COMPETITION OF IDEAS: CALL FOR PROPOSALS ON THE IMPLEMENTATION OF A SUSTAINABLE ECO GREEN VILLAGE IN THE AREA CALLED “Comparto 35c, via Raffaello”

DIMENSIONE srl

Cooperating with the Municipality of Castelnuovo Rangone
INTRODUCTION

Based on the specific variant of the P.R.G. (Piano Regolatore Generale – urban and land general plan) approved by the resolution n. 38 of the City Council of Castelnuovo Rangone on the 25th of September 2013, pursuant of Article 15, fourth paragraph, of the regional Law 47/78 and following a planning agreement, pursuant the article 18 of the Regional Law n. 20 (24th March 2000), both published in the Official Bulletin of the Region of Emilia Romagna n.310 of 23 October 2013, the Building Company Dimensione S.r.l., in collaboration with the Municipality of Castelnuovo Rangone, announces, on behalf of the owner of the area hereafter indicated, a private competition of ideas in a single phase, aiming to achieve ideational proposals for the Project MILD HOME.

The project MILD HOME (My Modular, Intelligent, Low cost, Do it yourself, nearly zero energy House for our Eco Green Village) implemented in the framework of the SOUTH EAST EUROPE – Transnational Cooperation Programme 2007-2013, co-funded by European Union.

The Municipality of Castelnuovo Rangone is project partner with: Regional Union of Veneto’s Chambers of Commerce (Italy), Emilia-Romagna Region (Italy), European Centre for Renewable Energy (Austria), Building Biology Institute Austria (Bulgaria), Bulgarian Chamber of Commerce and Industry (Bulgaria), European Labour Institute (Bulgaria), Municipality of Sofia (Bulgaria), Region of Thessaly (Greece), Szechenyi Istvan University (Hungary), Centre for Promotion of Clean and Efficient Energy in Romania (Romania), Caras-Severin County Council (Romania), City Municipality of Savski Venac (Serbia).

The project started in October 2012 and will ends in September 2014.

The main aim of the project is to define the modalities of design and triggering the construction of a new typology of civil building with specific characteristics and named MILD HOME.

The new buildings will have high energetic performances, low environmental impact, modular and with a low cost of construction. These units will be part of an Eco Green Village (EGV), a sustainable settlement based on a sustainable lifestyle.

MILD HOME’s business sustainability will be achieved through modularity, standard construction models, short chain of suppliers, re-used and recycled materials and others. The overall goal is setting up a sustainable buildings model for low-middle income people at affordable costs.
AIM OF THE CALL FOR PROPOSALS

The aim of the call for proposals is the achievement of ideas concerning an Eco Green Village, as required by the Project MILD HOME, in the area called "area 35C" located in Via Raffaello in Castelnuovo Rangone (MO) [see the attached area’s MAP].

Based on the specific variant of the P.R.G. (Piano Regolatore Generale – General Plan for the Regulation) approved by the resolution n. 38 of the City Council of Castelnuovo Rangone on the 25th of September 2013, pursuant of Article 15, fourth paragraph, of the regional Law 47/78, the building of the area "b" will be realized with the aim of setting up 4 social housing units. The 4 apartments will be rented at a reduced fee for not less than 16 years following the signing of the lease.

The area covered by the competition is located 700 meters from the town center, close to the gym, to the schools, to the pharmacy and to the main commercial services. This area is well served in terms of roads and bike paths; parks are nearby.

The competition of ideas will select innovative proposals on 3 main issues:

1. A general urban planning proposal for all the area ("a", "b" and "c") as the design of the Eco Green Village.
2. Mild Homes: a detailed design proposal (architectural and plant design) for Social Housing as described in the map – area “b”.
3. A proposal for a business model to describe the affordability of area “b” cost’s targeting the social housing intended use for more than 16 years.

Eco Green Village (see point n°1) will be developed in a residential area of 2700 m². The competition of ideas will select innovative proposals for all the area with the best energetic management, the less environmental impact and the highest livable level.

Mild Homes (see point n°2): in the Eco Green Village, an area of 650 m² will be dedicated to the building of four apartments of similar size (See the attached area’s map). Four residential units must be designed for a total amount of 250 m² of net surface (surface of the buildings, floor area); these units are addressed to Social Housing for more than 16 years following the signing of the lease.
The proposal must contain a detailed design of architecture, structure and plants and other if required by the owner of the area.

The **business model** (see point n°3) will describe and guarantee the achievement of the best energetic management, of the less environmental impact and the highest livable level for the area, but also of the low management and construction costs. The main aim of the model will be the integration of construction model and management in a Social Housing system for more than 16 years.

The business model will be based on some proposals useful to achieve a long term sustainability of the intervention; alternative ownership asset, systems and innovative management solutions should be included. The competition of ideas aim to the define a sustainable Social Housing model for the Municipality of Castelnuovo Rangone.

**CRITERIA PATTERN**

Proposals regarding points n°1-2-3 must fulfill the main goals of MILD HOME Project as:

- high energetic performance of buildings and low emissions;
- use of local, re-used, recycled materials;
- indoor climate based on the quality of the building envelope;
- use of renewable energy supply for buildings;
- modularity;
- economic sustainability of Social Housing model.

Eco Green Village (areas “a”, “b” e “c” of the town map) will be designed according to above principles and the local regulations.

Open spaces, parking and path networks must be defined targeting the livability and sustainability of the Eco Green Village.

Buildings will be MILD HOMEs so:

1- Energy performance will be calculated according to the local regulations. The MILD HOME should be in the best energy classes:

<table>
<thead>
<tr>
<th>Energy class</th>
<th>Score reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best class</td>
<td>10</td>
</tr>
<tr>
<td>-----------------</td>
<td>----</td>
</tr>
<tr>
<td>Second best class</td>
<td>5</td>
</tr>
<tr>
<td>Third best class</td>
<td>1</td>
</tr>
</tbody>
</table>

2- In the MILD HOME ecological materials– derived from renewable resources (guaranteed and long lasting) should be used:

<table>
<thead>
<tr>
<th>Amount of ecological materials used (for horizontal and vertical structures)</th>
<th>Score reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 80 %</td>
<td>10</td>
</tr>
<tr>
<td>From 50 % to 80%</td>
<td>5</td>
</tr>
<tr>
<td>From 20 % to 50%</td>
<td>2</td>
</tr>
</tbody>
</table>

[Calculation of the percentage for different building’s construction parts is volume based]

3- Indoor summer and winter comfort will be guarantee at the highest level. To quantify the indoor winter comfort the quality of the building envelope will be considered not only taking into account active heating or air conditioning systems (HVAC). In MILD HOMES, both summer and winter thermal comfort should be guaranteed: thermal comfort in winter is defined by the difference between the indoor surface temperatures of outer-walls and windows glasses and the air temperature in the room.

<table>
<thead>
<tr>
<th>Difference of inside surface temperature of outer-wall to room air temperature</th>
<th>Score reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 1 degree C</td>
<td>10</td>
</tr>
<tr>
<td>Between 1 - 2 degrees C</td>
<td>5</td>
</tr>
<tr>
<td>Between 2 - 3 degrees C</td>
<td>1</td>
</tr>
</tbody>
</table>

The MILD HOME building has to fulfil the national regulations against overheating of the most critical room of the building.
4- The MILD HOME building has to fulfil the national regulations on indoor air quality in respect to pollutants

5- The MILD HOME should be supplied with renewable energies. The sustainability of the energy supply must comply at least the national rules and, if possible/feasible achieve improvements. The extent of the renewable energy source is judged in the sectors of electricity, hot water and heating.

<table>
<thead>
<tr>
<th>Usage of renewable energy</th>
<th>Score reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-sufficient</td>
<td>20</td>
</tr>
<tr>
<td>More than 80 %</td>
<td>10</td>
</tr>
<tr>
<td>More than 50 %</td>
<td>5</td>
</tr>
<tr>
<td>More than 10 %</td>
<td>1</td>
</tr>
</tbody>
</table>

6 – The business model will be structured to guarantee (see point n°3) the achievement of the following two milestone:

- monthly rent of no more than € 390.
- lease duration not less 16 years from the date of the lease signing.

The economic model will take into account all the necessary solutions to ensure long-term sustainability including: hypothesis on the ownership of the area (ownership of the buildings at the end of the 16 years of reduced loan), or other innovative management approaches.

For the Municipality of Castelnuovo Rangone and for the MILD HOME Project it will be a target to find an economic model of social housing characterized by sustainability over 16 years:

<table>
<thead>
<tr>
<th>Economic sustainability management in social housing</th>
<th>Score reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 20 years</td>
<td>30</td>
</tr>
<tr>
<td>20 – 24 years</td>
<td>10</td>
</tr>
<tr>
<td>Less than 20 years</td>
<td>1</td>
</tr>
</tbody>
</table>
DOCUMENTS AVAILABLE TO PARTICIPANTS AND REQUESTS FOR INFORMATION

The call for proposals is downloadable at:

http://www.comune.castelnuovo-rangone.mo.it/il_comune/uffici/sportello_unico_per_l_edilizia/_mild_home_il_progetto_per_la_casa_economico_energetico_a_castelnuovo.htm?

For any further information contact the organizing secretariat which relies on the support of the administrative offices of the municipality of Castelnuovo Rangone (Alessandro Bellentani - E-mail edilizia.privata@comune.castelnuovo-rangone.mo.it).

The e-mails will be answered not later than the Friday of the week following the data of reception.

PARTICIPATING CONDITIONS

Participation is open to all professionals who are not inhibited to the profession and that are members of Registers of respective Italian professional orders or professional qualifications recognized in other European countries and to all companies on the Italian and European territory.

All competitors must agree with this competition conditions.

SUBMISSION OF THE PROPOSALS

The proposals must be submitted by sending all documents to Municipality of Castelnuovo Rangone, in English or in Italian, as above:

- from Italy, all documents must be sent by the following certified e-mail address comune.castelnuovo@cert.unione.terredicastelli.mo.it, by the deadline of 7th February 2014, 12 a.m. In the e-mail, the object must be: “COMPETITION OF IDEAS ON THE IMPLEMENTATION OF A SUSTAINABLE ECO VILLAGE IN THE AREA CALLED Comparto 35c, via Raffaello”;

- from the other European country all documents must be sent to the following e-mail address u.visone@comune.castelnuovo-rangone.mo.it by the deadline of 7th February 2014, 12 a.m. In the e-mail, the object must be: “COMPETITION OF IDEAS ON THE IMPLEMENTATION OF A SUSTAINABLE ECO VILLAGE IN THE AREA CALLED Comparto 35c, via Raffaello”;
The Municipality will manage the administrative procedures to support the competition in behalf of Dimensione S.r.l.

The Assessment Committee shall exclude any proposals received over the deadline or with lacking annexes. Deadline extensions will be published on Castelnuovo Rangone website with an adequate notice.

The proposal must contain:

1. A general urban planning proposal for all the areas ("a", “b” and “c”) defined as **Eco Green Village** (.pdf format), with:
   - a descriptive and technical report with no more than 10 (ten) files A4 format, with the EGV proposal’s logic, the description and analysis of choices. Report can contain sketches and schematics;
   - no more than 10 (ten) graphic arts with:
     a) overall plant of the project (scale 1:200), with distances to property lines, neighboring roads and buildings, infrastructures, trees, and any other element of the area, with information about project buildings, their heights, distances from roads, property lines and buildings; for existing trees, projects must indicate position, height, type and diameter and any other useful element;
     b) any other graphical useful element.

Charts must contain main project elements, with solutions for urban fabric and residential solutions, architectural details, main used materials and, if necessary, 3D-pictures and rendering.

2. **Mild Homes**: a detailed design proposal (architectural and plant design) of area “b” for Social Housing as described in the town map – area “b” (.pdf format), with:
   - a descriptive and technical report with no more than 10 (ten) files A4 format, with the aim of the project, the description and analysis of choices. Report can contain sketches and schematics;
   - no more than 10 (ten) graphic arts with
     a) building dimensioned plants (scale 1:100) with all building levels, indication of end use for every room, main surfaces, windows sizes and middleheights;
     b) roofing plants (scale 1:100) with indication of slopes, covering type, volumes, vents, skylights;
c) at least two dimensioned sections (scale 1:100) to describe the project completely;

d) all buildings perspective drawings (scale 1:100) with indication of materials and colors;

e) report about energetic performance of buildings, ad defined by art. 28 of Italian Law 09 January 1991, n° 10, related to Legislative Decree 19th August 2005, n°192 (modified by decree n°311/06)

f) structural report and structural graphic arts;

g) at least two rendering;

3. A proposal of a business model showing the economic sustainability of the social housing model or that the building and management cost of the area “b” will allow to rent the apartments at lower price than the present market for more than 16 years, with:

   o a descriptive report of less than 10 (ten) pages A4 format with the main specifics about the business plan, management models, ownership model and proposals and any other useful element to describe the economic sustainability of the choice;

   o a business plan for no less than 16 years to describe investment profile and profitability for the 4 residential units as described at point n°2.

**COMPOSITION OF THE ASSESSMENT COMMITTEE**

Members of the jury will be five:

- competition of ideas proposer as Chairman;

- 2 members of the technical staff of Municipality of Castelnuovo Rangone;

- 2 experts of MILD HOME Project.

**PROCEDURE**
Assessment Committee meetings will be considered valid only with the presence of all members of the Assessment Committee.

The Assessment Committee deliberation shall be secret during the execution; all operations performed must be reported in a minute, which must be signed by the chairman and by the members of the Committee.

The Assessment Committee decision will be taken by majority each vote justified by a concise statement of reasons.

The Assessment Committee shall bring its decisions by a majority vote: each member will vote once and will give a short motivation. In case of a tie, the chairman's decision will prevail.

The sum of the scores given by individual Commissioners discretion will lead to the final ranking. For the purposes of the evaluation of proposals, the members of the jury will evaluate the compliance to the items listed in the "Design Criteria".

Final rankings will contain only the first three classified, all others will be classified a tie in fourth place.

In the case of a tie in the final merit there will be a secret ballot; in case of a further tie, the Chairman will choose the winner.

Following the decision of the jury, the proposer company will proceed to award the winner, inform media, relevant professional associations, and will publish the list on the website of the municipality of Castelnuovo Rangone.

AWARDS

The winner will design the 4 residential social housing units (see point n°2), having a surface of 250 mq and to be rented at reduced fee for not less than 16 years, as already described. The design costs will be covered by the competition proposer, Construction Company Dimensione S.r.l.

Residential units design will include:

i. architectural design;

ii. structural design;
iii. plant systems design;
iv. Director of works and safety officer
v. any other design modification

Geological surveys and other elements not specified above are not included in the contract.

**The total contract is 38.000,00 € (VAT not included).**

Proposals of the competition of ideas might be advertised.

**PRIVACY**

Private competitors data will deal according to Legislative Decree n°196 of 30/06/2003.

Data will deal both on paper support and digital support. Data provision is necessary for the competition; competitors who reject data provision will be excluded by the competition.

Data provision will deal during and after the period of the competition, in order to conclude all expected activities.

Competitors can exercise their own jurisprudence according to art. 7 of the Legislative Decree. n. 196/2003.

Construction Company Dimensione S.r.l.

Stefano Storti