

BETTER ENERGY BY DESIGN

SUBMISSION: BIOBREAK

This project was not done in collaboration with any company at any time. The project is merely conceptualized on existing systems as an update rather than a new product by itself.



New floor unit for existing mobile toilet systems that separate liquid from solid human waste in order to reuse these as natural fertilizers for agriculture and as a resource for generating biogas.



> **RESOURCE**

- 1. SAVE ENERGY BY SAVING WATER**
- 2. LOCAL ACCESS TO CLEAN AND USABLE SANITARY INFRASTRUCTURE**
- 3. NO ENERGY WASTED IN DISPOSAL OF SEWAGE**
- 4. REPURPOSING OF HUMAN MANURE FOR (REGIONAL) AGRICULTURAL NEEDS**
- 5. REDUCE USE OF NATURAL GAS BASED CHEMICAL FERTILIZERS**

DO-IT-YOURSELF



Difficult to scale

INDIVIDUAL



Impact only on a small scale

FUTURISTIC



Not compatible with current systems



OPPORTUNITY TO ADAPT EXISTING MODULAR SYSTEMS

NEW ELEMENTS

EXISTING ELEMENTS

SPLIT TOILET

BASE PLATE

STEP

TANK

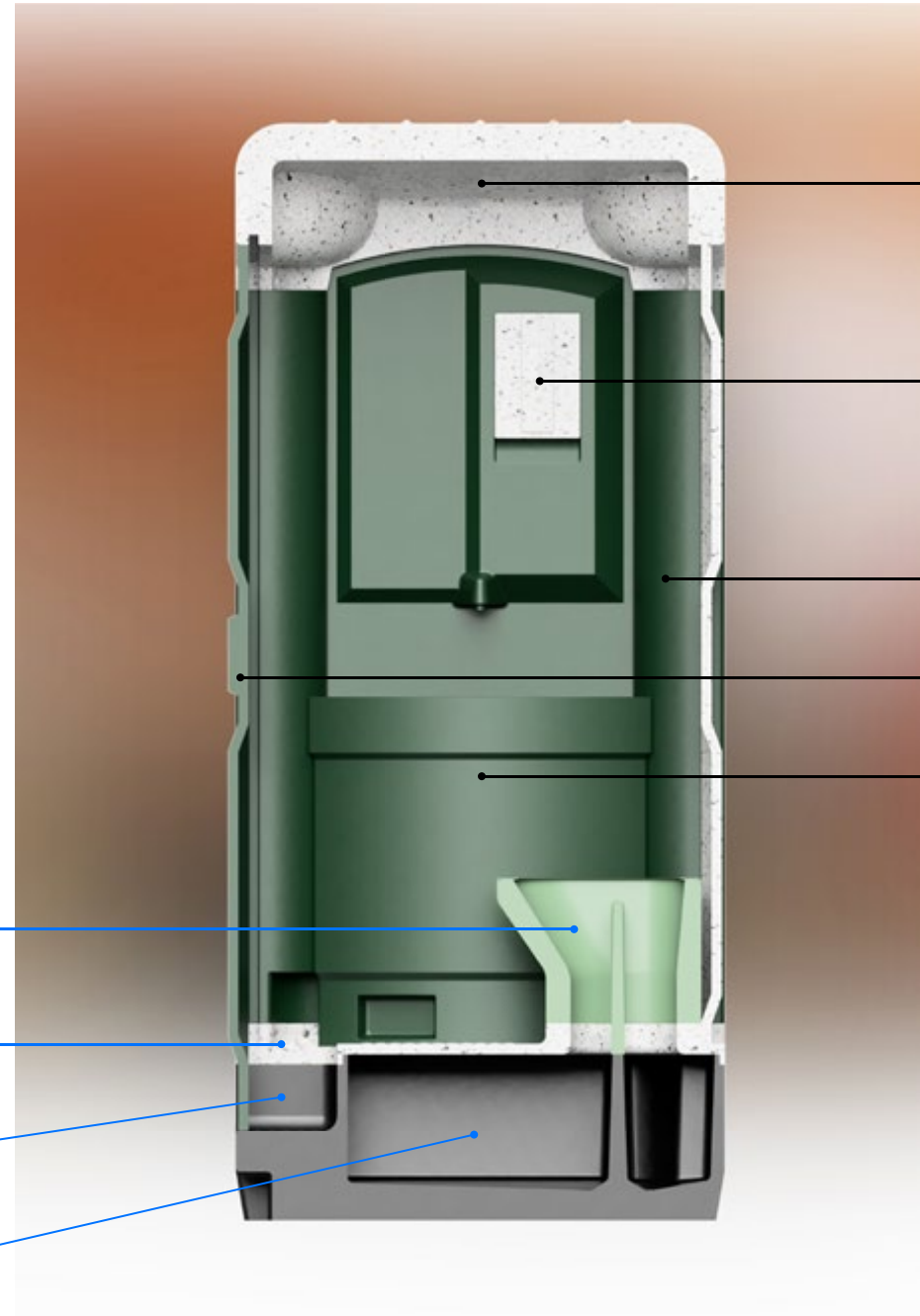
ROOF

PAPER TOWELS

PILARS

DOOR

WASHBASIN





TANK



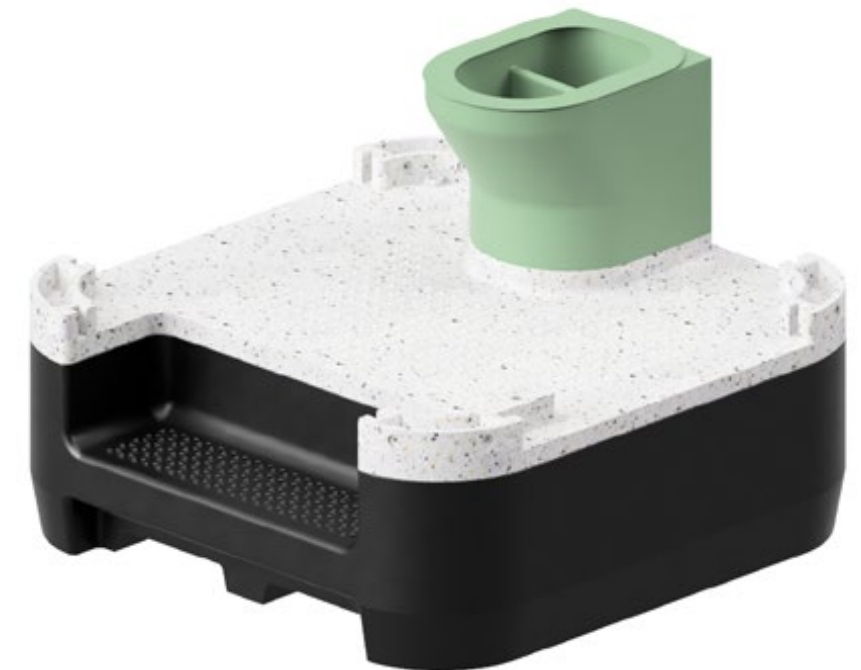
Separately storing the resources

BASE PLATE

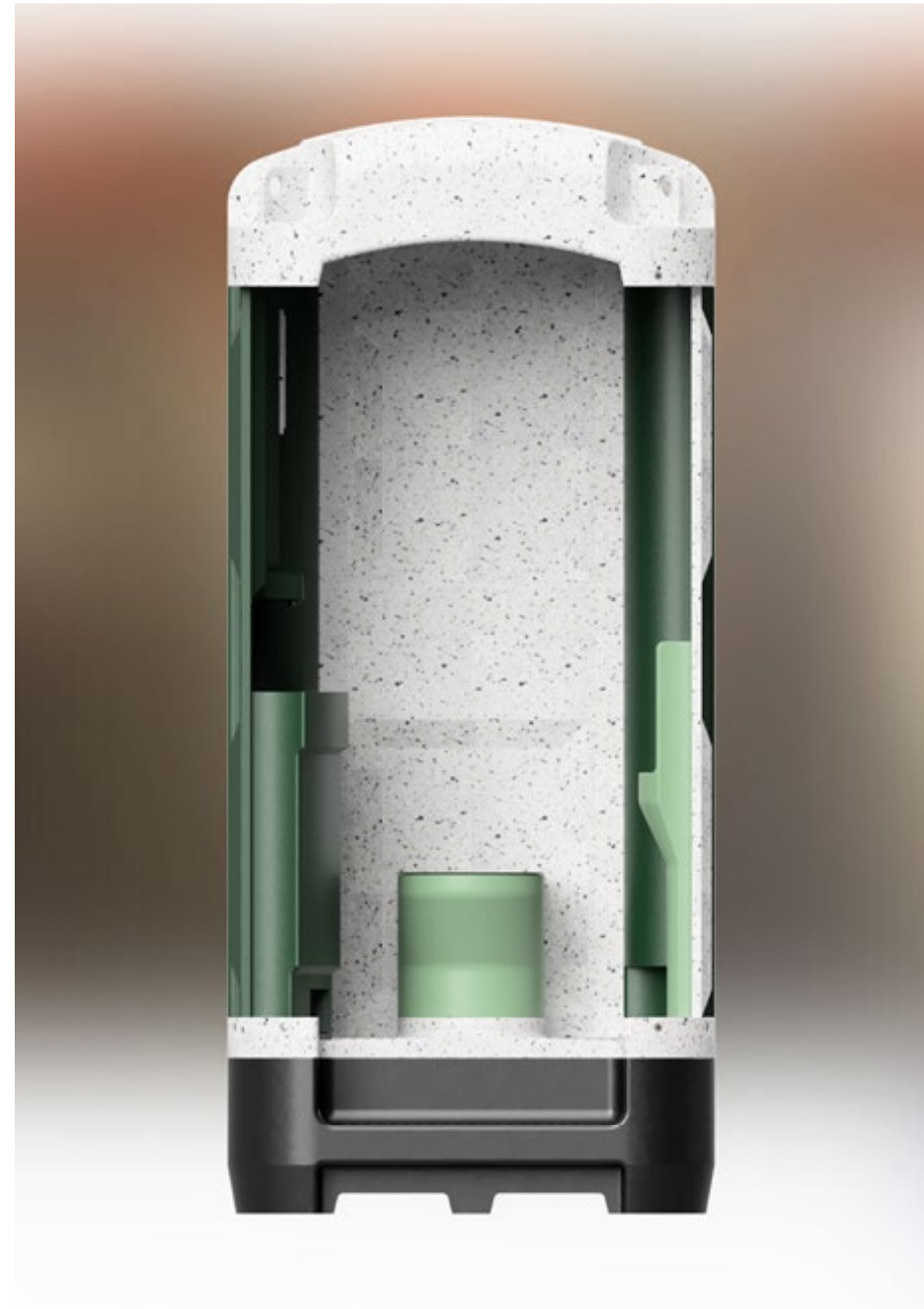


Interface connecting all the parts

TOILET



Presorting the manure



THANK YOU

Contact

Manuel Steffan
www.manuelsteffan.com
mail@manuelsteffan.com
manuelsteffan_

Paul Rees
www.paulrees.de
info@paulrees.de
paulr.ees