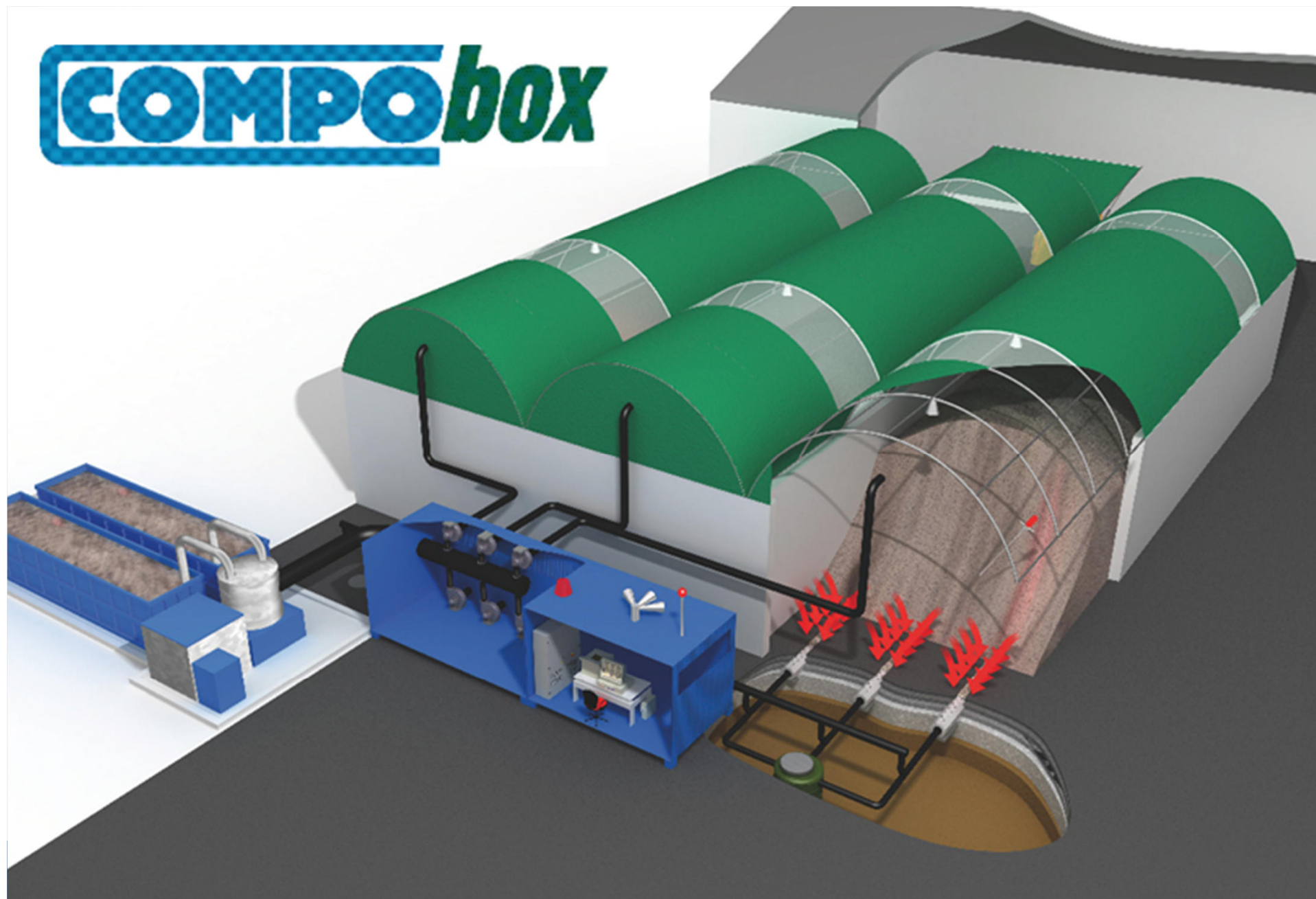


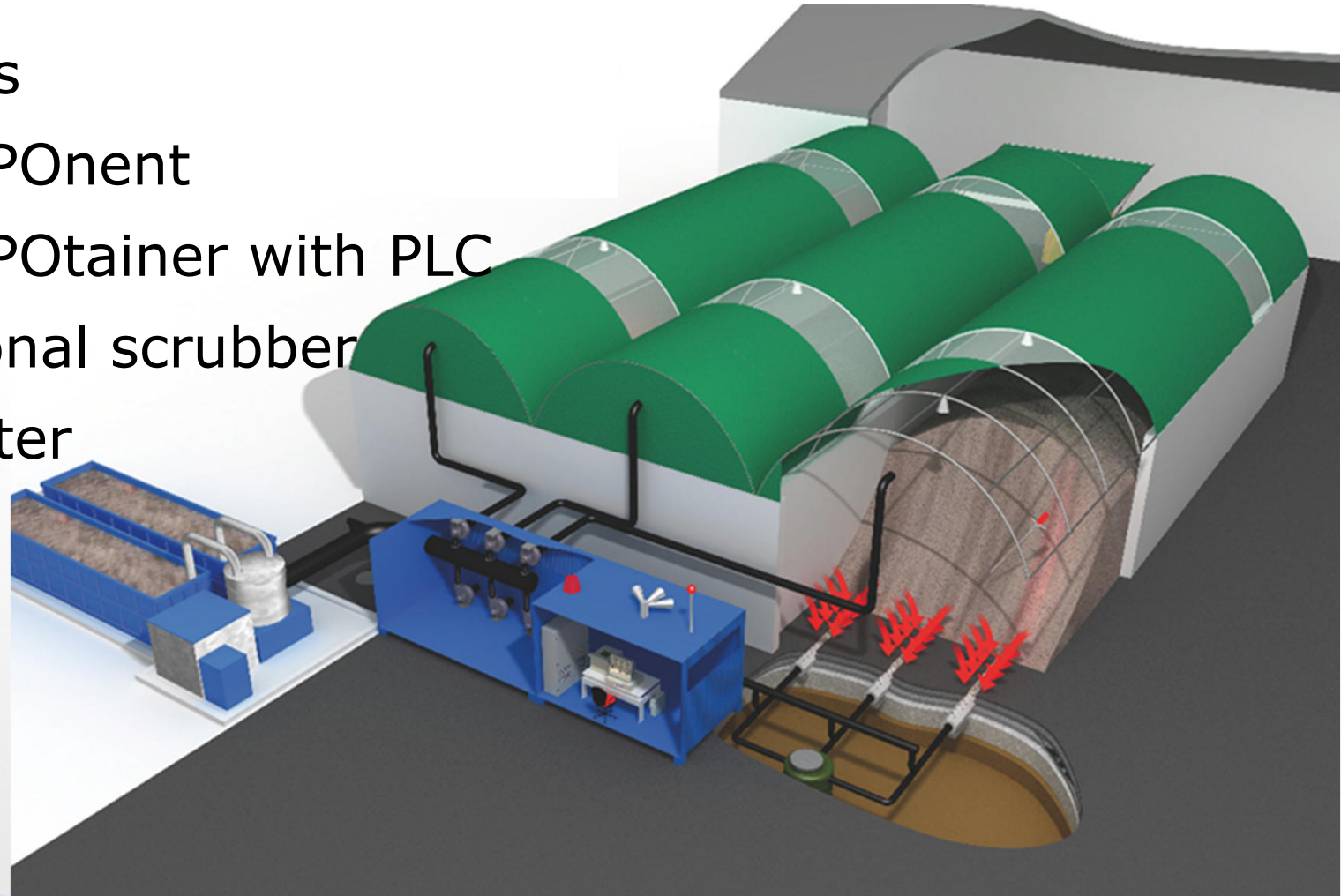
# COMPObox



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**SYSTEMS**

# COMPObox components

- ▶ Boxes
- ▶ COMPOnent
- ▶ COMPOtainer with PLC
- ▶ Optional scrubber
- ▶ Biofilter





## Function

- ▶ Box is filled
  - ▶ Temperature probe is put into the material
  - ▶ Active aeration (positive or negative)
  - ▶ Waste gas treatment (reduced emissions)
- 
- ▶ Composting time: 3-5 weeks
  - ▶ Curing necessary





## Advantages

- ▶ Closed process
- ▶ Modular expendable
- ▶ Optimal aerobic composting process
- ▶ Controlled sanitisation
- ▶ Short process time
- ▶ Minimum space requirement

Pre-cast or locally made concrete walls



# COMPObox Construction

Stainless steel support structure with two options:

- ▶ Air-tight PV-tarpolin
- ▶ Semi-permeable membrane

Advantage of membrane:

- ▶ No biofilter needed
- ▶ Positive/negative aeration
- ▶ Membrane filters air



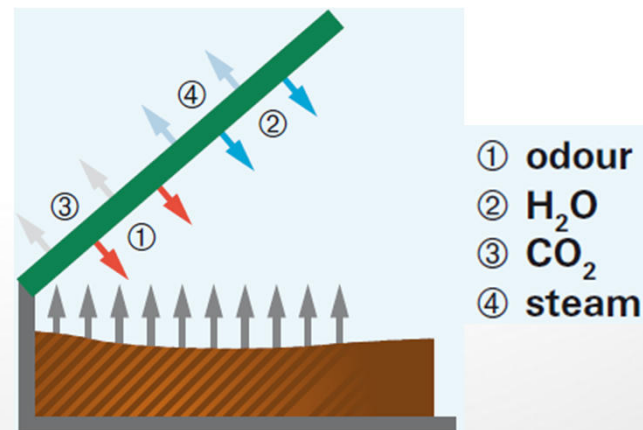
# COMPObox Waste gas treatment

## PV-tarpolin

- ▶ Negative aeration
- ▶ Air has to be mixed and conditioned
- ▶ Biofilter is needed

## Semi-permeable membrane

- ▶ Positive aeration
- ▶ Reduced hardware installation
- ▶ No biofilter





## COMPOair S aeration ducts:

- ▶ Special constructed aeration ducts
- ▶ Smaller
- ▶ Ensures a constant air distribution over the whole length
- ▶ Maximum length: 30 m





# COMPObox Construction

## COMPOtainer

- ▶ Enclosed for noise reduction
- ▶ Factory pre-assembled  
→ shorter installation time



# COMPObox Construction

## Hydraulic doors

- ▶ Completely air-tight
- ▶ No escape of waste gas
- ▶ Robust
- ▶ Corrosion resistant (construction outside)





# COMPObox Construction

Sliding doors

- ▶ Easy handling
- ▶ Cheap
- ▶ Corrosion resistant





# COMPObox Process

Equipped with **COMPOnent**

- ▶ Aeration ducts
- ▶ Temperature probes

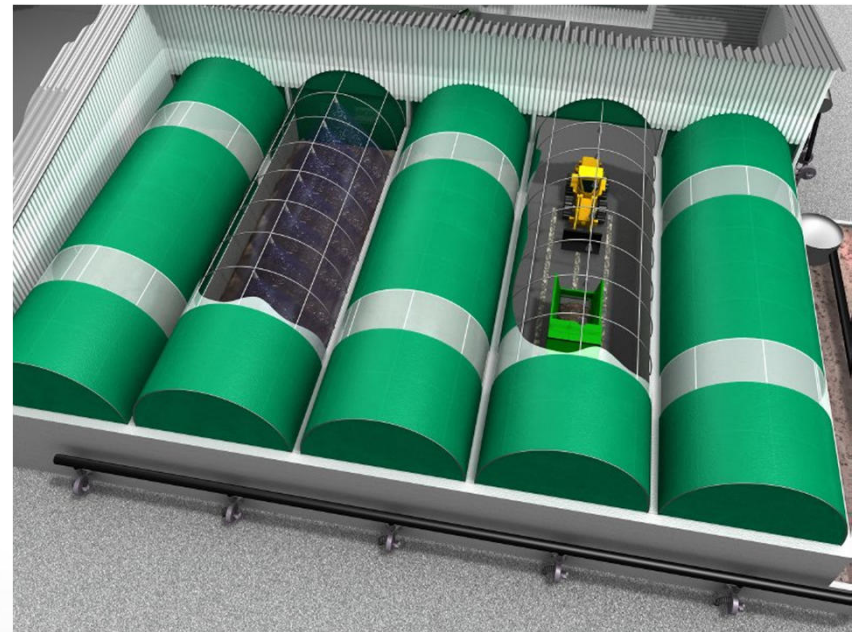
Process is computer-controlled to ensure

- ▶ Aerobic conditions
- ▶ Optimum temperatures
- ▶ High compost quality
- ▶ Reduced emissions ( $\text{CH}_4$ ,  $\text{NH}_3$ ,  $\text{H}_2\text{S}$ , odour)

# **COMPObox** Waste gas treatment



# COMPObox Pictures





# References



Chaumont, France



Jaroszw, Poland



Kryniczno, Poland



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