

MyNetWorks – Course Announcement

Online Workshop on Sustainable Building Practice, Application of SBET (Sustainable Building Evaluation Tool)

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What is the course about?	The purpose of the online course is to introduce the topic of sustainable building practices. Subsequently, to demonstrate a methodology for developing indicator sets that can then be used to evaluate the sustainability of buildings when the data is processed with computer software.
When and where will it take place?	Course period: 24 November – 5 December 2003
How can I know more?	www.mynetworks.org (The platform will be open for registration from November 1 st 2003)
What can I learn with this course? What is the content of the course?	Objectives: <ul style="list-style-type: none"> • Provide an introduction to the course itself • Provide an introduction to the concept of sustainable development • Introduce basic ideas and concepts of sustainable building practice • Outline the implications of sustainable development for buildings • Provide generic sets of environmental, economic and social building indicators that can be used to help ensure that buildings support sustainable development; subsequent refinement of the indicators through the participants for “mycase” • Introduce the SBET (Sustainable Building Evaluation Tool) and its application on buildings or projects before implementation; online evaluation and registration at www.sbet.ch • Introduction to the SBP regional workshop methodology and its bottom-up approach to find relevant indicators for a specific context
What are the prerequisites?	Pre-requisites: <ul style="list-style-type: none"> • Basic IT skills: email, www, standard word processing & spreadsheet applications • Reliable access to Internet • General knowledge about construction • Interest in Sustainable Building Practices • Willingness to participate in discussions and contribute to the course with own knowledge and experience • Professionals, Academics, Students, decision-makers, NGOs, Governmental Organisation, International and Multilateral Organisations
How will we work?	Working methodology: Synchronous (real-time exchange) chat, Asynchronous (delayed exchange) discussions, assignments, own reading
How much time do I need to invest?	Time to invest: 2 hours on each consecutive working day for a 2 week period: total 20 hours
How much do I have to pay?	Payment: <ul style="list-style-type: none"> • Students from developing countries 20 Euro • Students from other countries 100 Euro • Professionals from developing countries 40 Euro • Professionals from other countries 250 Euro
Who will answer my questions?	Alex Büchi, Skat Foundation, e-mail: alex.buechi@skat.ch
Do I have enough background to take part in this course?	Ask yourself the following questions to assess your own background. You do not need to be able to answer them all to derive benefit from the course. <ul style="list-style-type: none"> • What is sustainability? • What is sustainable development? • How much does construction contribute to the total worldwide CO2 emissions? • Why is it important to reduce the use of non-renewable resources? • What is needed to design buildings that are sustainable? • What aspects of buildings need to be developed in order to reach environmental sustainability?

	<ul style="list-style-type: none"> • What aspects of buildings need to be understood in order to reach social sustainability? • What aspects of buildings need to be focused on in order to support financial sustainability? • When can a building be called sustainable?
<p>Where can I get additional information concerning the subject?</p>	<p> http://www.un.org/esa/sustdev/sdissues/sdissues.htm http://www.un.org/esa/sustdev/natlinfo/indicators/indsearch.htm http://www.novatlantis.ch/frames_e.html http://www.baunetz.de/arch/solar/ (in German) http://nesa1.uni-siegen.de/wwwextern/idea/main.htm http://globalsustainability.org/ http://www.sustainabilityindicators.org/ http://www.sustainablemeasures.com/ http://global-alliance.org/Education/Definitions/ http://www.sbis.info/ www.sustainablesettlement.co.za http://www.csir.co.za/akani/2002/nov/agenda21_infobrochure.pdf http://www.csir.co.za/akani/2002/nov/agenda21.pdf http://www.concensus.info/reports1/reports1.htm http://www.cibworld.nl/4DCGI/index.shtml?RSES=20031531510591400 </p>
<p>What do I get? What's the final product of the course?</p>	<ul style="list-style-type: none"> • A holistic understanding of sustainability and its application on construction • A chance to meet people interested in SBP to build up networks within the community of practice • An introduction and free registration for one year at www.sbet.ch and a customised set of indicators to assess the sustainability of buildings tailored for "mycase" • An introduction to the SBP workshop methodology in order to develop new indicators for different local contexts. The participant will be able to conduct his/her own workshop on sustainable building practices using this methodology
<p>What are the assessment criteria?</p>	<ul style="list-style-type: none"> • Participants are set assignments during the workshop, working towards developing their own "mycase" -> customised indicator sets that are applicable for a context that is specified by the participant • Active participation in chats and discussion groups • The criteria to assess the outcome of "mycase" will be the holistic understanding of the concept of sustainability, the development of the indicators through the SBP workshop methodology in working groups (depending on regions) and their application via "mycase", the graphical representation of the evaluation

Summary of the online workshop on Sustainable Building Practice and the application of SBET (Sustainable Building Evaluation Tool)

Background

As the global population continues to grow and the sophistication of economic activities increases, mankind is placing more and more demands upon the Earth's finite resources. Inevitably, concerns over the sustainability of human activity in its current forms are taking increasing precedence on the global agenda.

Traditional construction industries are struggling to keep pace with the housing requirements of large (and growing) populations. Scaling up existing methods for the production of basic building materials is now seen as increasingly unsustainable from an environmental perspective. A study in 1993 showed that the construction sector was already one of the largest single contributors to the worldwide total CO₂ emissions and that housing demand was increasingly outstripping supplies that are based on traditional building practices. Many countries are therefore looking for ways to meet this demand without placing further unsustainable pressures on the environment. On top of environmental concerns, a great potential for livelihood and job creation exists in the housing and construction sector. However, awareness about such potential seems to be very limited among the key stakeholders currently involved.

Experience in India

In India, the Skat Foundation and Development Alternatives have worked together for many years. Recently, professionals, government representatives, academics, private sector builders and other stakeholders from the building sector in Western Maharashtra were brought together at a workshop to discuss and agree upon a set of indicators that would help to assess the sustainability of building practices in their region. The workshop produced a number of positive impacts: the indicators developed favour monitoring (and hence reduction) of energy intensity and resource consumption in the construction sector. In parallel, an increased regard for social, economic and cultural concerns of society were addressed. The participants, through discussion and a well-defined participatory methodology, validated the potential usefulness of a practical tool produced.

The Sustainable Building Practice Methodology

The tool that was developed held great promise in assisting decision makers at various levels - such as designers, builders, policy makers and municipal bodies - to assess the choices they make with regards to the management of their built environment.

The process of generating a common set of indicators to measure sustainability in building practice and the companion assessment tool (the framework for extracting meaningful conclusions from the data produced) were felt to have a tremendous potential in empowering professionals, users and others related to the building sector to make relevant and informed choices in their design and construction processes. Further, it would enable these actors in the building process to have a clearer idea of the implications associated with the choices they make - steering the building sector towards increasing levels of sustainability. The stakeholders would be able to use the tool and to take their decisions with none or very little reliance on external expertise.

The SBET (Sustainable Building Evaluation Tool)

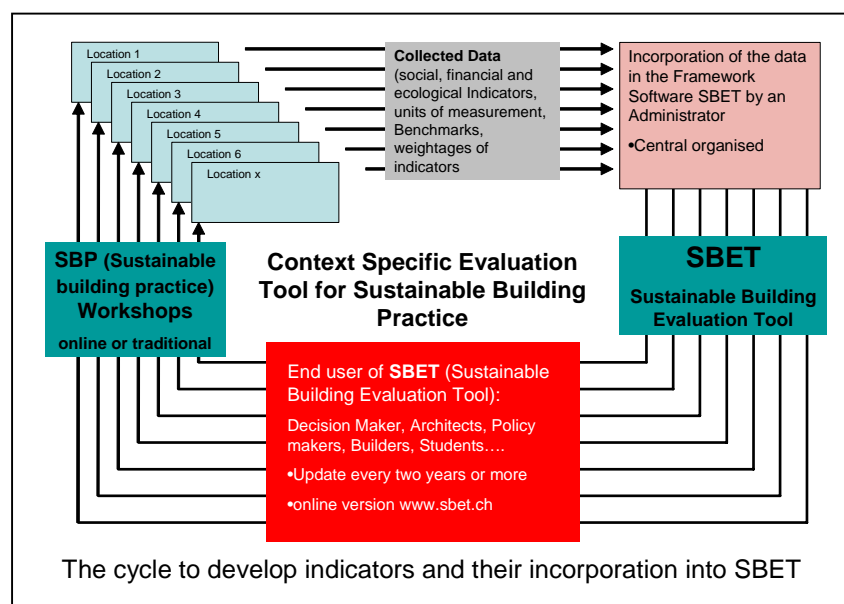
Assessing long-term sustainability of building practices requires a holistic view, which regards buildings as whole 'Systems'. Further, the assessment relies on measurement of certain performance variables or 'Indicators' of the building throughout its life cycle.

The 'Sustainable Building Practices' workshop methodology develops indicators that can be incorporate in a sustainable building evaluation tool (SBET) – a frame-

work that can be used to evaluate overall sustainability of our building practices on a comparative basis (either "before and after" scenarios, or "design A versus design B" scenarios). The tool is based on generic sets of indicators that represent ecological, social and financial concerns in building construction.

The identification of indicator sets for the evaluation tool is conducted through a moderated participatory exercise. The indicators for sustainability in building practices are drawn from the rich knowledge and local experiences of participants and reflect the most significant concerns of users and practitioners in the given context.

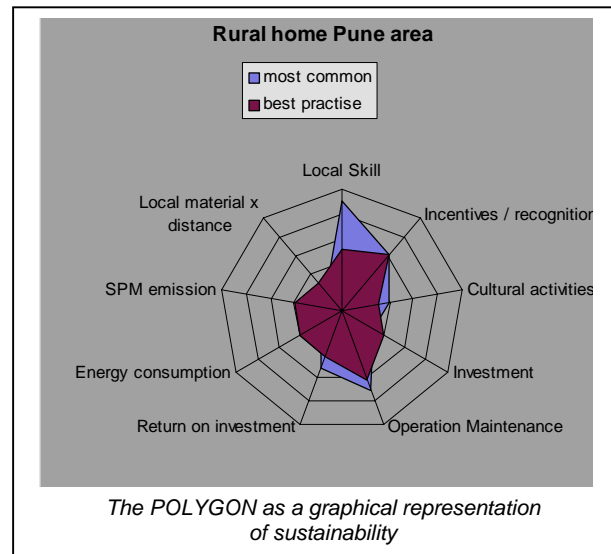
The definition of practical indicator sets is achieved by segmenting the concept of sustainability into more manageable components. Deliberations over two days define practical indicators covering **social, financial and ecological implications of building practices in**



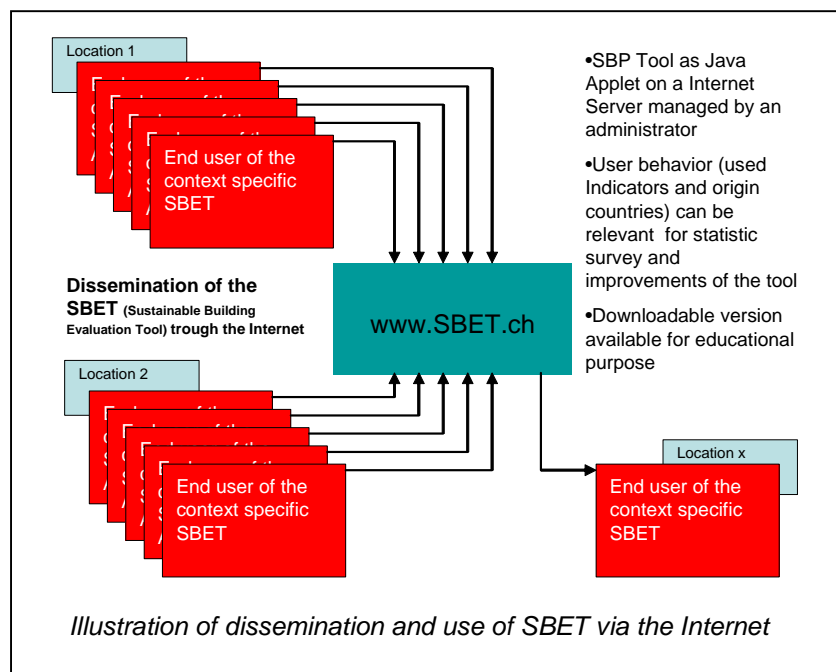
typical urban, rural and industrial contexts (frames of reference). Results of the individual assessment of financial, ecological and social sustainability are then assimilated into the objective and comparative **sustainable building evaluation tool (SBET).**

The **graphical** evaluation tool (a polygon) is developed for both the ‘**most common**’ and ‘**best practice**’ scenarios for a certain housing scheme, either in progress or planned. The sustainability of building practice is determined by the **centricity** and **area** of the polygon. The exercise is undertaken in a regional context to avoid the conflicts of comparing different geographical and cultural contexts.

While the indicator sets identified at the workshop are context specific, the methodology used for deriving the indicators is found to be robust and universal in nature. It was found in previous workshops that the tool provides a rapid initial assessment of the “state of building practices” in the region - and as such indicated a potential for wide scale application.



The developed software tool works as a framework for the data collected. In each country where the Skat Foundation conducts SBP workshops, the generated data is stored and the evaluation of buildings can be conducted via the Internet. The aim of this effort is to quantify and compare sustainable building practices and to make the process available for everybody everywhere in the world. The data developed through the regional workshops is stored in a database and can be added to and updated progressively, improving overall data quality over time



The Course

The online course aims to introduce the workshop methodology through active exchanges between participants. After studying the underlying principles of Sustainable Building Practice through case studies, each participant develops his/her own case (“mycase”) by working within groups to determine relevant social, financial and ecological indicators. The resulting data will be discussed and each participant will register free of charge at www.sbet.ch (SBET - Sustainable Building Evaluation Tool) - where a trial version of the data analysis tool will be

available online. The results of each analysis will then be discussed in the *myNetWorks* discussion forum.

The *myNetWorks* course opens up possibilities for the dissemination of the SBP workshop methodology and the SBP Tool. After completing the online course, the student will have the capability to conduct his/her own workshop in order to define indicators that enable measurement of sustainable building practice in his/her geographical and cultural context. The SBET works both as an evaluation tool and as a meeting point to exchange information for the community of practice.

Introduction	Background, The Internet as a learning platform
Module 1	Introductions of the organisers, introduction of the participants, expectations of the participants, objectives and expected output, methodology (listen and learn; discuss and decide)
Module 2	Concept of sustainability, experience sharing (experts and their views), key concerns
Module 3	Development of indicators, division into working groups within regions (step 1 - first list; step 2 - short-listing the indicators; step 3 - vote for final indicators), frames of reference (rural, urban, industrial) with context specifications, benchmarking, weight, context specific ranking of indicators
Module 4	Application of indicators -> introduction of SBET (sustainability-tool),
Module 5	Use and exercises with SBET with the students' own case; discussions
Module 6	The way forward (commitments, action plan, dissemination of the tool), workshop assessment