SOLAR HEATING & COOLING PROGRAMME
INTERNATIONAL ENERGY AGENCY

De Beijer RTB B.V.

General introduction to SolabCool™ Technology

Introduction De Beijer RTB:

Profile:

- Engineering company with 30 years of experience in renewable energy solutions and products.
- Several international cooperation's with institutes and universities.
- Various renewable energy products successfully launched to the market in the past.

Main activity:

De Beijer RTB is mainly active in the field of thermo-chemical energy storage and thermo-chemical heat pumps.

Main project:

The SolabCool™ technology has been developed to create a very cost-effective production method to make small capacity sorption cooling competitive with alternative systems.

Solares - solar collector

Energion - heat pump

Ecolution - heat pump boiler

SolabCool B.V. :

The company:

SolabCool B.V.'s core business is manufacturing thermo chemical heat pumps (SolabPump™). Our goal is to position SolabCool B.V. as the leading OEM-supplier of thermo-chemical heat pumps to the HVAC industry.

SolabCool™ technology:

The SolabCool™ technology is based on adsorption cooling. This process takes place in the SolabModule™, which consists of a condenser / evaporator and an accumulator.
To provide cooling a two stage charging and discharging process is used in a SolabPump ™.

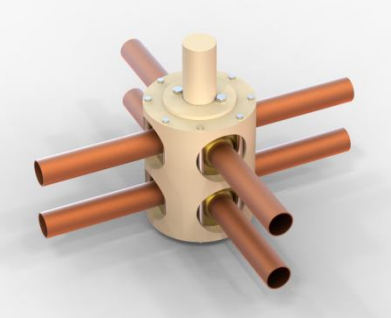
SolabPump™

SolabCool B.V. :

The components:

SolabCool B.V. produces several components itself that can be integrated into solar cooling and heating systems. The main components are:

- **SolabChiller**
- **SolabPump**
- **SolabModule**
- **SolabValve**



SolabValve™

SolabModule™

SolabChiller™

Related projects:

De Beijer RTB is running several projects that are related to the new task:

- **TKI EnerGO**
  - TKI is a national program meaning Top consortium Knowledge and Innovation.
  - EnerGO is one of the subprograms on Energy efficiency in the built environment.
  - De Beijer RTB is one of the main partners in the TESSEL-project to realize a thermal energy storage system.
- **EIT - KIC InnoEnergy**
  - Partner in the program 'Energy storage as necessary part of energy balanced buildings and districts '.
  - De Beijer RTB is work package leader for the task 'Energy storage to enable more effective use of chp and PVT'.
- **KP7 – Merits**
  - Partner in the program More effective use of renewables including compact seasonal thermal energy storage.
  - Work package leader for business models and market strategies. Responsible for prototyping.
- **IEA project**
  - Involved in SHC/ECES Task42/24 'Advanced Materials for Compact Thermal Energy Storage'.

Interest, Input and responsibilities :

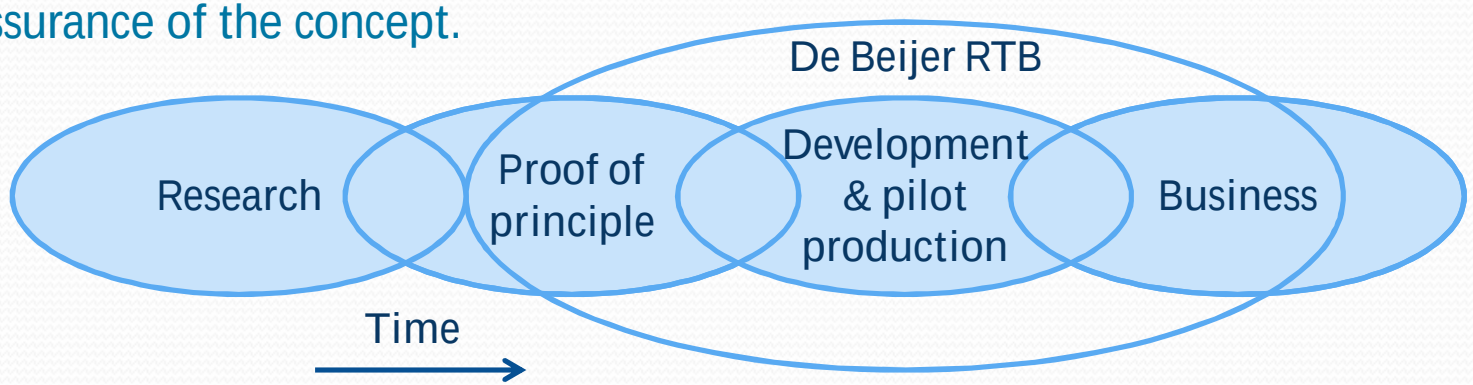
Interest:

De Beijer RTB is generally interested in Subtask A and C. We have a specific interest in:

- Certification process, test standards and quality label
- Development of tools and deliverables permitting to show the level of quality in both components and systems.

Input:

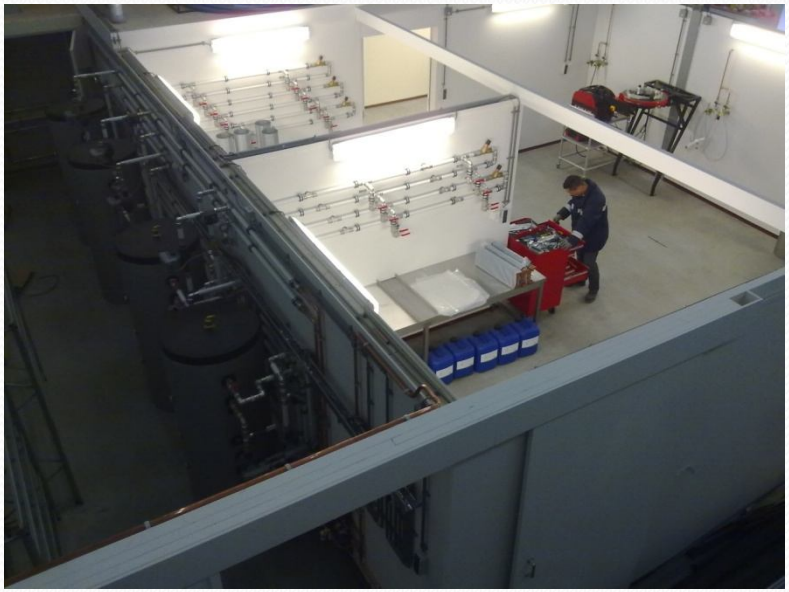
- Early stage feedback on production efficiency, costs-effectiveness and quality assurance of the concept.



Responsibilities:

- Prototyping of component with the SolabCool Technology as a basis.
- Participate in the certification process

SolabCool Pilot Factory, opening summer 2013:



Questions?