

A unique model for the sustainable refurbishment of 80 000 residential areas

A total management tool for the sustainable refurbishment of Europe's 80 000 post-war residential areas with a total of 56 million dwellings will be developed with the support of the European Commission.

Seven housing companies from all over Europe, together with nine European research institutes, one construction company and five consultancy organisations, are going to develop, test and improve models and tools in the next four years. The results will be provided to facilitate the enormous refurbishment task, which must be carried out in the European Union as well as in Eastern Europe. The sustainable refurbishment will be executed at a cost budget and within a time schedule comparable to traditional refurbishment, but with the greatest possible consideration for customer participation, energy savings and environmental improvement.

The project was initiated by Kalmarhem Ltd, Sweden, and Blomstrand Consulting Ltd, Sweden. Kalmarhem is also the project co-ordinator.

- The housing companies and contractors, as well as the tenants and municipalities concerned, have needed such concepts for a long time. Many housing companies already have experience in carrying out energy-efficient and environmentally friendly refurbishment. But they lack efficient and practical management tools, says the project co-ordinator Mr Tomas Eriksson, of CEO Kalmarhem Ltd. We have the framework for a European concept and it will be further improved during this four-year project.
- For a long time, housing companies have been presented with solutions made by designers and architects. These solutions are often good, but are not based on either the tenants' demands, the municipalities' needs or, most important of all, the housing companies' financial situation.

Development cost of approximately 10 million Euro

The European Commission's DG Research has granted 4,9 million Euro in the Fifth Framework Programme, Key action: The City of Tomorrow – for the project. The project participants provide an equal amount in terms of time from their experts' and staff's time. The total turnover of the project will be approximately 10 million Euro for the project duration of four years. This means that the project is one of the largest that the European Commission will support in the next four years.

- We will see rather quick results in the refurbishment projects that will be carried out in the participating housing companies' residential areas. Together, the housing companies own more than 200 000 dwellings. The project models and tools will be tested in selected parts of the housing-stock and then tested again in two other countries – one located in Eastern Europe.
- When the projects are completed, we will have a comprehensive concept to offer to the European housing companies, tenants' organisations and the municipalities concerned. They will be of great help in controlling the coming refurbishment and setting quality demands for architects, designers and technical installation engineers. It is not until then that we will be in control of the situation and can ensure that necessary, practical solutions to save energy and improve the environment will be realised, says Mr Karel Dekker of TNO, the project's scientific officer.

In all, more than 200 people from various organisations will be involved in the project. The model is simple and efficient: one single European organisation performs the actual production of the concept while the participating housing companies contribute with their assembled knowledge and test the experience in an ongoing refurbishment project. The municipalities, tenants organisations, local consultants and construction companies concerned are participating in each of the model-projects.

Widespread European participation

The project participants are from seven member states: The United Kingdom, Germany, Denmark, The Netherlands, Finland, France and Sweden. Not only housing companies from these countries are taking part, but also well known research organisations as TNO from the Netherlands, VTT, Renova and Motiva from Finland, CSTB from France, IfS and IRS from Germany, BRE from England and SBI from Denmark. In addition, a major construction company, NCC Ltd and a number of well-known consultancy firms are also participating.

Mr Jan A Blomstrand, Blomstrand Consulting Ltd Sweden, responsible for the project exploitation concludes:

- The models and tools that will be evolved will be disseminated in the form of general rules and as a set of guidelines. The participating companies from seven different countries form a parallel exploitation company that will market the results and help housing companies to carry out the sustainable refurbishment of post-war residential areas all over Europe on a consultancy basis.