

Working Group on Energy Efficiency

REVISED CONCEPT FOR A SUSTAINABLE BUILDINGS NETWORK

16 November 2009

1. INTRODUCTION

MANDATE

The HDP partner countries acknowledged the value of a new Sustainable Buildings Network (SBN) already from the outset of the Dialogue and asked the HDP Support Unit and the IEA to take forward a proposal for such a network. During its meetings in December 2008, March and May 2009, the HDP Working Group on Energy discussed the concept for a SBN and confirmed its support for the creation of the network as a deliverable for the Summit in L'Aquila.

PROCESS

In total, four workshops have been organised among dialogue partners and experts from international organisations and networks, concluding that there are convincing reasons to set up a new SBN to complement existing structures concerned with sustainable buildings. The underlying motivation lies in the acknowledgment of the untapped potential for substantial increases in energy efficiency in the buildings sector and the positive implications this could have for climate change mitigation and energy security. The workshops concluded that a new SBN would add value especially as an instrument for creating synergies, being a "network of networks". They also underlined the need to provide a link between the more technically oriented existing institutions and the policy level.

BACKGROUND

A large share of energy and water consumption takes place in buildings. The use of energy in commercial and residential buildings alone accounts for almost 40 % of global energy use (appliances and installed equipment included). There are many and compelling possibilities for reducing the consumption of energy in buildings, through greater efficiency and increase in the use of renewable energy sources integrated in buildings. The benefits are numerous, including cost reductions and increased business and employment opportunities. Improved energy efficiency can also have environmental benefits such as reduction of greenhouse gas emissions

and less pressure on resources. Sustainable and energy efficient buildings will also aim to use and waste less water.

Large improvements in energy efficiency are already technologically feasible, but great potential remains untapped and progress is slow. Economic and political barriers hamper the use of energy efficient solutions as well as the integration of renewable energy resources. In addition, social and behavioural barriers and a limited sharing of knowledge contribute to slow progress. At the policy level, co-ordination is often difficult and the responsibility for energy efficiency in buildings is often fragmented.

Several networks already exist in the field of sustainable buildings, but they are often limited in scope and membership. Their competence and experience nevertheless represent a considerable resource which could contribute to policy development and implementation on a larger scale, provided a platform for exchanges among them was put in place.

The support by the G8 and G5 countries for the creation of a new buildings network reflects their political awareness of the potential for greater energy efficiency in the buildings sector. The SBN represents a means to address issues of common interest for the partners in this field.

2. PURPOSE, SCOPE AND ACTIVITIES

The Sustainable Buildings Network will be established with the support of the HDP partner countries. All other major stakeholders; governments, international organisations, networks and research institutes; will be welcomed to participate in the network and take part in its activities.

PURPOSE

The main purpose of a new Sustainable Buildings Network would be to share information, identify and disseminate best practices and discuss policy instruments on sustainable buildings in order to provide major stakeholders, in particular policy makers, with evidence-based advice and practical guidance. The SBN could become an international reference portal for information on energy efficient buildings and renewable energy in buildings, combining a strong political mandate, technical expertise and networking with advanced and innovative dissemination strategies.

It should focus on policies and measures to implement existing technical solutions and to release the energy efficiency potential of both new and existing buildings. The SBN should prioritise and strengthen the communication and knowledge sharing systems among existing networks, and between them and other stakeholders. It should have a multidisciplinary and global perspective, address challenges related to international research in the field of buildings, and support effective systems for dissemination of research results.

In order to achieve this purpose, the SBN should:

- Mobilise existing stakeholders and networks towards common approaches;
- Collect and disseminate information; hence become a reference portal for information and policy-related issues;
- Provide a link between technical and political levels of decision-making;
- Provide a forum for sharing of experiences and lessons learned, between local, national and international levels;
- Provide informal coordination of political action at international level.

SCOPE

The SBN should have a global outlook, and should engage itself with developed, emerging and developing countries. Furthermore, it should:

- Consider technological aspects, as well as social and behavioural issues related to buildings;
- Take into account varying traditions and climatic and resource related conditions of different parts of the world;
- Focus on the existing building stock as well as on new buildings;
- Cover both policy development and implementation issues;
- Cover both residential and commercial buildings; and
- Include the promotion of financially affordable technology transfer and the development of low cost and affordable technologies.

The SBN should in the first instance concentrate its activities around energy efficiency in buildings, taking into account behaviour, and the use of building integrated renewable energy systems. In this context, the SBN should focus on the following core elements: the building shell, thermal energy use and illumination. Together, this will include cooling, heating, ventilation, hot water systems, air-conditioning and lighting.

The SBN could however also incorporate other elements related to energy use in buildings, such as escalators, dehumidification or other installations and appliances. Many of these incur large energy consumption and influence the energy use for thermal comfort. Over time, the SBN could expand its coverage to other elements of buildings such as water use, sustainable construction and building materials, health issues, waste handling and any other element of sustainable buildings or construction.

ACTIVITIES

Key activities for the Sustainable Buildings Network could be:

- Preparation of evidence based information and non-binding policy advice, nationally, regionally and globally; research into the effectiveness of

- implementation policies, especially for existing buildings; improved dialogue between technical and policy level;
- Support information exchange on definitions and standards, collection of information on efficiency indicators, identification of areas needing research or information collection, catalysing new projects and efficiency efforts in these fields;
- Support for capacity building in particular in developing and emerging countries, assistance to national authorities and organizations, support for networking.

These key activities will be essential for the fulfilment of the purpose of the network. To support the key activities, the SBN could engage in the following enabling activities:

- Collaboration between the many stakeholders in energy efficient and sustainable buildings on a global scale; including the dissemination of information on ongoing activities such as projects in industry and research;
- Establishment of an easily accessible data bank with information from all interested parties, with an overview on sustainable buildings activities on global level; dissemination of good results, best practices and policy advice;
- Dissemination of experiences and examples of demonstration projects, public private partnerships, cost and feasibility and saving results.

3. ORGANISATION

In order to ensure added value and avoid overlapping with existing activities, the SBN should be a forum of networks and play a complementary, catalytic role as an umbrella for existing initiatives and their activities.

The SBN could develop several channels of communication. Existing networks and organisations would play a substantial role in this, in particular through the identification of best practice policies, and in the publication of results. Media would be a key vehicle for dissemination of information to a wider public.

The SBN should have an internet-based information centre with electronic newsletters, publication of studies, databases on best practice policies, and links to other data sources, including information already stored and used in the existing networks. The Sustainable Buildings Network's website should be an easily accessible source of available information and recommendations. The website and databases on policies and best practices would be key instruments for communication among network members, policy makers and decision makers. The website should aim to become a reference portal for information on best practices and policy options in energy efficient and sustainable buildings.

Working Groups could be organised around specific topics according to the interests and needs of the SBN members. These groups would play an important role in the development of the network's substantive results and should liaise with other members of the network through the Secretariat, the website and databases.

MEMBERSHIP AND GOVERNANCE

Stakeholders could engage in the SBN in three different ways, as:

- **Members** contributing financially and having voting rights; also constituting the **Steering Group**
- Participants in the **Advisory Board**, including core actors such as policy makers, networks, international organisations, industry and other associations;
- **Beneficiary Members** or users, from a broad range of stakeholders, involving themselves in individual activities.

The Steering Group should provide the overall orientation of the network and formulate and deliver political messages in order to raise public and political awareness. It could be composed of a limited number of representatives mainly from partner countries' governments.

An Advisory Board could be composed of representatives from international organisations active in sustainable buildings (OECD, IEA, UNEP, TERI and others proposed by the HDP dialogue partners), resource persons from research and industry, and other relevant stakeholders. Contrary to the Steering Group, the Advisory Board would be primarily a working-level body collaborating closely with the Secretariat on technical issues including quality assessment, agendas and activities. The Advisory Board representatives are chosen by the Steering Group of the SBN.

The SBN could be open to any interested stakeholder from developed and developing countries as well as international organisations who are interested in being associated with and using its activities and databases. Beneficiary members should be able to register in order to:

- access regular information on ongoing activities, conferences and newsletters;
- access databases on policies of participating countries, measures and implementation issues;
- submit proposals for the network and for its activities;
- attend conferences which would be open to all members;
- interact in the SBN fora; share information on activities for the SBN events calendar.

4. COLLABORATION WITH THE IEA AND IPEEC

The International Partnership on Energy Efficiency Cooperation (IPEEC) was established by the G8 countries, India, the Peoples Republic of China, Mexico, Brazil, South Korea and the European Commission at the G8 Energy Ministers' meeting in Italy in May 2009. The first Executive Meeting of IPEEC was held in Paris in September 2009. As IPEEC will include energy efficiency in buildings in its work programme, the HDP partners wanted to use possible synergies between the two initiatives in order to avoid duplication both of structures and activities.

There is also agreement among the partners that there would be administrative benefits in associating the SBN with an existing international organisation, and that the IEA would be a well suited option. The IEA will host a secretariat for IPEEC and welcomes the idea of having secretariat functions for the SBN, as long as activities and secretariat are funded through specific voluntary contributions. (Final approval of such functions will have to be taken by the IEA Governing Board.)

However, the HDP partners stress that the visibility of the SBN as an HDP "product" should be maintained, and that the SBN should be organised as a free-standing initiative. At the IPEEC Executive Committee meeting in September 2009, the SBN was welcomed as a future Task Group of IPEEC and a small group of countries led by Germany was established, in order to prepare the SBN as a Task Group of IPEEC.

5. SECRETARIAT

The SBN secretariat should be light and efficient. Its two main roles would be to coordinate the activities of the network and play a key role in the dissemination of information and best practices. It should run the web-based information services and interact with the members; countries, networks and organisations; on technical as well as policy making levels.

It is proposed that a secretariat for the SBN is established by the HDP partners independently of the secretariat of IPEEC, but that the two could collaborate in the future in order to maximise potential synergies both on a technical and administrative level.

A secretariat for the SBN, covering the activities mentioned previously, could include one manager, (one or) two experts and (one or) two technical assistants plus some assistance for development and maintenance of databases and web solutions. Establishment of the secretariat can start once agreed on the MoU (Memorandum of Understanding) and ToR (Terms of Reference) between the establishing countries and the IEA, provided there are sufficient pledges for funding for the coming 1-2 years.

6. LAUNCH OF THE SBN

The formal establishment of the SBN was endorsed by the Leaders of the G8 and the G5 at the July 2009 Summit in Italy. A kick-off event marking the launch of the SBN is expected to be organised early next year. It will confirm the commitment of the HDP partner countries to the SBN and mark the start of the activities of the network. This conference will attract high level attention to the issues tabled and bring relevant actors together for the first time. It will put energy efficiency and sustainability in buildings high on the agenda at the global level.

In a longer term perspective, the SBN could organise a biennial conference with participation at high level, to bring the stakeholders together regularly and present major results of SBN's work, including policy recommendations for governments. This would serve to keep energy efficiency and other sustainable buildings issues at the forefront of the global agenda.

6. FINANCING

At present, the work related to the development of the SBN concept in the HDP Support Unit and the IEA is covered by the existing voluntary contributions to the OECD and the IEA by HDP partner countries. A portion of a German Voluntary Contribution (VC) to the IEA for 2009 for HDP activities is earmarked for the SBN. This "seed-money" should be sufficient for the work to be carried out in summer and autumn 2009, related to the formal establishment of the SBN and the support for the organisation of the kick-off event early next year.

Once established, the network will need further funding through voluntary contributions from member countries of the SBN.

The cost of running a secretariat for the SBN with the functions that are described above in the IEA, is currently estimated to be up to approximately € 1,3 million per year. This figure does not factor in any specific governance or management structure and therefore could change. The greatest variable cost will be related to whether or not the SBN secretariat will build up and run its own ICT activities (web development, maintenance, intranet etc.), or whether these can be carried out on the basis of an existing ICT platform.