

**Future Buildings Forum Think Tank Workshop on
Future Sustainable Buildings and Communities,
21-22 March 2007, Espoo, Finland**

First announcement

As a major industrial sector, the real estate and construction sector must contribute to reducing the consumption of natural resources, especially energy, water and materials. Although not visible, energy supports vital services and societal comfort. Energy consumption has major impacts on the environment and the economy.

Energy consumption of communities and of buildings must be dramatically reduced. There is need to develop a new generation of “highly efficient buildings” with reduced energy demand and “highly efficient production and supply structures” in an integrated and optimised way.

Within IEA there is a good spectrum of expert knowledge and activities going on towards highly energy efficient and sustainable buildings and community level solutions, including the Implementing Agreement technology programmes on Energy Conservation in Buildings and Community Systems ([ECBCS](#)), Energy Storage ([ECES](#)), Heat Pump Centre ([HPC](#)), Solar Heating and Cooling Programme ([SHC](#)), District Heating and Cooling ([DHC](#)), Demand Side Management ([DSM](#)) and Photovoltaic Power Systems ([PVPS](#)) .

What is needed is to increase and strengthen the co-operation of various experts in the scope of sustainable buildings and communities and related technologies within IEA. Therefore, this FBF workshop will be organized.

The aim of the workshop is to identify R&D needs and new business opportunities in the scope of sustainable buildings and communities. The expected outcome of the workshop is a vision and a roadmap towards the vision (draft of strategy) concerning the energy system and the most important components of this system. The emphasis is on processes and co-operation models which are exceeding traditional “limits and borders”, and on integral technology solutions as well. The timeframe for the outlook would be up till 2030.

Two governing questions, as far as long term vision is concerned, are: What components, systems and solutions would be used in 2030? How this could happen from the market point of view?

An FBF workshop would be developed in the context and as a 2-day event with 5 blocks that concerns all Buildings-Related IEA Implementing Agreement programmes:

- Integral solutions,
- Building envelope as a energy system,
- Building services,
- Distributed energy systems,
- Process and information management

The output would be concentrated on R&D priorities for:

- Innovative technologies (community or building level),
- From products and systems to solutions,
- Innovative business models, customer needs
- Implementation (barriers, incentives, policies)

and be wrapped up as a “whole picture mapping”.

Contact: Markku.Virtanen@take.fi