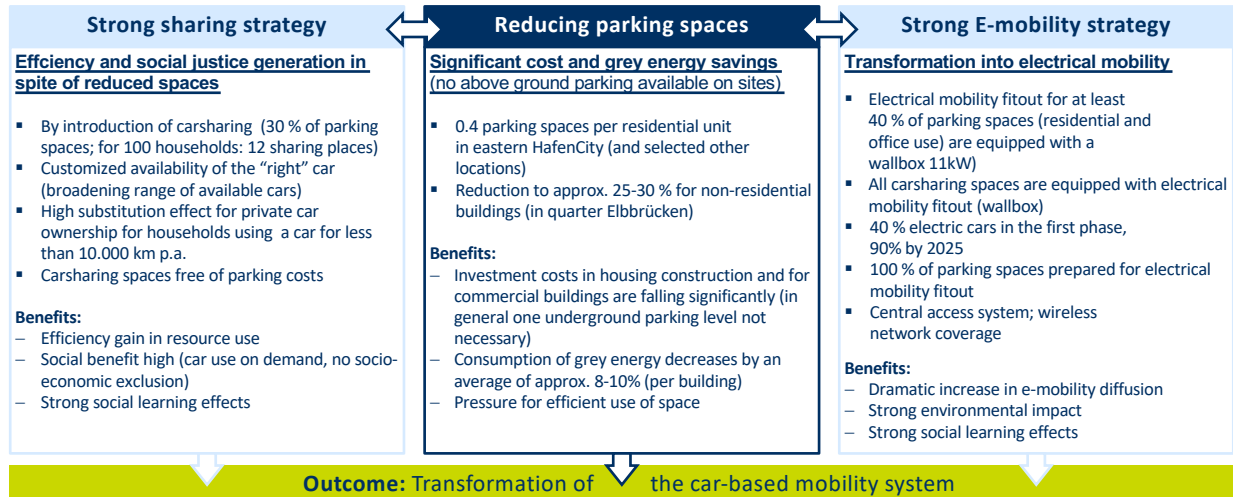


20

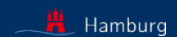


## HafenCity: Urban Mobility

### The Mobility Transformation / Car-based Mobility Systems



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## HafenCity: Urban Mobility

### E-Mobility, Car-Sharing, autonomous bus and more





## Dimension: Sustainable Construction



HafenCity EcoLabel: Platinum Certification required (since 2017) – starting new Experiments



### General Features

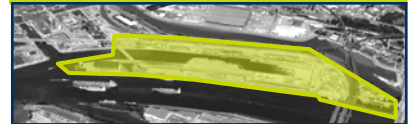
- First certificate in January 2007
- Certificate became mandatory for all in 2010 (gold certification standard)
- Major adjustments in 2010 and 2017 (Platinum now mandatory)

### Benchmarking System / Categories

1. Sustainable use of energy resources (required Platinum standard for every building)
2. Sustainable use of public goods (including mobility requirements such as integration of electric mobility and carsharing system)
3. Use of environmentally friendly building materials (elements of cradle-to-cradle)
4. Special consideration for environment, comfort and health protection
5. Sustainable Facility Management

### New: Five new Features (benchmarks and requirements):

- platinum standard in three categories (sustainable use of energy mandatory); gold standard in the other two categories
- Energy generation of solar energy (30% of roof top area) and green roofs
- Integration of 50% electric charging points as minimum standard (40% of spaces fitout, 60% prepared)
- Very low primary energy factor (approx. 0.11), industrial waste heat of Aurubis copper melting plant
- Monitoring process of energy efficiency after two years of operation



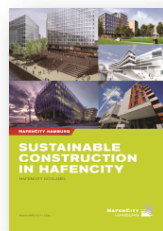
## Dimensions: HafenCity EcoLabel



Raising the environmental Construction Standards



No minimum standard for buildings beyond legal requirements



**HafenCity Gold standard optional**  
3 out of 5 categories to be Gold, energy efficiency mandatory in Gold

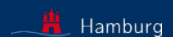


**HafenCity Platinum standard**  
3 categories Platinum standard and two Gold minimum, energy efficiency mandatory in Platinum

2000

2007

2017



Thank you for Your Attention!



*„For the last 20 years, HafenCity was Europe’s largest inner-city urban regeneration project. It is an extraordinary project and frequently used as a blueprint for the development typology of a European quarter on the waterfront.”*

Lehmann, Steffen (2019): Urban Regeneration, Palgrave Macmillan: Cham, S. 93

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