Scalable Solutions for Waste (Water) Management - small volume systems
Sustainable Planet Solutions

- Canadian/Dutch Company
- Expertise merger of Adverio, Drycake, Orgaworld
- Scalable solutions/Proven technologies/Operational excellence
- Founded in 2015
- Expertises:
  - anaerobic digestion
  - Composting
  - Pre processing, Refining and mixed waste processing
- Services:
  - Design & Build/Design, Build & Operate
  - Consultancy: operations support/spare parts management
Pre Processing

Shredder/Bag Ripper

- SSO
- L&Y waste

Mixer:

- Biosolids
- Food scrap
- IC&I waste
Application of CHP’s i.c.w. Solar and/or Wind energy: Self Sufficient facilities

Anaerobic Digestion
Why Dry Anaerobic Digestion?

Dry AD

Wet AD
In-Vessel Composting

Production of compost product and/or biofuel (based on biosolids)
Why In Vessel Composting?

- No exposure of staff members to contaminated air
- Lowest possible footprint due to spigot aeration system
- Internal recycling of air for higher energy efficiency
- Automated water spraying for moisture control
- Maximum process control
Refining

Drum Screen

Star Screen
Process Chart Biosolids Composting

1. Weighing and registration
2. Unloading / visual inspection
3. Mixing
4. Filling Compost Containers
5. Active composting and Sanitation
6. Maturation
7. Screening/cleaning
8. Ready compost (Pellets)
9. Ready compost (Bulk)

Oversize wood
Process Chart SSO AD and Composting

1. Weighing and registration
2. Unloading / visual inspection
3. Shredding
4. Filling AD Containers
5. AD process
6. Active composting and Sanitation
7. Maturation
8. Screening/cleaning
9. Biogas and/or Electricity
10. Oversize wood

- Ready compost (Pellets)
- Ready compost (Bulk)
Sun Peaks Utilities - example

Biosolids →

Wood chips →

Compost
Surrey Biofuel Facility - example
SBF – Process Chart

SSO waste → **Dry AD Biocel** (SSO bypass) → **Composting** → Compost

**Solid IC&I waste** → **Composting**

**Liquid IC&I waste** → **Wet AD reactor** → **Biogas**
SBF: Odour Abatement

4-stage process:

1. Ammonia removal
2. Air cooling
3. Biofiltration
4. Exhaust via 70 m stack

resulting in

1 OU/m3 at the site property line.

Onsite odour will also be monitored using electronic sensors.
Thank You!

Sustainable Planet Solutions
Den Sliem 13
7141 JE Groenlo, The Netherlands
C. 15196705970
k.hofstra@sustainableplanet.solutions.nl