Design Codes for Integrated Urban Development
The Urbact II Working Group Hopus - Housing Praxis for Urban Sustainability

Dr. Carola Clemente, Dr. Federico De Matteis
“Sapienza” University of Rome

Towards an Action Plan
for Energy Efficient Housing in the UNECE Region Conference
November 24th, 2009, Vienna
Sprawling Suburbs
Fragmentation

The poor management of a fundamental asset: space
Loss of Identity: the end of Urban Space
Over-sized, under-sustainable developments
Consumers misled by the real estate market
Problems of Urban and Housing Quality

- **Scarce public funding** leads to overwhelming private initiative (1:10 ratio)
- Limited coordination between planning levels leads to poor management of territory, consuming space
- Local authorities exercise limited control over urban development
- Difficulty in implementing designs and new technologies for sustainable housing
- Existing regulations define quantitative aspects but are unfit to provide qualitative guidance

All of these problems can be recorded with different intensity **AT EUROPEAN LEVEL**
Design Codes: Specific, Flexible Guidelines for Residential Development Areas

If...

- Regulations are rigid
- Regulations are a top-down approach
- Regulations are generally quantitative

then...

- Codes can be flexible
- Codes derive from a concerted negotiation with stakeholders
- Codes can engage qualitative aspects

BUT...

TO BE SUCCESSFUL, THE CODING PROCESS REQUIRES A SOPHISTICATED GOVERNANCE CULTURE
Borneo - Sporenburg Amsterdam
1996-2000

Large new residential developments, with individual buildings designed by many different architects using a design code to guarantee homogeneity and quality of urban space.
37 new public-private residential development areas are being carried out using a code of practice for urban design, building design, and sustainable construction.
Coding Examples

Sheffield City Council Residential Design Guide
In progress

A guide for new and redeveloped residential areas focusing on urban landscape, character definition, sustainability
Implementing Quality through Coding

- Energy certification
- Quality labeling
- Urban design guidelines
- Guidelines for sustainability
- Design coding
Coding for Energy Efficiency in Housing

Design coding can be used to indicate the...

- **correct layout of buildings** for optimal orientation and ventilation
- **massing of volumes** to enhance natural cooling
- **correct use of building elements** intended to provide shading such as screen, louvers, canopies etc.
- **layout of interior spaces** to optimize natural lighting and ventilation
- **appropriate use of building technologies** for the achievement of high-end technical performances
- **integration** of active solar technologies
- **any other indication** useful to homogeneously enhance the environmental sustainability of a residential development
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