



**ecosan – newsletter – no. 11 – 2/2004 – english**

**This regular electronic news bulletin from the ecosan project of GTZ, Germany, addresses a network of friends and professionals involved in initiatives and projects in the field of closed-loop wastewater management and sanitation.**

**Dear friends and colleagues!**

Welcome to GTZ's ecosan newsletter in English, French, Spanish and German; issue no. 10!

The latest editions of the English version are distributed directly via e-mail in the globally-readable, text-only format. You can also download German, French, Spanish and English versions as easy-to-read pdf files from our website.

**!!! Downloads:**

**German:** <http://www.gtz.de/ecosan/download/nl11dt.pdf>  
**Spanish:** <http://www.gtz.de/ecosan/download/nl11esp.pdf>  
**French:** <http://www.gtz.de/ecosan/download/nl11fr.pdf>  
**English:** <http://www.gtz.de/ecosan/download/nl11eng.pdf>

Your ecosan team hopes you enjoy our current issue!

**Your contribution**

This medium lives through interaction. So please keep sending your suggestions, requests and information to be published via this newsletter to the addresses at the end of this issue. Thank you for any contribution!

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**Publications**

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- Managing solid and liquid wastes - enhancing municipal and private sector partnerships
- Promotion of hygiene and environmental sanitation - planning and management for behavioural change
- Internet - online course on "Sustainable Aquacultures"

**New upcoming**  
**events**

- |                    |   |
|--------------------|---|
| 10-13 / 03 / 2004  | <b>Water China</b> and MERBO Messe, Guangzhou, China                |
| 24-26 / 03 / 2004  | <b>37. Essener Tagung</b> für Wasser- und abfallwirtschaft, Germany |
| 31/ 3 - 1/4 / 2004 | <b>Gebäude- u Grundstücksentwässerung</b> , Marburg, Germany        |
| 12-15 / 05 / 2004  | <b>WWW-YES</b> „Discharged urban ...“, Vitry sur Seine, Frankreich  |
| 30 / 5 - 3/6 2004  | <b>Int. Water Demand Managem. Conf.</b> Dead Sea, Jordan            |
| 01-04 / 06 / 2004  | <b>2nd Leading-Edge Conf.</b> Prague, Czech Republic                |
| 16-20 / 08 / 2004  | <b>Stockholm Water Week</b> , Stockholm Sweden                      |

**Events**  
**- reminder**

- |                     |   |
|---------------------|---|
| 30/3 - 2 / 4 / 2004 | <b>3<sup>rd</sup> ASIAWATER 2004</b> , Kuala Lumpur, Malaysia         |
| 28/3 - 1/ 4 / 2004  | <b>ENVIRO 04 Convention &amp; Exhibition</b> , Sydney, Australia      |
| 02-06 / 05 / 2004   | <b>Water Inst. of Southern Africa (...)</b> Cape Town, South Africa   |
| 25-27 / 05 / 2004   | <b>Water and Wastewater Europe 2004</b> , Barcelona, Spain            |
| 29-31 / 05 / 2004   | <b>World Renewable Energy Forum</b> , Bonn                            |
| 01-04 / 06 / 2004   | <b>RENEWABLES 2004</b> , Bonn, Germany                                |
| 27/6-01 / 7 / 2004  | <b>World Water &amp; Environ. Res. Congress</b> , Salt Lake City, USA |
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| 13-15 / 09 / 2004   | <b>Water Middle East</b> , Bahrain                                    |
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| 28/9-1 / 10 / 2004  | <b>Aquatech Amsterdam 2004</b> , Amsterdam, Netherlands               |
| 29/9-1 / 10 / 2004  | <b>Waste Management 2004</b> , Rhodes, Greece                         |
| 01-05 / 12 / 2004   | <b>Global WASH Forum</b> ; Dakar                                      |

**General information**

- contact and ecosan newsletter information

**In-house news**

**Urine separation to be implemented for the main building at GTZ headquarters, Eschborn, Germany**

It is with great pleasure that we are able to announce that an ecological sanitation system will be implemented in the main building of the GTZ headquarters in Eschborn (Germany). This will occur in the course of renovation work, with the installation of waterless urinals, and urine separating toilets. Partner companies will then ensure the utilisation of the urine, with nutrient extraction being achieved using magnesium ammonium phosphate precipitation.

With this, the GTZ will be using modern, future oriented, concepts in their own building, to demonstrate their feasibility, and the important role they can play in reaching the Millennium Development Goals for water and sanitation. The project planned for the GTZ building will compliment the existing sanitary system at the KfW banking group headquarters, in Frankfurt (Germany). Here, a vacuum sewer has been installed to collect the black water, and an installation has been installed for grey water recycling. With these two demonstration projects, the German development co-operation has increased its credibility when it comes to promoting ecological sanitation concepts in partner countries.

!!! Info: [christine.werner@gtz.de](mailto:christine.werner@gtz.de)

### GTZ-ecosan project prolonged (2005 to 2008), with 2.25 Mio. Euro

The GTZ supra-regional sector project "ecosan" will enter its third phase in 2005. Following the successful first two phases, the BMZ has announced that the third phase will run over three years (2005-2008) with an increase in budget to 2.25 Mio Euro. This announcement acknowledges the relevance of ecosan and the important contribution it can make to achieving the Millennium Development Goals with regard to sanitation as seen by the German Federal Government.

### Project proposal to the EU for "Sanitation Systems for Water Reuse" rejected

The proposal to the EU "Sanitation Systems for Water Reuse", submitted by the Swedish University of Agricultural Sciences, in co-operation with the GTZ and several other partners, has unfortunately been rejected (Proposal 004037 in the programme "Specific Target Research Project STREP"). The proposal was seen as failing to reach the guidelines set by one point in the overall evaluation and between one and half a point in the six individual categories. The evaluators were of the opinion that this particular programme did not intend to promote research for completely new methods, but rather to mainly look at established technologies used in new combinations and environments. The microbiological and geochemical analyses were not sufficiently itemised, and the distribution of the workload appeared to be based more on the principal of equity than on scientific practicability.

### Proceedings from the 2<sup>nd</sup> international ecosan symposium, from April 7-11 2003, can now be ordered

The english version of the conference proceedings from the 2nd International Symposium on ecological sanitation, organised by the GTZ and IWA in Lübeck from the 7<sup>th</sup> – 11<sup>th</sup> April 2003 has been published and can be ordered. Around 350 specialists and experts from 60 countries met during this symposium to discuss and exchange their experiences, questions and visions with regard to ecosan. More than 150 contributions to this symposium (including speeches, articles and posters) are presented in this publication, with many of the papers having undergone a peer review process. At almost 1000 pages, this book represents the most comprehensive overview of the current state of the art in ecosan available.

### !!! To order the conference proceedings

For **people in Germany**, the proceedings can be obtained direct from the publisher in exchange for postal costs.

Please direct your order to [Horst-Dieter.Herda@Universum.de](mailto:Horst-Dieter.Herda@Universum.de)

For **people overseas**, the proceedings can be obtained through the GTZ ecosan office.

Please direct your request by e-mail to: [ecosan@gtz.de](mailto:ecosan@gtz.de)

The contents of the proceedings can also be downloaded from the GTZ ecosan web-site. Each of the pdf files to be found on this site corresponds to one of the sessions (A to I).

!!! Download the proceedings under

<http://www.gtz.de/ecosan/english/symposium2-proceedings.htm>

The main contributions to the proceedings will also **soon be available for download in Spanish**. The preparation of the Spanish version was financed by EcoSanRes (Sweden) and translated by SARAR-T. The articles already available in Spanish can be downloaded from the ecosan web-site.

!!! **Download soon Spanish chapters of the proceedings** under  
<http://www.gtz.de/ecosan/english/symposium2-proceedings.htm>

### **GTZ participates in the WATERA EU proposal**

Within the European Water Initiative, the sub-group "research" has developed the idea to submit a project proposal in the framework of the ERANET-programme to co-ordinate water research in the EU. This proposal, called WATERA, particularly aims to co-ordinate and network water research pertaining to achieving the Millennium Development Goals in the areas of water supply and wastewater management, as well as to international co-operation. Austria is co-ordinating the elaboration of the proposal. Ecosan has been foreseen as a thematic focal point of the proposal, with a duration of 4 years. This programme does not aim to finance research projects but rather to support networking between existing research programmes within the EU. The GTZ is participating in the elaboration of the proposal and will carry out the work foreseen within Germany, in co-operation with the Federal Ministries for Co-operation and Development (BMZ) and Education and Research (BMBF), along with the Karlsruhe Research Centre.

!!! **Information** : [niki.fleischmann@hydrophil.at](mailto:niki.fleischmann@hydrophil.at)

### **GTZ supports the drafting of a UNESCO IHP Technical Document on ecological sanitation**

As a result of a meeting between UNESCO, GTZ and NGO representatives in January 2004 in Paris a working plan for the production of a publication on in the series "Technical Documents in Hydrology" by the end of 2005 in the theme of "Ecological water and wastewater management concepts in education, further education and research". The GTZ agreed to deliver a draft version of the text, which will then be discussed between the co-operating organisations in order to organise and arrange financial support for a CD of background material. Presently, along with the GTZ, the WSSCC (Water Supply and Sanitation Collaborative Council), EcoSanRes (Sweden) and SANDEC (Schweiz) are interested in participating in this common product. Additional partners are welcome, as the text and background material should present a result of common, multi-lateral co-operation. With this project, one of the proposals of the WSSCC-GTZ working meeting from December 2003 will be implemented. Further information on this meeting will be presented in greater detail below.

!!! **Contact** : [Christine.Werner@gtz.de](mailto:Christine.Werner@gtz.de)

### **The ecosan-newsletter is now available in chinese !**

The ecosan-newsletter is now available in chinese ! The translation is undertaken by the chinese "Institute for Energy and Environment Protection" (CEEPTD). The chinese NL10 can be downloaded now. The chinese NL 11 will be available by end of March 2004.

!!! **Download NL 10** under: <http://www.gtz.de/ecosan/download/nl10cn.pdf>

!!! **Download NL 11** under: <http://www.gtz.de/ecosan/download/nl11cn.pdf>

### **New team members in the GTZ ecosan project**

We pleased to be able to welcome, or see the return of, two interns to the GTZ-ecosan team:

- **Rong Wang** from China, an MSc student in Water Resources Engineering and Management (WAREM) at the Universität Stuttgart. She will be placed in our Eschborn offices from March – June 2004
- **Ve Kessen** from Germany, a sociology student from the LMU Munich. Ve will be working from February – April 2004 in a project in Kafr El Sheikh, Egypt

## Outcomes from GTZ-WSSCC Workshops

## Wide range of organisation attend GTZ-WSSCC ecosan / HCES working meeting from 3<sup>rd</sup> – 5<sup>th</sup> December 2003.

Representatives from a wide number of organisations, including the World Bank, the World Health Organisation, UNESCO and many other international experts met from the 3<sup>rd</sup> to the 5<sup>th</sup> of December 2003, in the GTZ offices in Eschborn, Germany, to discuss the implementation of ecosan. With the increasing recognition of the potential ecosan approaches have to contribute to the achievement of the Millennium Development Goals, the number of ecosan projects being carried out world wide is increasing rapidly.

During this working meeting on the “preparation and implementation of ecosan projects”, organised by the GTZ and the WSSCC (Water Supply and Sanitation Collaborative Council), a range of different products currently under development were presented and discussed. These publications intend to address the increasing demand for ecosan and address the needs of practitioners working in such projects.

Organisations who participated in this meeting included the WHO, World Bank Water and Sanitation Programme, the UNESCO International Hydrological Programme, EcoSanRes (Sweden), EAWAG-SANDEC (Switzerland), WASTE and IRC (the Netherlands), Ecosan-Club (Austria), CREPA (West Africa), MVULA-Trust (South Africa). Other participants attended from Asia and Latin America. Around 40 participants discussed a wide range of topics, including possible contributions to a forthcoming WHO guideline on the safe use of excreta and grey water, a planned publication on ecological sanitation from UNESCO, and possible locations for the next international symposium on ecological sanitation. The main reason for calling the meeting was to discuss a draft version of a publication prepared by the GTZ ecosan team on the preparation and implementation of ecosan projects. Other related publication being prepared by the WSSCC and EcoSanRes were also presented and discussed.

## WHO announce plans for guidelines for the safe use of excreta and grey water

During the course of the 3 day workshop in Eschborn, the World Health Organisation announced its intention to update the 1989 Guidelines for the safe use of wastewater and excreta in agriculture and aquaculture, with a series of 3 new publications. While the first two of these publications will be separately devoted to wastewater reuse in agriculture and aquaculture, the most recently announced 3rd publication will be Guidelines for the safe use of excreta (and grey water).

Prof. T.A. Stenström of the WHO requested an active participation from all the organisations present in developing these new guidelines to ensure that their publication in 2005 will be possible.

A meeting of the organisations who will be involved in the drafting of this third publication has been scheduled for March 2004 in Geneva.

!!! Contact: [carr@who.int](mailto:carr@who.int)

## WSSCC presents updated version of the “Provisional Guidelines for Decision-Makers” for implementing the Bellagio Principles

Dr. Darren Saywell, programme manager with the WSSCC presented the current status of the WSSCC guidelines currently under preparation, which seeks to provide practitioners with guidance on how to “operationalise” the Bellagio Principles, and include a 10-step guide to implementing a Household Centred Environmental Sanitation (HCES) programme.

The next step for these guidelines is to move towards a consultation phase for validation and adoption by organisations linked to the WSSCC in the very near future. The guidelines will then be field tested in practice in 3 or 4 locations and adjusted according to the results of this. The final step envisaged is to publish, disseminate and advocate the finalised version.

!!! Information : <http://www.wsscc.org>

!!! Contact : [saywelld@who.int](mailto:saywelld@who.int)

### **UNESCO publication on the series “Technical Documents in Hydrology” on ecological sanitation concepts**

W. Gilbrich informed the participants about the content and goals of UNESCO's International Hydrologic Programme (IHP). UNESCO are interested in making their own contribution to ensure a paradigm change in urban water management, and plan to issue a publication in the UNESCO-IHP series “Technical Documents in Hydrology” dedicated to ecological sanitary concepts (see previous news in this Newsletter). The workshop participants welcomed this initiative in the area of “Education and Research” which would bring modern ecological alternatives into urban water management.

**!!! Information in the IHP can be found under**

**<http://www.unesco.org/water/ihp/index.shtml>**

### **Draft version of the GTZ ecosan source book met with international approval**

The current status of the GTZ “ecosan source book” was presented during the workshop by Christine Werner, team leader of the GTZ ecosan project. This draft publication, intended for the preparation and implementation of ecosan projects was prepared by the GTZ-ecosan team over a period of several months last year and was then widely distributed to an international working group of over 100 members who provided constructive feedback regarding its structure, content etc. These contributions were collected and presented once more to the workshop participants. A comprehensive discussion then followed regarding the content and way forward for this publication.

Whilst the general feedback for the book was extremely positive, participants also expressed their approval that the publication did not only espouse the idea of stakeholder participation, but also tried to ensure it through the wide ranging consultation process involving many institutions and individuals.

Due to this consultation, several new sections have been identified for the source book, which will be added before its final publication in the first half of 2004.

The GTZ ecosan team would like to take this opportunity to thank all those who have contributed to the development of the source book with comments, suggestions for improvement and constructive criticism.

**!!! Contact: [Christine.Werner@gtz.de](mailto:Christine.Werner@gtz.de)**

### **Help fill the Toolbox of the GTZ ecosan source book!**

The ecosan source book will be accompanied by a toolbox, which will contain a collection of practice oriented tools for the planning and support of ecosan projects (e.g. awareness raising material, workshop reports, studies, questionnaires, terms of reference etc.). If you have any tool which you feel would be suitable for such a toolbox, please send them to:

**!!! Send your tools to: [Florian.Klingel@gtz.de](mailto:Florian.Klingel@gtz.de)**

### **EcoSanRes presents planning and implementation tools for ecological sanitation and begins work towards developing criteria for the comparison of sanitation systems, in collaboration with the GTZ**

Dr. Elisabeth Kvarnström of EcoSanRes gave a very interesting presentation in Eschborn on work they have carried out to establish an overview of planning and implementation tools currently being used by ecological sanitation practitioners, and proposing a method based on comparative consequence analysis to assist various stakeholders in identifying the most appropriate system for them.

**!!! Download: <http://www.gtz.de/ecosan/download/EcoSanRes-ImpPlanTool.pdf>**

**!!! Contact: [elisabeth@verna.se](mailto:elisabeth@verna.se)**

The work of identifying further criteria for the comparison of different approaches to sanitation, as well as comparing various sanitary technologies will continue in the coming weeks in an internet based discussion to be held on the EcoSanRes Yahoo group for ecological sanitation.

!!! Join [http://www.ecosanres.org/discussion\\_group.htm](http://www.ecosanres.org/discussion_group.htm)

It is planned to include the results of this discussion in the soon to be published GTZ ecosan source book, and use it as a basis for further discussion with conventional sanitary engineers planned by EcoSanRes during the Stockholm Water Week. (August 16-20, 2004)

!!! Information on the „Stockholm Water Week“: <http://www.siwi.org/>

### Where will the next international ecosan-symposium take place?

A further topic of discussion at the workshop held in Eschborn were the possible locations for the 2005 international ecosan symposium. The favoured location at the moment amongst the participants, and on the basis of discussion, is the city of Durban, South Africa, which was proposed by Aussie Austin, who also would coordinate the organisation of the symposium.

!!! More Informationen: [LAustin@csir.co.za](mailto:LAustin@csir.co.za)

### News from EcoSan Club (Austria)

#### EcoSan Club Homepage updated and expanded

The EcoSan Club homepage ([www.ecosan.at](http://www.ecosan.at)) has been expanded to include information on completed and ongoing activities. Under the title “Activities”, short descriptions of projects in Austria (Christophorus Haus, Stadl-Paura und Papiermühle Mörzinger, Bad Grosspertholz) and Uganda (Kalungu Girls Secondary School, Masaka District and Technical Advisor on Ecological Sanitation, Kampala) can be found along with proceedings of EcoSan workshops (“water and sanitation”) and documents from these events.

#### EcoSan Club projects in Uganda

Ecosan concepts are being (further) developed and implemented in various ongoing projects. Currently these activities include the realisation of an ecosan concept for a health centre in Kanawat (Kotido District, Uganda) and the development and implementation of ecosan concepts for clinics in Naggalama (Mukono District, Uganda) and Balit (Mindanao, the Philippines).

Additionally, in the framework of an existing watsan project in Kitgum, northern Uganda, in response to a request from local authorities and going further than the current mandate of the project, a concept for addressing the sanitary problems of the town based on the guide given in the GTZ ecosan source book for implementing ecosan projects. The goal is to test the practical applicability of the HCES approach in the planning process, with the primary aim of developing solutions to existing problems suitable to the given local context. An ongoing report on this process is planned for the ecosan homepage from march 2004.

Also this year, further ecosan workshops will be held in Uganda. The target group will be technicians responsible for self-contained facilities, such as hospitals, health centres and schools. Participation is currently limited only to participating institutions. However if the maximum number of 20 participants is not reached, participation of others (including travel and other costs) is possible until the maximum number of participants is reached.

Detailed documentation with photos of the demonstration projects appeared in the magazine “The Weekly Message” (25.11.2003) and can be downloaded as a pdf file from the ecosan web-site.

!!! Download [www.gtz.de/ecosan/download/weekly-message-031125.pdf](http://www.gtz.de/ecosan/download/weekly-message-031125.pdf)

### EcoSan workshop in Austria

The EcoSan Club plans a one day workshop in Vienna, focussing on the demands of the ecosan concept from an architectural perspective (provisional planned for 3<sup>rd</sup> June 2004). The aim is to develop common solutions that offer an alternative to "business as usual", with the approach that wastewater management does not first begin outside of the building, but rather that the arrangement of living areas and the building itself can also play an important role.

### News from EcoSanRes (Sweden)

### EcoSanRes 2004/05 Training programme in ecological sanitation - Invitation to apply

#### Training Programme "Ecological Alternatives in Sanitation":

This advanced, international training programme in ecological sanitation focuses on attractive sanitation solutions for urban and peri-urban areas to promote human health, enhance human dignity, improve nutritional status and protect water sources. The basic principle of ecological sanitation is "Closing the Loop on Sanitation", which implies that the nutrients in human excreta – after proper hygienisation - are used as a resource in local cultivation, including urban agriculture and the water used in households is treated and returned safely to the environment.

**Target group:** Professionals in selected countries in Africa and Asia engaged in town planning, water supply, waste management; hygiene, and socio-economic development; researchers and teachers/trainers in fields related to sustainable sanitation and; key persons engaged in NGOs with projects associated with community development for improved sanitation and water supply.

**Dates and Practicalities:** The programme has three parts: a 3-week course in Sweden 16 August – 3 September 2004; a 2-week course in South Africa for African participants (February 2005) and in India for Asian participants (March 2005). The period between the courses is intended for project work back home. Language requirement is English. 37 countries have been targeted and costs are covered by Sida – see brochure for more details. Closing date for applications is 15 April 2004.

**Programme organiser:** The EcoSanRes Programme at Stockholm Environment Institute (SEI). Contact person: Cecilia Ruben at [cecilia.ruben@sei.se](mailto:cecilia.ruben@sei.se). SEI, Box 2142, SE-103 14 Stockholm, Sweden. Dr. Jan-Olof Drangert is the Training Programme Director.

In 2005/2006 the Training Programme will target Africa and Latin America and in 2006/2007 the Programme will target Latin America, Asia and the Middle East.

### Job Vacancies

### Integrated Specialist (CIM) positions in China and in the Philippines

The German Centrum für Internationale Migration und Entwicklung (CIM), a working group of the GTZ along with the German employment agency are financing more ecosan related positions with GTZ through their Integrated Specialists program. The Integrated Specialists program provides a wage subsidy for qualified European specialists to obtain a contract with local institutions in developing countries.

#### Who can apply?

Applicants must retain German or European citizenship with related work experience, articulate in German business operations, and limited travel outside of the EU.

#### Job description: Junior Consultant for Ecosanitation in China

As consultant for ecosanitation with the Institute for Energy and Environment Protection you will be responsible for developing the Chinese network of information exchange and know-how transfer between national and international investors and engineers. You will participate in the regional GTZ ecosan projects, facilitate communication with government organizations, projects team members, universities and experts with regards to the documentation and evaluation of the project activities. Furthermore, you will cooperate with the senior consultant for Biomass in the Biogas and Water department with the evaluation, design and feasibility studies of biogas, wastewater and solid waste management systems. (Reference number 60040252)



### **Job description: Senior Consultant Biogas Project in China**

As Senior Consultant of the Biogas Project with the Institute for Energy and Environment Protection (IEEP) you will manage the feasibility studies and develop new ideas for the biogas and solid waste disposal project. You will assist with quality control and project evaluation. Furthermore, you will support the IEEP with the introduction of modern technologies and management methods and guide in professional development. You will advise the Director of IEEP with building international cooperation and network with German and European Organisations. (Reference Number 60040251)

### **Job description: Water Management Consultant in the Phillipines**

As the consultant for integrated water resource management you will provide the PPDO with technical and practical support. You will lead the training course in sustainable groundwater use and create a database of relevant groundwater information. Furthermore, you will educate and support project team members in the use of the database, groundwater resource evaluations, groundwater management and environmental protection. A close cooperation with the GTZ water program is intended. (Reference number 60037901)

**!!! Additional information about the CIM positions is available at:**

[http://www.cimonline.de/deutsch/frames/ind\\_stellen.htm](http://www.cimonline.de/deutsch/frames/ind_stellen.htm)

**!!! Contact:** [susanne.beck@gtz.de](mailto:susanne.beck@gtz.de)

### **Wanted: Long term waste management expert for the Phillipines.**

Since January 16, 2004 Knoten-Weimar has advertised their urgent need for a long term expert in solid waste management for the Phillipines. See their website <http://www.bionet.net/en/newsservices/index.htm#19>

Initial 3 year period with possible extension. Task: Consulting selected local administrations, regional governments / environmental agencies in the professional and economical operation of integrated waste management systems according to the new waste legislation.

**!!! For further details contact :** [frank.schweizer@bionet.net](mailto:frank.schweizer@bionet.net)

### **Pilot project news**

#### **...German ecosan cooperations**

### **Benin: Demonstration Project at Educational Center in Lokossa**

In the GTZ and KfW supported Rural Water Management Project PADEAR, the Bénin Département Couffo is implementing an ecosan demonstration toilet within the construction of a new training center. The local agricultural education center "Centre de Promotion Rurale D'Agnavo" will be located near the city Lokossa. The urine and faeces will be used to fertilizer the surrounding landscape around the center. Thereby demonstrating the nutrient recycling concept of ecosan. Combining the demonstration and education center together a quick acceptance and promotion of the ecosan-ideas by the visitors is expected. CREPA Bénin and Otterwasser GmbH will consult in the planning and construction of the demonstration PADEAR-project

**!!! For further information contact:** [padear-gtz@firstnet1.com](mailto:padear-gtz@firstnet1.com)

### **China Kunming: Proposal submitted to EU-China SPF**

The EU-China small projects facility programme (SPF) aims to support projects promoting China's structural reforms and integration into the world economy (<http://www.eucnspf.org/>). It releases funds between 50 and 100 T Euro per project.

GTZ ecosan is contributing to a proposal made by Yunnan Environmental Development Institute (YEDI) in partnership with Europe Forum for Economic Co-operation, EFEC. During the duration of action of 9 month, the proposal suggests to focus on two aspects:

1. ecological sanitation concepts for waste, wastewater treatments and management
2. the use of energy efficiency and renewable energy technology in improved city design under central Yunnan conditions.

Activities planned under the proposal are: Workshops in Kunming with relevant stakeholders; international study visit for Chinese key technical staff coupled with an international seminar in Germany.

!!! **Information** on EU-China SPF is found under: <http://www.eucnspf.org/>

!!! **For further information** on the Kunming project proposal contact:

[Heinz-Peter.Mang@gtz.de](mailto:Heinz-Peter.Mang@gtz.de) or [henryvoigt@web.de](mailto:henryvoigt@web.de)

### **Chile - Easter Island: diagnosis study**

In the frame of a technical cooperation between Chile and Germany an ecosan diagnosis study in the Eastern Island was carried out from 15 to 21 November by Waste from the Netherlands, GTZ-ecosan, and Chile Foundation. During this study 5 workshops with the governmental entities and tourist sector were undertaken to inform on experiences from running ecosan projects and to introduce the ecosan concepts and technologies, including nutrients reuse. Several interviews were made to get information on the current sanitation status on the Eastern Islands and to investigate the willingness of the inhabitants to accept ecosan solutions.

!!! **For further information contact:** [heinz-peter.mang@gtz.de](mailto:heinz-peter.mang@gtz.de)

### **Germany: Research Results of the Lambertsmühle Project**

The Lambertsmühle, a historic water mill in Burscheid (in the vicinity of Leverkusen/Cologne), was rebuilt in 2000 into a museum and equipped with a source separated sanitary concept. With financial support from the Nordrhein-Westfalen regional Ministry of Environment (MUNLV) and the Wupperverbandes the new sanitary system was examined as part of a scientific research project until 2003. The investigations focused on the function and practicality of the new sanitary technology; specifically the composition and quantity of the material flows (urine, brown water and greywater), the agricultural utilization of urine and faeces as well as persistence and concentration of pharmaceutical active agent (residues of medicines and hormone).

A following research study, financed by the Nordrhein-Westfalen regional Ministry of Environment (MUNLV) (period 2003 - 2004), will further investigate the persistence and behaviour of medical residues in the soil and on plants irrigated with urine.

!!! **Information** [www.lambertsmuehle-burscheid.de](http://www.lambertsmuehle-burscheid.de)

!!! **pdf-report** of the preliminary research findings (German) can be downloaded from [www.lambertsmuehle-burscheid.de](http://www.lambertsmuehle-burscheid.de)

### **Germany: Urine separation project - Berliner Wasserbetriebe**

Berliner Wasserbetriebe along with Veolia Water have proposed a pilot project to include new sanitary concepts within the framework of Berlin's Water Management. In the feasibility study a cost comparison between conventional and two alternative systems (vacuum toilets and urine separating toilets) is presented. This comparison shows that the new sanitary concepts have cost advantages, depending on conditions. This was further reason to implement a pilot project in Berlin/Brandenburg under realistic conditions. The European Union LIFE project is promoted under the title "Sanitation Concepts for Separate Treatment of Urine, Faeces and Greywater "(SCST) (LIFE 03 ENV/D/000025).

Copy of the urine separation project report can be found in the German periodical "KA Abwasser-Abfall" (KA, Heft 1, 2004, S. 38-43). Background information is also available in the following downloads.

!!! **Downloads**

[www.gtz.de/ecosan/download/Urinseparation-BerlinerWasserbetriebe-eng.pdf](http://www.gtz.de/ecosan/download/Urinseparation-BerlinerWasserbetriebe-eng.pdf)

[www.gtz.de/ecosan/download/Urinseparation-BerlinerWasserbetriebe-de.pdf](http://www.gtz.de/ecosan/download/Urinseparation-BerlinerWasserbetriebe-de.pdf)

### **El Salvador: ecosan workshop**

From 27 to 31 October the Dutch WASTE ecosan project hold an ecosan workshop in the region of El Tránsito in the Republic of El Salvador. 42 participants from Colombia, Costa Rica, El Salvador, Ecuador, Germany, Guatemala, Holland, Mexico, Nicaragua, Peru, and United States of America were present. The workshop was jointly organized with the GTZ – ecosan project and Oikos – El Salvador.

Topics like participative analysis, nutrients cycle, sanitation and health, socio-cultural and gender aspects were discussed and experiences from ecosan projects currently running in, Ecuador, El Salvador, Mexico, Peru and a feasibility study in Colombia were presented. Ecosan systems implemented in a rural area of El Salvador were visited. The workshop participants emphasized their interest to continue the development of guidelines for ecosan technologies.

!!! Further information at: [www.waste.nl](http://www.waste.nl) or [heinz-peter.mang@gtz.de](mailto:heinz-peter.mang@gtz.de)

### **Namibia: Baseline study for Marienthal und Gibeon in preparation**

In the context of the Namibia-German cooperation plan "service Delivery promotion Project - SDPP", two ecosan baseline study for the cities Marienthal and Gibeon are currently implemented as the first preliminary step by the two start-up workshops in both of the municipalities at the beginning of February. Altogether, basic data for the introduction of sustainable ecological sanitation systems are to be raised with the help of the two studies to at the end of May, so that the concerned population and the involved authorities can encounter an investment decision.

!!! Contact: [ecosan@africaonline.com.na](mailto:ecosan@africaonline.com.na)

### **Philippines: ecosan im DILG-GTZ Water Program**

"The Philippine government has the focus on improving the water supply of the larger cities, whereas wastewater purification projects has poor priority. Only approximately 1% of the generated wastewater in the country is cleaned again," described by Andreas Kanzler, leader the program "rural water supply and wastewater disposal in the Philippines." "Here there is still much awareness work to be carried out," convinced by Kanzler. In order to strengthen the topic of ecosan, the Philippines itself is devoted to a program "DILG-GTZ Water Program towards an Integrated Water Resources management." A 45-pages study from Claudia Früh features the potential for the ecosan in term of waste and resource management on the Philippines just as analyzed in the administrative and political field. Furthermore, the study informs the first experiences on demonstration projects and the results of the Workshops in which the GTZ project on the Philippines has been implemented. Starting from March 2004, Esther Geiss will take up the issue, which will then last until October 2005, as a GTZ project female assistant on the Philippines.

The study concerning the potential of ecosan in Philippines can be downloaded as in pdf-file.

!!! The study can be downloaded at

[www.gtz.de/ecosan/download/ecosan-introduction-philippines.pdf](http://www.gtz.de/ecosan/download/ecosan-introduction-philippines.pdf)

!!! Information und Contact: [ecosan@gtz.de](mailto:ecosan@gtz.de) or [esther.geiss@gtz.de](mailto:esther.geiss@gtz.de)

### **Romania: Ecosan pilot project for a school and 2 families as a measure to protect drinking water**

As a water protection measure within the scope of the pilot project "Safe drinking Water" in the Romanian village Garla Mare, dry separation toilets (double vault system) were installed in a school and for 2 families.

Faecal bacteria tests of the public drinking water wells had shown that the drinking water wells were primarily polluted by non-sealed latrines. Ecosan is therefore a relatively cheap and fast solution to improve drinking water quality in the village.

The drinking water pilot project is implemented by the international organization Women in Europe for a Common Future (WECF) in cooperation with the Romanian NGO Medium et Sanitas (M&S). For the planning and construction of the installation of the ecosan pilot project in Garla Mare the University of Hamburg-Harburg was involved.

!!! Contact: [sascha@sascha.wecf.org](mailto:sascha@sascha.wecf.org) or [c.wendland@tuhh.de](mailto:c.wendland@tuhh.de)

### Yemen: ecosan-Study in the provincial towns programm II

Mit Unterstützung der deutschen KfW wird im Rahmen des Provinzstädteprogramm II ("Provincial Towns Programm II") im Jemen derzeit eine Studie und Entwurfsplanung für ecosan-Pilotmaßnahmen in den Städten Jiblah (Pilotvorhaben: historisches Altstadtgebiet mit ca. 500 EW) und Al-Shehr (Pilotvorhaben: Neubaugebiet mit ca. 900 EW) erstellt. Die Studie wird auch einen ökonomischen Vergleich mit konventionellen Systemen umfassen. Die Ergebnisse sollen in Kürze in einem nationalen workshop im Jemen vorgestellt und diskutiert werden. Anschließend soll dann die Ausführungsplanung der Pilotmaßnahmen beginnen.

In Yemen, at present a study and a design planning for ecosan pilot projects, with the support from German KfW in the context of "provincial towns program II", are built in the cities of Jiblah (pilot project: historical old part of the town area with approx.. 500 inhabitants) and Al-Shehr (pilot project: Development area with approx.. 900 inhabitants). The study will also cover an economic comparison with conventional systems. The results are to be presented and discussed shortly in a national workshop in Yemen. The construction planning of the pilot projects will subsequently begin.

!!! Contact : [Christine.Werner@gtz.de](mailto:Christine.Werner@gtz.de) or [Martin.Oldenburg@gmx.de](mailto:Martin.Oldenburg@gmx.de)

### Zambia: Successful ecosan advocacy workshop held in Lusaka, Zambia

From January 21st-23rd, the GTZ ecosan team, in co-operation with WASAZA (Water and Sanitation for Zambia) held an extremely successful ecosan advocacy workshop in the Mulungushi Conference Centre, Lusaka, Zambia. One hundred participants, from commercial water supply and sanitation utilities, government ministries, non-governmental organisations and international donor agencies met to discuss the current sanitary situation in Zambia, to learn about the ecosan approach and to assess its potential, particularly for urban and peri-urban areas.

Initial discussions have revealed a huge level of interest and plans are afoot to begin a baseline study leading to the implementation in a pilot area in the Southern Province. Further requests for assistance are expected and it is hoped that the co-ordination of the activities of the international donor community involved in the water sector will result in a further dissemination and adoption of the approach.

!!! Information : [Heinz-Peter.Mang@gtz.de](mailto:Heinz-Peter.Mang@gtz.de)

## Project news

### Botswana: Nutrient recovery in jail

#### ...general

After detailed preparation and discussion in Botswana, a prison for 1200 occupants is equipped with a nutrient recovery (Effluent Recycle system) and associated nutrient recirculation. The pre-purified wastewater (immersed trickling filter) is thereby used for the irrigation of the sports field. It is also applied for the production of concrete blocks and there is also a plan to use this pre-purified wastewater for vegetable irrigation. For this reason, it is calculated that extra costs for the irrigation facilities is amortized in 4-5 years. The project is implemented on behalf of the government of Botswana. For the construction, the company CPP Botswana (civil planner + Partnership, Botswana) will be responsible.

!!! Contact: Johannes Selke unter [eta@info.bw](mailto:eta@info.bw)

### Tanzania: 50 ecosan toilets in Dar es Salaam

The Water and Environmental Sanitation Projects Maintenance Organisation (WEPMO) has undertaken an ecological sanitation promotion programme in the City of Dar es Salaam in Tanzania. WEPMO is working with the Water Aid - UK Dar es Salaam and other partners. Under Water Aid support 32 ecosan latrines were constructed. However the demand is strong and several latrines were constructed at the cost of the users. The report states, that the improved health situation and the production of fertiliser are seen as advantages of the ecosan approach. Space is another important factor as often houses are situated so close to one another, that there is now place to dig another pit latrine and that ecosan latrines have the advantage of being a durable solution.

The "Report on ecological sanitation latrine initiative promotion in Dar es Salaam City" as well as an ecosan promoting "Report of Health campaign in Burgundi and Vingunti Wards" can be downloaded from the address given below.

#### !!! Downloads:

[www.gtz.de/ecosan/download/Tanzania-ecosanreport.pdf](http://www.gtz.de/ecosan/download/Tanzania-ecosanreport.pdf) und  
[www.gtz.de/ecosan/download/Tanzania-buguruni.pdf](http://www.gtz.de/ecosan/download/Tanzania-buguruni.pdf)

!!! Contact : WEPMO P.O. Box 38340, Dar es Salaam, Tanzania

### Products

#### Dry-Toilets from PikkuVihreä Ltd. in Finland

Finnish PikkuVihreä Ltd. is an environmental company, which specialises in ecological toilets. It advertises its toilets stating that: "The brilliantly simple Green Toilet -ecological toilet represents the absolute tip of our research and development. The product is limitless in its capacity and it is a simple and working solution for camping sites, hiking trails, crisis areas and other places, where cost effective and reliable solutions are needed." (...)

!!! Further information: [www.pikkuvihrea.fi](http://www.pikkuvihrea.fi)

#### Urine diverting toilets from the company Wost Man Ecology, Sweden

Wost-Man-Ecology AB from Sweden offers several types of urine diverting porcelain toilets. In the "ES-Classic" model the urine is flushed with 0,1 litres of water and runs by gravity to large tanks under the house for later transport to a farm, while the faeces are handled dry and fall straight down by gravity into individual bins under the house. Other models use vacuum technology (Model: ClearVac), or water (Model: DoubleFlush) for the black-water stream. The web-site gives photos, texts and further information.

!!! Further information: <http://www.wost-man-ecology.se/english.html>

### Recent publications

#### The uses of wastewater for agriculture in Tunisia

In Tunisia, the use of cleaned wastewater was defined as the national goal and its use rate of 50% in the agricultural irrigation was aimed at. Different indicators, such as the valid legal basic conditions or the differentiated tariff composition, occupy with a serious will, so that the Tunisian decision makers will pursue the goal.

Nevertheless, the use rate of wastewater for several years does not rise beyond 20% was examined by a two set of study from Sihem Benabdallah and Susanne Neubert. It was discussed among other things in which the advanced possibilities of ecosan approach begin to offer, which are imperfectly available only by the use of cleaned waste water from central purification plants.

The study was prepared based on the framework from German-Tunisian Cooperation enterprise between "Centre International des Technologies de l'environnement de Tunis"(CITIT) and "Deutschen Institut für Entwicklungspolitik" (DIE).

It is stated in the first regional-oriented part from Benabdallah regarding the basic conditions for the use of cleaned wastewater in Tunisia. In the second problem-oriented part from Neubert, the different perspectives of the individual participants, who are affected by the use of cleaned wastewater, are analyzed.

### ...books

Both parts of the study are available free-of-charge for download in German and French language. They are very informative and also suitable for, e.g. after its model can be conducted the similar investigations in other countries.

**Benabdallah, Sihem (2003):** La réutilisation des eaux usées traitées en Tunisie, Institut Allemand de Développement (IAD)/ Centre International des Technologies de l'Environnement de Tunis (CITET), Bonn

**Neubert, Susanne (2003):** Die Nutzung von Abwasser in der Landwirtschaft aus der Perspektive verschiedener Akteure. Umsetzungshemmnisse und mögliche Strategien in Tunesien., Deutsches Institut für Entwicklungspolitik, Bonn, 71 S.

!!! The study can be downloaded under :

[http://www.die-gdi.de/die\\_homepage.nsf/FSemit?OpenFrameset](http://www.die-gdi.de/die_homepage.nsf/FSemit?OpenFrameset)  
[Scientific Staff: By alphabetical order] [Dr. Neubert H][Publications]

!!! Contact: [Susanne.Neubert@die-gdi.de](mailto:Susanne.Neubert@die-gdi.de)

!!! Info: <http://www.die-gdi.de>

## Recent publications

### Scope Water

#### ...in the web

"Scope Water" is a website developed by Strategic Science Consult in Germany to share knowledge, expertise and ideas related to water. Scope water offers two cost free opportunities (platforms): 1) Free Calls, to put to use new approaches to techniques for solving of a specific problem. Free calls could be used to disseminate low cost solutions on water treatment/use and sanitation suitable to developing countries. 2) Sharing Knowledge, to ask practical questions to other scientists or non-scientists. You need to register (no cost) to get full access to all information.

!!! Info: <http://www.scopewater.com>

### Glossary on water related terms included in WaterGenius.com

WaterGenius.com is a platform developed by Sun information systems in the United Arab Emirates to serve the water industry. It provides a database of manufacturers, retailers and so on. However following the link "waterpedia" you will find a useful glossary of water related terms.

!!! Glossary: [http:// www.watergenius.com](http://www.watergenius.com) →[waterpedia]

## Workshops and Training courses

### Managing solid and liquid wastes - enhancing municipal and private sector partnerships

NETWAS International, Sanitation in Developing Countries (SANDEC) and the Swiss Centre for Development Cooperation in Technology and Management (SKAT), Mombasa, Kenya, 16 - 27 Feb 2004

This course aims to develop skills in planning and management of solid waste and provides a forum for participants to learn from the experiences of others. The course fee is US \$1,480 per participant. This will cover tuition, course file, books and field trip. Fullboard accommodation is available at the venue of the course at an additional cost of US\$ 460.

!!! Contact: NETWAS International, [training@netwas.org](mailto:training@netwas.org)

!!! Info: <http://www.netwasgroup.com/courses/courses/2004/1>

### Promotion of hygiene and environmental sanitation - planning and management for behavioural change; 29 March - 9 April 2004

NETWAS International, Nairobi, Kenya, 29 Mar - 9 Apr 2004

This course seeks to bring about the new awareness of the complex interaction between behavioural and technological elements, and focuses on non-technical aspects such as community involvement, hygiene promotion and management; and linkages to technical pre-conditions for water supply and environmental sanitation. The course fee is US\$ 1480 per participant. This will cover tuition, course file, books and field trip. Full-board accommodation is available at the venue of the course at an additional cost of US\$ 460.

!!! **Contact:** NETWAS International, [training@netwas.org](mailto:training@netwas.org)  
!!! **Info:** <http://www.netwasgroup.com/courses/courses/2004/3>

**Internet - online course on "Sustainable Aquacultures";**

**March 29 - April 8 2004**

On the platform of [www.mynetworks.org](http://www.mynetworks.org) an internet - online course on "Sustainable Aquacultures" shall take place from March 29 to April 8, 2004.

The course manager is Prof. B. B. Jana from Kalyani University, Calcutta. A detailed announcement shall become available during early march at the below given web-site.

!!! **For further Information see under:** <http://www.mynetworks.org>

## Events

...new

**China: Water China - Foreign Trade Guangzhou Exhib. Corp. and MEREBO Messe Marketing**

**10. - 13. March 2004, Guangzhou (Canton)**

**Organizer:** China Foreign Trade Guangzhou Exhibition Corp. and MEREBO Messe Marketing

This event was originated from 2000 and was found to be the largest specialized exhibition for the water industry in China. In 2003, it was participated by 267 exhibitors from 16 nations and 11700 specialized visitors. There is an increase to more than 300 exhibitors in the year 2004, in which has been divided into several partitions, water, wastewater and water treatment as well as pump, valve, and pipe. European enterprises will have a possibility to take part within the border of Europe Pavillion.

!!! **Contact :** [info@merebo.com](mailto:info@merebo.com)

!!! **Info:** <http://www.waterchina.merebo.com>

**Germany: 37. Essen Conference for Water and Waste Management**

**24. - 26. March 2004, Essen**

The topics are EU-framework guideline for membrane technology, watercourse protection, waste, and water supply. On Thursday 25<sup>th</sup> afternoon, there will be a speech from Christine Werner during the session "offensive export of the German water economy" in which its title is "Offering new sanitation concept to improve the chance of export for the German water economy."

!!! **Contact:** Prof. Dr. Ing. M. Dohmann, Chair of the municipal wastewater management, RWTH Aachen, 52056 Aachen

!!! **Info:** [www.isa.rwth-aachen.de](http://www.isa.rwth-aachen.de)

**Germany: Gebäude- und Grundstücksentwässerung, Gemeinschaftstagung**

**31. March - 1. April 2004, Marburg**

**Organiser:** ATV-DVWK Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V. und ZVSHK

The event is directed on the staff from drainage authorities, construction supervision authorities, engineering firms, manufacturers, and specialized companies, in which the actual questions concerning drainage technology situation must be covered. After the conference opening, there will be a presentation from C. Werner on Wednesday concerning "Sustainable wastewater disposal: a new, environmental-friendly, economic, efficient, community-fairly, and technically suitable drainage concepts." Other topics range from "The chances of German technologies aboard" (T. Grüter) to "Right and duty of the landowners" (K. Selleng).

!!! **Download (german):**

[www.gtz.de/ecosan/download/ATV-Gebaeude-Grundstueck.pdf](http://www.gtz.de/ecosan/download/ATV-Gebaeude-Grundstueck.pdf)

**France: 3rd World Wide Workshop for Young Env.I Scientists  
"Discharged urban waters: resource or risk?"**

**12. - 15. May 2004, Domaine de Cherioux, Vitry sur Seine**

**Organizer:** Water University of the Val de Marne County; Cereve (Centre d'Enseignement et de Recherche Eau Ville Environnement)

"Discharged urban waters: resource or risk?" For its 3rd annual venue, the "Water University" of the Val-de-Marne county organises jointly with the Cereve, a workshop dedicated to young environmental scientists (doctoral, or post-doctoral). Every invited participants need to make a presentation under this topic. The certain process will be informed in the website.

!!! Deadline of the application 5. March 2004

!!! **Contact :** Dr Bruno Tassin, [tassin@cereve.enpc.fr](mailto:tassin@cereve.enpc.fr)

!!! **Info:** [www.enpc.fr/cereve/](http://www.enpc.fr/cereve/)

**Jordan: International Water Demand Management Conference**

**30. May - 3. June 2004, Dead See, Jordan**

**Organizer:** Ministry of Water and Irrigation in the Hashemite Kingdom of Jordan with funding provided by the United States Agency for International Development

The conference objectives are:

1. to provide a forum to share concepts, research, technologies, and experience on the most efficient use of water in the domestic, industrial and agricultural sector,
2. to provide a forum how new conservation technologies can reduce their costs, as well as save the region water, and
3. to show-case state of the art conservation technologies at the exhibition.

!!! **Contact :** Ms. Hala Dahlan, Conference Manager, [hdahlan@go.com.jo](mailto:hdahlan@go.com.jo)

!!! **Info:** <http://www.wdm2004.org/>

**Czech Republic: 2nd IWA Leading-Edge Conference  
on Water and Wastewater Treatment Technologies**

**1. - 4. June 2004, Prag**

**Organizer:** IWA

The first Leading-Edge Technologies conference was held in Noordwijk/Amsterdam, Netherlands on 26-28 May 2003. Over 180 delegates gathered to discuss the latest innovations in drinking water and wastewater technologies. The 2nd Leading-Edge Technologies conference will be held in Prague on 1-4 June 2004. Once again the conference programme will be structured around the two themes of drinking water and wastewater treatment technologies. This year will also see the introduction of workshops to allow delegates to debate topics further. "Rethinking the Wastewater Treatment Concept" is the title of one of the sessions.

!!! **Contact :** Lara Changizi, [LET2004@iwahq.org.uk](mailto:LET2004@iwahq.org.uk)

!!! **Info:** <http://www.let2004.com>

**Sweden: Stockholm 2004 World Water Week**

**16. - 20. August 2004, Stockholm**

**Organizer:** Stockholm International Water Institute (SIWI)

**Place:** Stockholm City Conference Centre

The 2004 World Water Week takes place August 16-20, 2004, and is themed "Drainage Basin Management – Regional Approaches for Food and Urban Security". The Announcement/Call for Abstracts includes information about the Stockholm Water Symposium workshop topics, seminars to be organised by the European Union, World Water Council, International Water Management Institute, and other organisations, plus much more.



!!! Contact : [sympos@siwi.org](mailto:sympos@siwi.org)  
!!! Info: <http://www.siwi.org/>

## Events

### reminder

#### Malaysia: 3<sup>rd</sup> ASIAWATER 2004

30. March - 2. April 2004, Kuala Lumpur

Over 8000 delegates and trade buyers will congregate at AISAWATER 2004, Asia's No. 1 Water & Wastewater Event. Over 450 exhibitors from 28 countries, packed with the latest solutions and technologies for municipality water, sewerage and industrial wastewater management.

!!! Info: <http://www.asiawater.com>

#### Australia: ENVIRO 04 Convention & Exhibition

28. March - 1. April 2004, Sydney

**Organiser:** Australian Water Association (AWA), Waste Management Association of Australia (WMAA), Australian Business Council for Sustainable Energy (BCSE), Environment Business Australia (EBA), Clean Air Society of Australia & New Zealand (CASANZ)

Enviro 04 will incorporate six conferences dealing with:

- Sustainable industry — engaging the mainstream industry sectors of urban development, food and beverage supply and intensive agriculture
- Water — planning for the future
- Waste — finding your place in the brave new “no-waste” world
- Sustainable energy — markets and programs, technologies and suppliers, projects and case studies
- Business of the environment — do we grow the limits or limit the growth? who's driving the marketplace?
- Advances in odour management — towards more liveable communities

!!! Info: <http://www.enviroaust.net>

#### South Africa: Water Institute of Southern Africa Biennial Conference & Exhibition

2. - 6. May 2004, Cape town

**Organiser:** Water Institute of Southern Africa

Water Institute of Southern Africa provides a forum for the exchange of information and views to improve water resource management in Southern Africa

!!! Info: <http://www.wisa.org.za/>

#### Spain: Water and Wastewater Europe 2004

25. - 27. May 2004, Barcelona

**Organiser:** Water & Wastewater International, PennWell Corporation

Water & Wastewater Europe 2004 will host experts from major players in the industry, including the public and private sectors, to discuss the serious challenges faced by many European countries - asset management; water resource management; water production and quality; desalination, water reclamation; operations and maintenance; privatisation, system rehabilitation; wastewater treatment and sludge management.

!!! Info: <http://wwe04.events.pennnet.com/>

**Germany: World Renewable Energy Forum: Global Benefits and Policies**

**29. - 31. May 2004, Bonn, Bundeskunsthalle**

**Organiser: The European Association for Renewable Energies e.V.**

Event undertaken to prepare the International Conference for Renewable Energies, RENEWABLES 2004 (see below)

!!! Info: [http://www.eurosolar.org/new/de/termine\\_aktuell.html](http://www.eurosolar.org/new/de/termine_aktuell.html)

**Germany: RENEWABLES 2004 – International Conference for Renewable Energies**

**1. –4. June 2004, Bonn**

**Organiser: BMZ, BMU and GTZ**

As announced by German Chancellor Gerhard Schroeder in Johannesburg at the World Summit on Sustainable Development in September 2002, the conference *renewables 2004* will lend further impetus to the momentum generated in Johannesburg leading to global expansion of renewable energies. The conference participants will be addressing the following themes in particular: financing (instruments) and market development; structuring of conducive policy frameworks; capacity building (education, research, networks, cooperation arrangements etc.) taking into account the country-specific conditions.

!!! Info: <http://www.renewables2004.de/>

**USA: World Water & Environmental Resources Congress 2004  
"Critical Transitions in Water & Environmental Resources  
Management: Understanding the Past - Shaping the Future!"**

**27. June – 01. July 2004, Salt Lake City**

**Organiser: The Environmental Water & Resources Institute of the American Society of Civil Engineers**

The event is designed for: engineers, biologists, policy makers, regulators, economists, ports managers, industrialists, manufacturers, researchers, consultants, and other parties interested in water and environmental resources; to boost understanding, collaboration, coordination, and cooperation with international practitioners ... AND ... Native American/Indigenous Peoples/First Nations, government officials, and non-government organization leaders.

!!! Info: <http://www.asce.org/conferences/ewri2004/>

**China: IFAT Fair China 2004,**

**29. June – 02. July 2004, Shanghai**

**Organiser: MMG - Messe München GmbH; IMAG – Internationaler Messe- und Ausstellungsdienst GmbH (International Exhibition and Fair Service); SNIEC - Shanghai New International Expo Centre Co., Ltd.**

The 2004 IFAT CHINA will present specific industry solutions and the latest technologies for implementing practical and economically feasible solutions as well as a wide range of highly qualified services in every area of environmental protection.

!!! Info: <http://www.ifat-china.com/>

**Bahrain: Water Middle East – International Exhibition and Conferences for Water Technology**  
**13 -15. September 2004**

**Organiser:** Bahrain Convention & Exhibition Bureau (BCEB) & Nürnberg Global Fairs GmbH

**Water Middle East** is an initiative by the Bahrain government to address all water issues and to provide a regular forum for international and regional water experts for the exchange of information on latest technological developments and new applications from around the world.

!!! Info: <http://www.watermiddleeast2003.com/>

**Morocco: IWA World Water Congress and Exhibition**  
**19.- 24. September 2004, Marrakech**

**Organiser:** IWA - International Water Association

Over 3,000 people are expected to participate in the Congress and exhibition over five days. Leading researchers and practitioners will present the latest innovations in water management to Congress. The Congress themes cover most areas of the global water industry and there is a desire to create a programme which is relevant to both the developed and developing regions of the world.

!!! Info: [www.iwa2004marrakech.com](http://www.iwa2004marrakech.com)

**Netherlands: Aquatech Amsterdam 2004 - International trade exhibition of water technology and water management**  
**28. September – 01. October 2004, Amsterdam**

**Organiser:** RAI Exhibitions (Netherlands) Co., Ltd  
Conference & Trade Fair

!!! Info: [http://www.aquatechtrade.com/events/events\\_detail.asp?eventid=45](http://www.aquatechtrade.com/events/events_detail.asp?eventid=45)

**Greece: WASTE MANAGEMENT 2004 - 2nd International Conference on Waste Management and the Environment**  
**29. September – 01. October 2004, Rhodes**

**Organiser:** Wessex Institute of Technology, UK

The conference will be of interest to environmental engineers, local authority representatives, waste disposal experts, research scientists in the area of waste management, civil engineers and chemical engineers.

!!! Info:

<http://www.wessex.ac.uk/conferences/2004/waste04/index.html> - CALL%20FOR%20PAPERS

**Senegal: First Global Water, Sanitation and Hygiene (WASH) Forum**  
**1 – 5 Dec 2004, Dakar, Senegal**

**Organiser:** Water Supply and Sanitation Collaborative Council (WSSCC)

**Objectives:** (a) to draw lessons on how successful water, sanitation and hygiene programs, sector reforms and development partnerships are in leading to the eradication of poverty, and (b) to strengthen regional and national partnership initiatives aimed at attaining the goals of the World Summit on Sustainable Development.

The Forum will be divided into three parts - Part I: Creating an enabling environment to fight poverty and promote sanitation and hygiene; Part II: Strengthening regional and national initiatives in water supply, sanitation and hygiene; and Part III: Meeting the goals of the World Summit on Sustainable Development.

Web address: [http://www.wsscc.org/load.cfm?edit\\_id=332](http://www.wsscc.org/load.cfm?edit_id=332)

## Links and tips

### Links on GTZ ecosan homepage

You'll find an extensive list of interesting links on our homepage at:

<http://www.gtz.de/ecosan/links.htm>

We would greatly appreciate your calling our attention to additional links of interest:

[ecosan@gtz.de](mailto:ecosan@gtz.de)

## Homepage

Would you like to know more about GTZ's sectoral project ecosan or about the subject in general?

If so, visit our homepage (expansion and update in progress):

<http://www.gtz.de/ecosan>

## Newsletter

If you would like to contact the administrators of this newsletter please send an e-mail to:

[owner-ecosan@mailserv.gtz.de](mailto:owner-ecosan@mailserv.gtz.de)

Your proposals for contributions to the newsletter, and any inquiries and comments you may have are always welcome.

## Contact

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## Mailing list / Newsletter - user information

### How to use the ecosan mailing list

You can interact with the Majordomo software of our mailing list server by e-mailing commands to:

[majordomo@mailserv.gtz.de](mailto:majordomo@mailserv.gtz.de)

Commands must be the only text in the e-mail, and not as part of the subject line! You can send several commands in one and the same e-mail message. Just be sure to start a new line for each command.

If you attach a signature block to the end of your e-mailed messages, the Majordomo software could perhaps mistake it for another command, so please enter the word "end" by itself in the line below the last command.

### Useful mailing-list commands:

#### **subscribe ecosan**

Use this command to subscribe to the ecosan mailing list

#### **subscribe ecosan your.name@xy.org**

Use this command to receive the newsletter at an address other than that listed in your registration (e.g., if you send the e-mail from your workplace account, but wish to have the newsletter sent to your private e-mail address).

#### **unsubscribe ecosan**

Use this command to cancel your subscription.

#### **unsubscribe ecosan your.name@xy.org**

Use this command to de-register your receiving address, if this differs from the one from which you are currently using to send the request.

#### **info ecosan**

Use this command to request general introductory information about the ecosan mailing list.

#### **index ecosan**

Use this command to obtain a list of files sent so far via the mailing list.

#### **get ecosan <filename>**

Use this command to obtain a specific file sent via the mailing list (e.g., an archived newsletter).

#### **help**

Use this command to obtain information on how to use the Majordomo software.

#### **end**

Use this command to terminate a list of commands, e.g., especially if your mailer attaches an automatic signature.