

# **VILLAGE** Co-Living

## Implementing The Vienna Model

8 September, 2020

# Measurable holistic sustainability

All Village Co-Living projects are committed to sustainability goals, managed through a comprehensive, transparent and measurable quality metric. The model is an application from the City of Vienna's 4-Säulen Modell / 4 Column Model (wohnfonds\_wien and Wirtschaftlichkeitsparameter und ökologischer Planungsfaktor für geförderte Wohnbauprojekte in Vienna / Efficiency Parameters and Ecology Planning Factor), developed by Technical University Vienna (TU) and Geschäftsstelle Bau der WKÖ (Construction Division of the Chamber of Commerce Austria). The model only allows projects that reach a sufficiently high quality score at the design stage in the following four areas: social, environmental, economic and architectural criteria. The model needs to be agreed on with stakeholders and if needed, complemented with local criteria before implementation. Please see full English version at [https://drive.google.com/file/d/14HIDU\\_t1TAbaN08K8-3BSivt8RxCce7o/view?usp=sharing](https://drive.google.com/file/d/14HIDU_t1TAbaN08K8-3BSivt8RxCce7o/view?usp=sharing)

## SOCIAL CRITERIA

### 1 SMOOTH EVERYDAY LIFE

- 1.1 Independent and flexible use of space
- 1.2 Adequacy of storage space
- 1.3 Furnishability with standard furniture
- 1.4 Bicycle and stroller storage facilities
- 1.5 Fear-free and barrier-free spaces / social security
- 1.6 Quality of outdoor living space
- 1.7 Measures to increase safety

### 2 COST REDUCTION BY DESIGN

- 2.1 Dwellings reserved for permanent social housing
- 2.2 Economical floor plans and efficient use of communication facilities
- 2.3 Effective structural volume
- 2.4 Reduced administrative costs for buildings and external buildings
- 2.5 Alternative mobility concepts that replace Parking spaces / garage

### 3 LIFE IN THE COMMUNITIES

- 3.1 Common spaces: Versatility and communication features
- 3.2 Outdoor spaces for different user groups, especially young people (noise protection, solid materials, ...)
- 3.3 Community organization, economic management, involvement of residents
- 3.4 Inclusive concept during design, construction and operation
- 3.5 Site identity and clear (ie defined) neighborhood
- 3.6 Measures to enable art

### 4 FROM HOUSING TO CHANGING NEEDS

- 4.1 Social mixing enabling diverse living arrangements
- 4.2 Consideration of special user groups, possibilities of assisted living
- 4.3 Connecting and connecting to existing social infrastructure
- 4.4 Diverse opportunities for different (living) cultures
- 4.5 Work-living environments, common areas, temporary use facilities
- 4.6 Flexible and purpose-independent ground floor spaces

### TOTAL POINTS 11/11

## ENVIRONMENTAL CRITERIA

### 1 CLIMATE AND RESOURCE FRIENDLY CONSTRUCTION

- 1.1 Basing design, construction and technical solutions on low and ecological life cycle costs
- 1.2 High energy efficiency - nZEB
- 1.3 Energy efficient heat production with minimum emissions, renewable energy, decentralized electricity generation
- 1.4 Ecological construction principles, demolition construction, low gray and production energy
- 1.5 (Beverage) water saving measures, availability of service water, utilization and absorption of rainwater
- 1.6 Quality assurance measures, studies and monitoring

### 2 HEALTHY AND ENVIRONMENTALLY CONSCIOUS LIVING

- 1.2 Daylight and ventilation properties of living quarters, protection against overheating
- 2.2 High comfort level: Optimized comfort parameters, ventilation / air flow rate, humidity control, simulation results
- 2.3 Healthy living: Pollution-free building materials, emission reduction (windows, controlled ventilation, EMF reduction)
- 2.4 Support for environmentally conscious and healthy lifestyles, measures to increase the recreational value of the living environment, access to services and mobility, special facilities for cyclists

### 3 URBAN CHARACTERISTICS OF OUTDOOR / GREEN AREAS

- 3.1 Functioning urban relations, concepts that create identity
- 3.2 Accessibility, pedestrian and bicycle routes, integration into the interior of the ground floor
- 3.3 Urban ecological measures to promote microclimate, soil and groundwater quality and nature conservation
- 3.4 Protection of noise and privacy
- 3.5 Material usage that enables high utilization and reasonable maintenance costs
- 3.6 Technical characteristics of surfaces and materials and quality of fastenings
- 3.7 Functionality and design of the greenery of the facade

### 4 USING OUTDOOR / GREEN AREAS

- 4.1 Consideration of all user groups
- 4.2 Neighborhood, communication, participation and equality characteristics
- 4.3 Play and sports activities, indoor air areas, quality of appearance, playgrounds
- 4.4 Mixing and separating, avoiding excessive segmentation, avoiding fences
- 4.5 Operation of yards, communal areas, green areas, lighting and winter maintenance
- 4.6 Proportion, diversity, adaptation, segregation, location and scale of private outdoor spaces
- 4.7 Proportion of outdoor space available to residents for shared use

### TOTAL POINTS 11/11

## ECONOMICAL CRITERIA

### 1 PLOT

- 1.1 Acquisition cost
- 1.2 Rental cost
- 1.3 Additional costs (registration, booking, infrastructure, cleaning, financing, interest)

### 2 TOTAL CONSTRUCTION COSTS

- 2.1 Construction costs
- 2.2 Construction side costs
- 2.3 Design efficiency compared to limit values

### 3 RESIDENTS COSTS AND SERVICE CONTRACTS

- 3.1 Supported housing
- 3.2 Cooperative housing
- 3.3 Rental housing
- 3.4 Owner-occupied housing
- 3.5 Parking costs
- 3.6 Maintenance costs
- 3.7 Involvement in operational expenditure decisions

### 4 COST-AWARENESS TECHNICAL SOLUTIONS AND EQUIPMENT

- 4.1 Value for money
- 4.2 Heat and noise protection
- 4.3 TCO / life cycle costs
- 4.4 Measures to enable low maintenance costs

### TOTAL POINTS 11/11

## ARCHITECTURAL CRITERIA

### 1 URBAN IMAGE AND STRUCTURE

- 1.1 Functional and identifiable urban structure
- 1.2 Urban connections
- 1.3 Passage and movement, permeability, closability
- 1.4 Accessibility, accommodation and mobility facilities
- 1.5 Views
- 1.6 Utilization of topography
- 1.7 The relation of the ground surface and ground floor
- 1.8 The social spatiality of the habitat

### 2 STRUCTURE OF THE BUILDING

- 2.1 Composition and orientation of buildings
- 2.2 Functionality of floor plans
- 2.3 Quality of corner and corner solutions
- 2.4 Adequate ground floor functions and equipment
- 2.5 The impact of structural choice on the structure of life and the economy
- 2.6 Indoor and outdoor connections

### 3 THE STRUCTURE OF LIFE

- 3.1 Versatile apartments and floor plans
- 3.2 Functionality of floor plans
- 3.3 Availability of the rooms
- 3.4 Efficiency of circulation spaces
- 3.5 Room orientation and views
- 3.6 Connection between the apartment and the outdoor space, usability of the outdoor space

### 4 DESIGN

- 4.1 Effectiveness of buildings in line with project objectives
- 4.2 Facade design and materials
- 4.3 Adaptation to the environment

### TOTAL POINTS 11/11

## LOCAL CRITERIA

### 1 POLITICAL GOALS

- 1.1 Nn...
- 1.2 ... ?

### 2 STRATEGIC GOALS

- 2.1 Nn...
- 2.2 ... ?

### 3 DEVELOPMENT GOALS

- 3.1 Nn...
- 3.2 ... ?

### TOTAL POINTS 11/11

<b>CLASS A</b>	<b>PROJECT HAS EXTRAORDINARY QUALITY</b>	<b>45-55</b>	<b>POINTS</b>
<b>CLASS B</b>	<b>PROJECT PASSED</b>	<b>34-44</b>	<b>POINTS</b>
<b>CLASS C</b>	<b>PROJECT PASSED WITH CONDITIONS</b>	<b>23-33</b>	<b>POINTS</b>
<b>CLASS D</b>	<b>PROJECT TO BE RESUBMITTED</b>	<b>12-22</b>	<b>POINTS</b>
<b>CLASS E</b>	<b>PROJECT FAILED, NEW CONCEPT REQUIRED</b>	<b>0-11</b>	<b>POINTS</b>

The model is an implementation of the "4-Säulen Modell/4 Column Model" mallista (wohnfonds\_wien ja Wirtschaftlichkeitsparameter und ökologischer Planungsfaktor für geförderte Wohnbauprojekte in Wien / Efficiency Parameters and Ecology planning factor), kehittäjinä Technical University Vienna (TU) ja Geschäftsstelle Bau der WKÖ (Construction Division of the Chamber of Commerce Austria).

# Measurable sustainability objectives

The implementation of sustainability objectives is monitored through project parameters and quality criteria.

Project parameters are used to determine whether a project meets the limit values set by the criteria.

The limit values are used to score the quality criteria.

The figure displays five spreadsheets related to sustainability benchmarking and scoring. The first three are titled 'BENCHMARKING vs GARAGE' and show various project parameters (e.g., area-related, volume-related, energy-related) with their respective limit values and current values. The fourth spreadsheet, 'SCHEMATA OF SUSTAINABILITY', features a color-coded bar chart at the top and a table of sustainability objectives with their corresponding scores. The fifth spreadsheet, 'SUSTAINABILITY', provides a detailed table of sustainability objectives, categorized by area (e.g., Energy, Water, Air Quality, etc.), with their respective limit values and current scores.

Finally the entity constitutes a measurable overall sustainability assessment. Village Co-Living commits to reaching at least "class B (second highest) in all its projects.

# CONTACT

## VILLAGE CO-LIVING

[villagecoliving.com](http://villagecoliving.com)

**Village Development Osk**  
c/o tafkao architects Oy  
Uudenmaankatu 2 K, 00120 Helsinki

Solving expensive and lonely living by building socially, environmentally, economically and architecturally sustainable co-living locations.

[villagecoliving@gmail.com](mailto:villagecoliving@gmail.com)  
+358405182518 (WhatsApp)