

DECENTRALIZED SELF CONTAINED MAKER SPACES

WASTE  **4ME2**

WASTE POWERED, PEOPLE DRIVEN.

WHO ARE WE AND WHAT HAVE WE DONE YET?

Vincent Toepoel

- Master in Mechanical Engineering, TU Delft
- International experience in developing & deploying energy technologies

Reid Larson

- Bachelor in Business Management & International relations
- Nano materials dispersion & processing techniques of materials used in 3D printing

Onno Meijerink

- Business developer
- Former owner of biofuel power plant

Yet

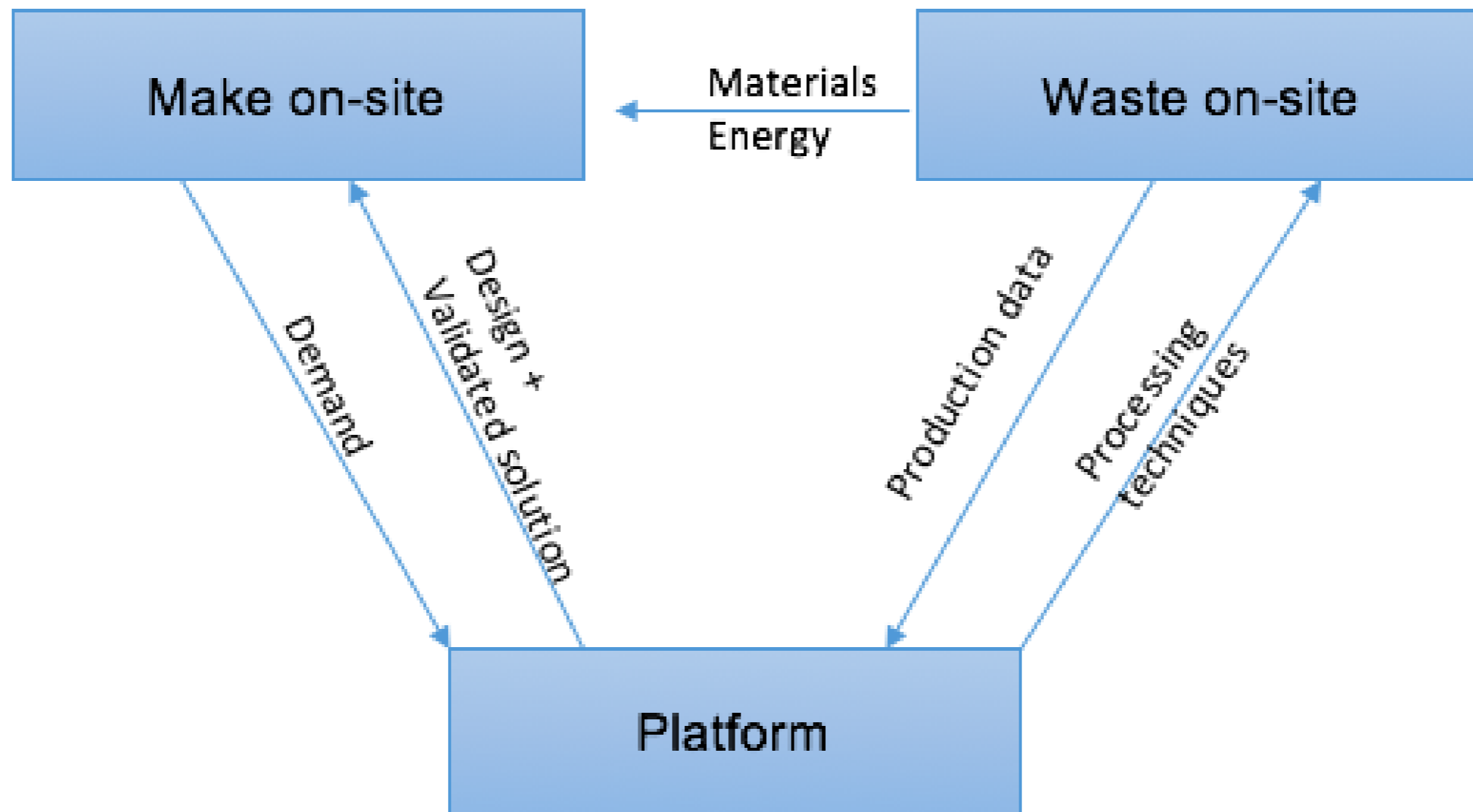
- Build (TRL8) and run a waste to energy unit (150 kg/h and 1,25 ton/h)
- Developed the technique to 'upgrade' waste plastics with nano materials to a virgin level and better
- interested businesses for maker spaces

CHALLENGES

- **Plastics are prevalent in areas where there should not be plastic waste**
- **Plastic products and energy are required everywhere**
- **Collection-cost of plastics are huge and when its not collected its environmental impact is disastrous**
- **Separation-cost (many types of plastics) are immense and needs a lot of power and clean water**

SOLUTION

- A web platform for community led waste to value creation, for offline decentralized functionality.
- With offline design and production validation
- Make your own production units, free downloadable designs



HOW DO WE PLAN TO GROW

- By empowering communities to collect and turn their own plastic into personalized 3D printed materials locally
- Supporting Circular Economy
- Solving environmental problems
- Reducing waste and converting it into sustainable resources
- Increasing the value of non-value/ end of life/ plastics
- Adjusting high end market product to consumer market
- Community driven, developed, and supported products
- We bridge the gap between local creators and a network of global consumers

Ambition/development demand

Using biobased nano materials collected by pyrolysis to upgrade the waste/bio plastics to a filament with at least the same characteristics as virgin plastics

(Nano are: materials of which a single unit is sized (in at least one dimension) between 1 and 1000 [nanometres](#) (10^{-9} meter) but is usually 1—100 nm. Materials with structure at the nanoscale often have unique optical, electronic, or mechanical properties.)

WER UNIT

