

REHVA

Some recent activities of

**REHVA Technology and Research
Committee**

Olli Seppänen, chair



Federation of European Heating and Air-conditioning Associations

Guidebooks in process

Filters in A/C systems – review completed

Solar shading - draft 80%

IAQ in Schools – good progress

IAQ investigations – good progress

Air distribution – completed by Antalya

**Museums – draft from 8/2008 Thermal
environment in low energy buildings
- results of ThemCo project**

Radiant heating of large premises

REHVA journal plan for 2010

- **European Journal of Heating, Ventilation and Air-conditioning Technology or European Journal of HVAC Technology**
- **Six issues á 64 pages**
- **Issues to be distribute in special events**
- **Goal: min 10 pages of advertisements**
- **Long articles to website, and abstract or shorter version in the Journal from the beginning of 2010**
- **New cover with REHVA new logo**

REHVA journal plan for 2010

- **Expanded mailing to specific counties to be tested**
- **Expanded mailings offered to supporters with cost of 5 euros per issue**
- **Products and systems commercial section to be revitalized**
- **Mailing lists from members and supporters updated**

Themes of 2010 issue

- 1. Air Conditioning and Ventilation (ASHRAE, Interclima, ISH China) Dec 20**
- 2. Heat Pumps (Mostra C, Light and Building, Nord Bygg) Feb 20**
- 3. Energy efficient technology for buildings (Clima2010, Sodex) April 10**
- 4. Results of Clima 2010 (Finnbuild, Chillventa) June 10**
- 5. Renewable Energies in Buildings Sept 25**
- 6. Energy efficient heating Nov 20**

Advertisement for 2010

- **Full price for one page** **2000**
- **Supporters adds**
 - **Single adds (-20%)** **1600**
 - **3 issue contract (-30%)** **1400**
 - **6 issue contract (- 40%)** **1200**

REHVA newsletter

- **About 1000 subscribers, free**
- **4 pages in 2009 6 issues**
- **Order at www.rehva.eu**
- **Call for material**
 - Events
 - News from NAs (personnel etc)
 - Universities new professors, dissertations
 - Books and publications
 - etc

Recast EPBD

- **Contents agreed between commission, parliament and council on Nov 17**
- **More stringent than 2002 version**
- **More stringent than the original proposal from commission**
- **Not so stringent, and more realistic than the proposal by the Parliament in April 2009**

Several potential tasks for professional organisations, some examples

- **Definition of nearly zero energy building**
- **Integration of alternative systems for all new and renovated building (1000m² limit omitted)**
- **New methodology for A/C inspections**
- **Methodology for Heating system inspections**
- **Requirements of technical systems**
- **Uniform calculation method**
- **Definition of cost-optimal**
- **Comparative method (Annex III)**
- **New requirements for certificartes**
- **Control system of certificates**
- **etc.**

Several potential tasks for professional organisations, some examples

- **Definition of nearly zero energy building**
- **New methodology for A/C inspections**
- **Methodology for Heating system inspections**
- **Requirements at system level**
- **Uniform calculation method**
- **Definition of cost-optimal**
- **Comparative method (Annex III)**
- **Control system of certificates**
- **etc.**

REHVA EPBD actions

- **Follow up the final reading in the Council and in the Parliament**
- **Inform the national associations**
- **Follow up CEN activities**
- **Establish a Task Force under TRC**
- **Organise a number of seminars**
- **At ASHRAE conference January 2010**
- **Antalya at REHVA GA May 2010**
- **Brussels Sept-Oct 2010**

Article 3 Adoption of a methodology of calculation of the energy performance of buildings

- **Member States shall apply a methodology, at national or regional level, of calculation of the energy performance of buildings on the basis of the common general framework set out in the Annex I - with reference to CEN standards and Renewables Directive**
- **Primary energy to be calculated**

Articles 4 & 5

Setting of energy performance requirements

- **Setting requirements with a view to achieving cost-optimal levels with the methodology referred to in Article 3.**
- **The calculation of cost-optimal levels shall be performed in accordance with the methodology developed by the Commission (so called comparative methodology Annex III)**

Article 6 New buildings

- **1000m2 limit removed**
- **Consider for all new buildings also**
 - (a) decentralised energy supply systems and energy from renewable source**
 - (b) cogeneration**
 - (c) district or block heating or cooling esp. when based on renewables**
 - (d) heat pumps**

Article 7 Existing buildings

- **Requirements for new buildings apply also to all buildings under major renovations (1000m² limit removed)**
- **Technically, functionally and economically feasible**
- **Requirements can be set also at component level**

Article 8

Technical building systems

Requirements for technical systems installed in the existing building, requirements may also apply to new buildings

- (a) heating systems**
- (b) hot water systems**
- (c) air-conditioning systems**
- (d) large ventilation systems**

Article 9

Nearly zero energy buildings

- a) **by 31 December 2020, all new buildings have to be nearly zero energy buildings**
- b) **after 31 December 2018, public authorities that occupy and own a new building shall ensure that the building is a nearly zero energy building**

Article 9a

Financial Incentives and Market Barriers

- **Member States shall take appropriate steps to consider the most relevant financial instruments given national circumstances**

Article 10

Energy performance certificates

- shall include the reference values
- shall include recommendations for the cost-optimal or cost effective improvement of the energy performance
- may include additional information such as the percentage of renewable energy in the total energy consumption

Article 13

Inspection of heating systems

Not any more boiler inspections but heating system inspections including, still 20 kW limit (unclear)

- the heat generator,
- control system and
- circulation pump(s),

Article 14

Inspection of air-conditioning systems

- **The inspection shall include an assessment of the air-conditioning efficiency and the sizing compared to the cooling requirements of the building.**

Article 17

Independent control system

- **Member States shall ensure that independent control systems for energy performance certificates and reports on the inspection of heating and air conditioning systems are established.**



Opportunities offered by the BUILD UP interactive web portal



Surname **LASTNAME**
ORGANISATION

Title of the conference
City, 00 Month 2009





Propose a news item!



Propose a Case!



Propose an Event!



Propose a Tool!



Propose a Publication!



Propose a Blog!



Propose a Link!



Propose a Community!

Actions

- **Promote BUILD UP in events and within Association and supporters organisations and in the national journals**
- **Register at BUILD UP**
- **Submit events, links, cases etc.**
- **Join the communities at BUILD UP**
- **Use the BUILD UP**

Events

- **Seminars at AHRAE conference Jan 25**
- **Seminar at Light and Building in Frankfurt April 15 th**
- **Meeting and EPBD seminars at REHVA General Assembly Antalya May 8-9**
- **20+ Workshops at Clima 2010 Antalya May 9-12**
- **Technical seminar in Brussels Sept-Oct 2010**