



## Microalgal Cultivation at Kalundborg Municipal Wastewater Treatment Facility

Van Wagenen, Jonathan; Møller, Per; Holdt, Susan Løvstad; De Francisci, Davide; Angelidaki, Irini

*Publication date:*  
2012

*Document Version*  
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

*Citation (APA):*

Van Wagenen, J., Møller, P., Holdt, S. L., De Francisci, D., & Angelidaki, I. (2012). *Microalgal Cultivation at Kalundborg Municipal Wastewater Treatment Facility*. Poster session presented at Young Algaeneer Symposium, Wageningen, Netherlands.

---

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# Microalgal Cultivation at Kalundborg Municipal Wastewater Treatment Facility



Jon Van Wageningen, Per Moller\*, Susan Løvstad Holdt, Davide De Francisci, Irini Angelidaki

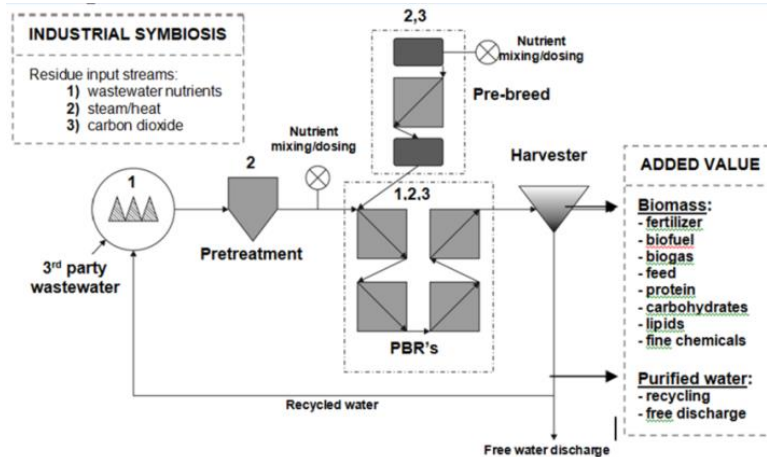
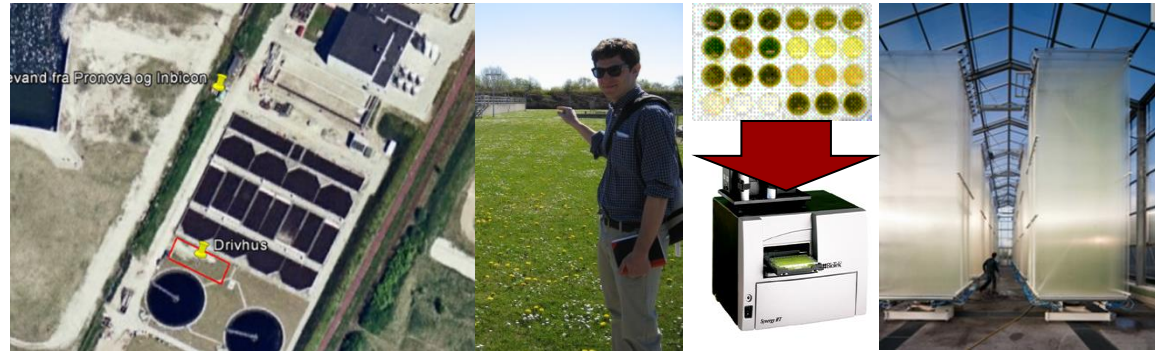
**Corresponding:** jovw@env.dtu.dk  
 Technical University of Denmark,  
 Dept. of Environmental Engineering  
 \*Per.Moller@kalundborg.dk  
 Kalundborg Symbiosis & Cluster  
 Biofuels Denmark

## Solution: Microalgal cultivation for bioremediation and biomass production

**Problem:**  
 Industrial wastewater  
 treatment is energy-  
 intensive and costly



Example : the treatment of fermentation waste requires oxygen compression for ozonation to remove "inert COD" at great cost.



Images (from top left):  
 • A Red box and Jon indicate the cultivation site  
 • Initial screening of various wastes as media is monitored in microwell plates  
 • Modular photobioreactors will be used for scale-up (photo credit Ecoduna)  
 • Treatment and biorefinery schematic.