

# GCSM Blue Responsibility Award: Manufacturing for a Sustainable Terra Preta Sanitation System



Source: <http://www.unwater.org>



Source: <http://www.thepolisblog.org>

## ▶ Challenges

- ▶ Sanitation is a basic need that still has to be fulfilled for a large part of humanity
  - ▶ 40% of the world's population currently lacking basic sanitation
  - ▶ Every 20 seconds, a child dies as a result of poor sanitation

- ▶ Water-based sanitation systems are environmentally inefficient

- ▶ High resource consumption (water, energy), heavy sewage infrastructures
- ▶ The cycle of nutrients is broken: nutrients are not fed back to the soil, supporting use of fertilizers and soil depletion

- ▶ In order to take up these challenges, the organizers of the Global Conference on Sustainable Manufacturing (GCSM) launch on the 15.11.2013 an international competition on sustainable sanitation

- ▶ Objective: design new closed-loop sustainable sanitation systems
- ▶ Main criteria: ease of deployment and resource efficiency



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- ▶ Requirements for submission:
  - ▶ Overall system design of the sanitation system, including toilets, excreta storage, transportation and transformation into fertile soil enabling food generation.
  - ▶ Provide a prototype (at least digital, preferably physical) for at least one of the elements of the whole chain
  - ▶ Definition of realistic business models under the motto: “make sustainable business out of shit”
  
- ▶ Important dates:
  - ▶ 15.11.2013 - Official launch
  - ▶ 28.02.2014 - Registration deadline
  - ▶ 31.07.2014 - Deadline for full submission
  - ▶ 31.08.2014 - Announcement of shortlisted contributions
  - ▶ 22-24.09.2014 - GCSM Conference: presentation of shortlisted contributions and attribution of awards
  
- ▶ Award: 10 000 Euro
  
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