

Aims

Following United Nations Development Goals (MDG), South African policy addresses, amongst others, housing, water supply, wastewater treatment, sanitation and energy supply as most challenging issues, and inaugurated programs for regions suffering from poor infrastructure and poverty related problems.

Integrated technological approaches involving green technologies for water and sanitation and the solar option for energy, are defined and must be harnessed and cultivated. International cooperation is encouraged.

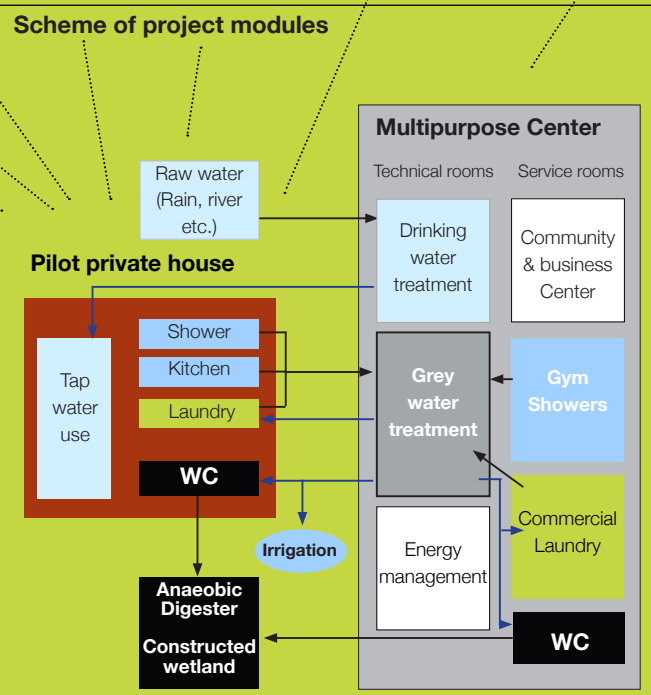
RSA and Germany started, as part of their CLIENT initiative, the EcoSUN project which was launched in 2015. Partners from industry and academia are involved.

EcoSUN project aims to develop an infrastructure package that combines proven, applied and marketed, on international scale, technologies after principles of ecological sanitation (Ecosan) and renewable and solar energy use (Sun), in an innovative manner (EcoSUN).

Houses are combined with a Multipurpose Centre for technology and community activities. (see EcoSUN scheme)

The package will deliver a sustainable solution at a good cost/benefit ratio and an easily maintained technical layout. Education for good operation skills and long term maintenance is integral part of the project. Public participation will guarantee that community is involved in every decision making and implementation step.

EcoSUN



EcoSUN Sustainable Village

Green technologies for modern settlements with sustainable water and energy management in South Africa

www.ecosun.com.de



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biogas plant

Project activities and team

Sanitation and waste management

Development and adaption of EcoSUN options in new settlements. Production of biomass and mineral fertilizers made from organic residues from households, agriculture and environmental protection measures and its application for soil improvement and local food production using urban farming principles.

GTS | www.gts-oekotech.de

Implementation of climate protection measures through total balancing of processes and low carbon technologies and materials.

Potsdam University | www.uni-potsdam.de

Architecture and town planning

Settlement planning after principles of good neighbourhood that involves an integrated Multipurpose Centre and a new type of housing following principles of the National Housing Code and the needs of EcoSUN technologies and corresponding to people's needs.

Barbara Mohren Architekten | www.mmst-architekten.de



new RDP settlement | Architects' vision

EVERS
drinking water
facility



Windrow
composting
plant



Training and public participation in Ikwezi, RSA

Energy supply

Supply of affordable bio-energy using local sources, by producing power and gas from organic waste via bio-digestion, using solar energy via solar-air collectors for room heating and warm water, as well as solar power via PV cells in local smart grids.

Ingenieurbüro Dr. Markert | www.biogas-markert.de

Water supply

Provision of clean tap water of best quality from different water sources, through advanced filter technologies.

EVERS | www.evers.de

Sanitation

Greywater treatment for high quality, service water which can be re-used in households for toilet flushing, laundry and irrigation.

INTEWA | www.intewa.com

Nolde & Partner | www.nolde-partner.de



Communal waterhouse in Ikwezi, RSA



Greywater plant in Berlin, Germany

