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### ➤ CALL FOR NEW PROGRAM PHASE LAUNCHED

The new and long awaited call of the German BMBF-ministry for the next phase in the megacities program has been launched in September.

Due to new political emphases the call has been focused on **“Energy- and climate-efficient structures in urban growth centres”**. Following the new guidelines the proposals also have to follow a “High-Tech Strategy for Climate Protection” as a cornerstone of an innovation-driven, integrated and international research and implementation oriented approach. The previous project phase has certainly shown that **EnerKey** is in the center of this new overall orientation.

The running projects of the previous program phase are invited to submit a project application by 15. Nov. 2007. All applications are subject to a two-stage evaluation procedure, consisting of a written assessment followed by an assessment round which includes a project presentation by the applicants to the review committee. The main phase for successful projects begins in April 2008.



Federal Ministry  
of Education  
and Research

The main project phase is scheduled for a period of five years. An intermediate assessment will be performed for each funded project after 2.5 years.

### ➤ PREPARATIONS FOR THE NEW PROPOSAL

The EnerKey team is now engaged in preparing the details for new project proposal. The main key activities, building energy efficiency, energy supply, transport, socio-economics and systems-modeling will be continued, but will be amended with new components. The German EnerKey team will be visiting Johannesburg in the first week of

November 2007 to discuss the proposal with the EnerKey Governing Board and Program Management Committee.

All South African Partners are invited to contribute with ideas and will also be requested to issue a **“letter of interest”** for further participation in the project.

### ➤ JOINT SA-GERMAN PUBLICATION ON TRANSPORT EMISSIONS IN JOBURG

Philip Goyns (UJ) and E. Doruk Özdemir (IER, U. Stuttgart) submitted a joint paper to the International Journal of Environment and Pollution on emissions estimation from mobile sources in urban regions. The abstract of the paper points out the details:

*“Driving cycles, including real-world driving cycles, by definition describe only the forward motion of a vehicle, ignoring effects of topology and auxiliary equipment on emissions and fuel consumption. A method is proposed to simulate emissions factors using engine operating patterns as an alternative to driving cycles. A set of engine operating patterns along with their fuel consumption and emissions factors for NO<sub>x</sub>, HC, CO and CO<sub>2</sub> are developed from speed time series’ of real-world driving cycles and the physical properties of a range of private passenger vehicles. Emissions are estimated and compared for idealised driving cycles and real engine operating patterns developed from measurements made from a Euro-3 petrol vehicle driven in Johannesburg (South Africa). Emissions and fuel consumption estimated from these engine operating patterns are higher by up to a factor ×22 than those estimated from measured driving cycles.”*

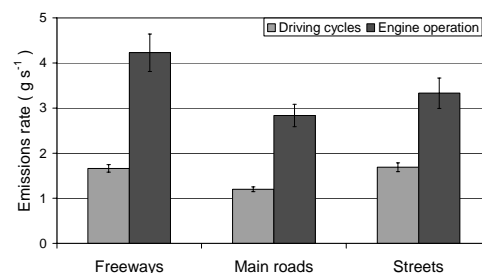


Fig. 1: CO<sub>2</sub> emissions estimated from driving cycles and engine operation



➤ **STUDENT EXCHANGES SA - GERMANY**

○ **MATHIAS FINK TO UJ / UCT ON SOLAR HOT WATER SYSTEMS**

Mathias Fink, a student from IER, Stuttgart is working at UJ/UCT on behalf of the EnerKey project for a period of four months, beginning in Oct. He started his work at ERC at the University of Cape Town and will come to work under the guidance of Harold Annegarn at UJ in Nov. He will investigate and compare solar thermal hot water systems from Germany and SA, focussing on technical and economic aspects. The City of Joburg has also indicated their interest in including Cosmo City as study region.

○ **IMOH COLINS FROM UCT TO STUTTGART ALSO ON SHW SYSTEMS**

Vice versa to the visit of Mathias Fink to SA Imoh Colins from UCT will spent a four month stay at IER. As a result of the increasing interest in solar hot water systems he also will work on a transfer of knowledge and techno-economic evaluation of adapted and advanced systems to use solar energy. The results of the studies will be made available to the EnerKey project community.

○ **VICTORIA VAN DER LAND WITH PEER AFRICA ON ENERGY ACCESS AND SOCIAL DEVELOPMENT**

Victoria van der Land from the University of Trier is spending a three month research visit to South Africa and working with Peer Africa. She is investigating the conditions for energy access and social development in different city quarters. In several different projects interviews were conducted with residents that had moved from shacks to energy-efficient low cost housing, as well as experts on energy and housing issues. The interviews served to determine people's

living and energy using habits and the costs of energy while living in shacks versus living in houses. Provisional research findings are e. g. in terms of health, that electricity prevents diseases caused by toxic gases present when using paraffin, wood or coal and changes eating habits because of the availability of refrigeration. In addition, people can improve their economic situation because using electricity helps to run businesses.

➤ **NEWS AND UPCOMING EVENTS**

○ **UNITED NATIONS CLIMATE CHANGE CONFERENCE IN BALI**

3.-14. December 2007  
Nusa Dua, Bali, Indonesia

The Conference hosted by the Government of Indonesia, brings together representatives of over 180 countries together with observers from intergovernmental and nongovernmental organizations and the media. The two week period includes the sessions of the Conference of the Parties to the UNFCCC, its subsidiary bodies as well as the Meeting of the Parties of the Kyoto Protocol. A ministerial segment in the second week will conclude the Conference.

[http://unfccc.int/meetings/cop\\_13/items/4049.php](http://unfccc.int/meetings/cop_13/items/4049.php)

○ **URBAN PLANET CALL FOR PAPERS**

Irmgard Coninx Research Conf. 2008  
Berlin, 11. - 16. June 2008

In continuation of previous roundtables on population politics and migration into cities, the Eight Berlin Roundtables on Transnationality will focus on "Collective Identities, Governance and Empowerment in Megacities". Deadline for essay submission: 15. December 2007

[www.irmgard-coninx-stiftung.de](http://www.irmgard-coninx-stiftung.de)

[www.enerkey.info](http://www.enerkey.info)

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