

# Dry toilets at music festivals in Norway – a way to create business, loops, and awareness

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# Outline

1. Festival toilets today
2. Approach
3. Our Norwegian project

Goal: Present the potential for business and awareness raising in big events

# Sanitation at music festivals



**Common: dry plastic toilets with single collection chamber under seat, no urine separation**

**Music festivals gather thousands of people**

**Temporary, usually a few days**

**Chemical liquid often added to prevent odour**

**Relatively frequent emptying of collection chambers**

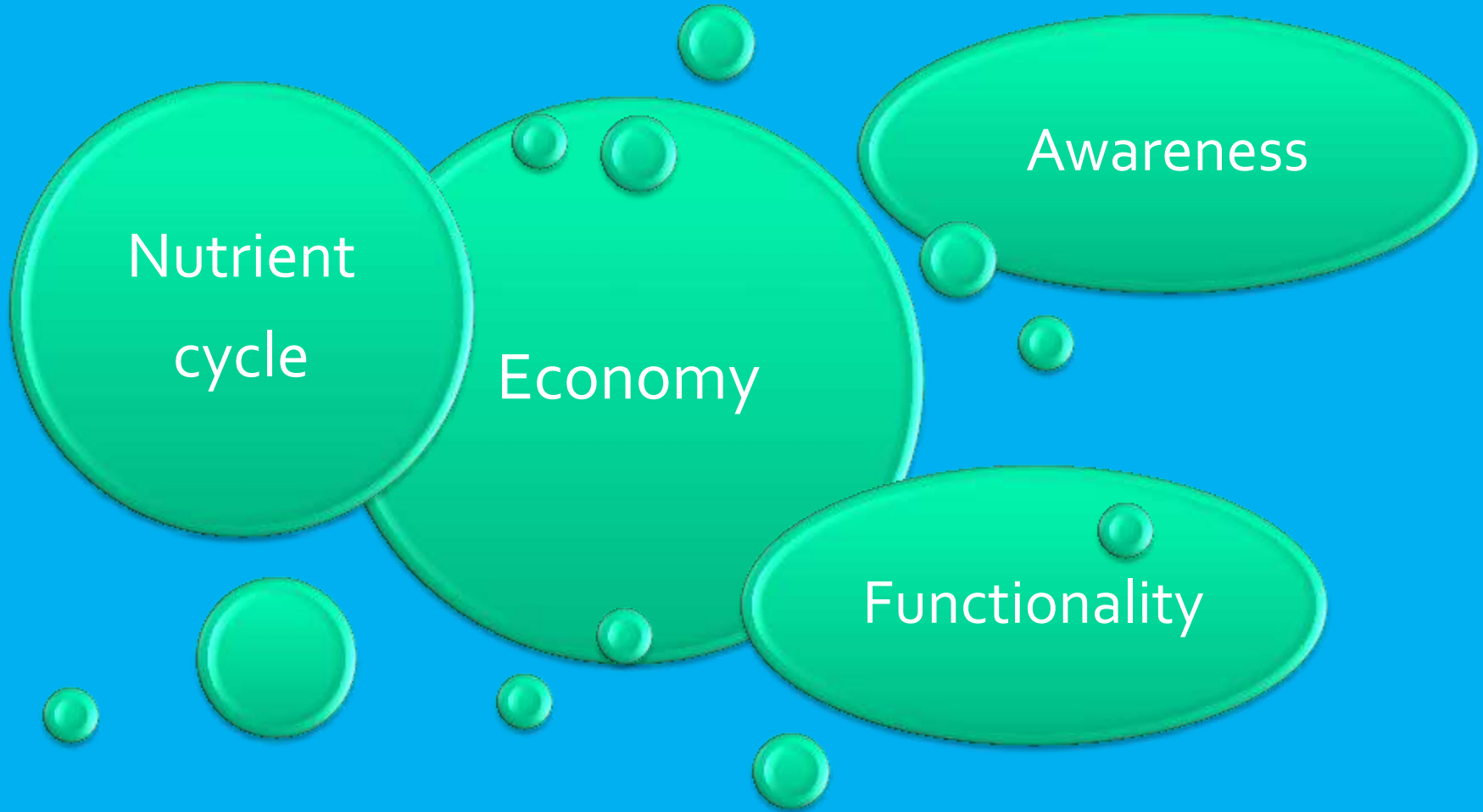
# Portable toilets: an established business model

- Companies rent out toilets, easy to install
- Cleaning may or may not be included
- Waste taken to municipal wastewater treatment plant

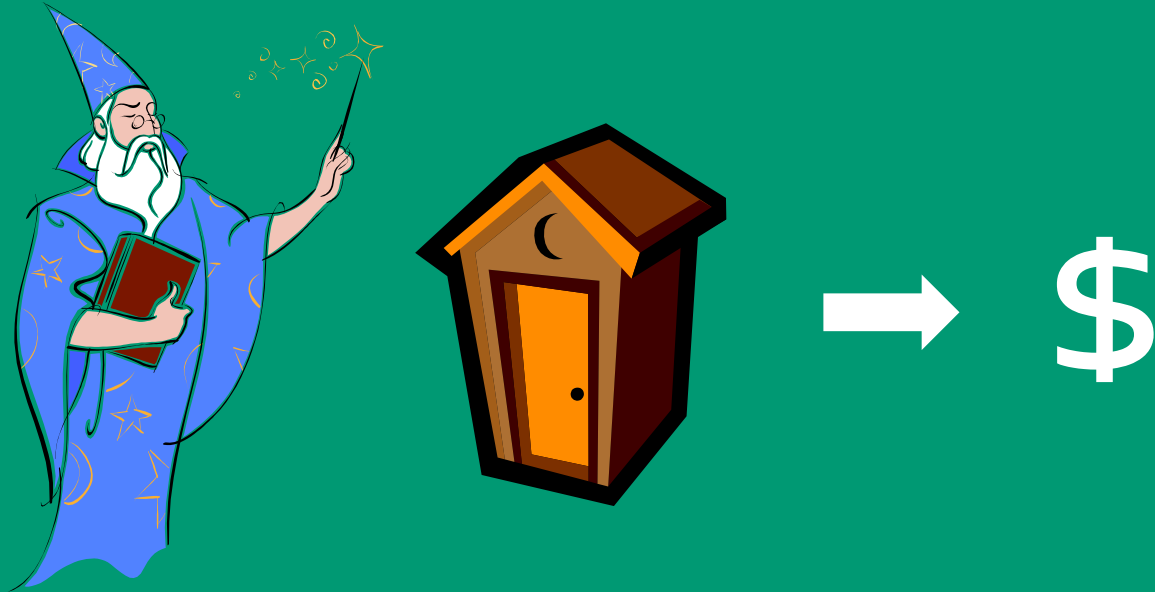


Photos: [www.hibas.no](http://www.hibas.no)

# Holistic approach



# Circular consequences: Economy





# Outreach and awareness



Photo: [www.naturalevent.com.au](http://www.naturalevent.com.au)

# Festival toilet requirements





# Festivals' motivations for change

- Price of rental
- Frequency of emptying / storage capacity
- User comfort
- Green image

Not necessarily in prioritized order



# Project «New festival toilet in Norway»

- Create business out of the obvious potential for improvement
- In a start up phase where tasks are many and big:
  - Create a company and attract financial support
  - Build and test prototypes
  - Connect with partner companies
  - Find productive use for (diluted) urine especially

# Ideas for prototypes

- ❖ Urine separation (because of large urine/faeces ratio) → better capacity for faeces, less need of bulking material
- ❖ Urinals with storage tanks that “communicate”
- ❖ Toilets to be flat packed for storage and transport



Thanks for your  
attention!

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