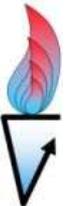


Introduction about EU- FP7 - Valorgas Project

Dr Prasad Kaparaju
University Lecturer



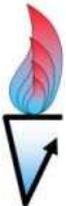
Valorgas Project: Valorisation of Food Waste to Biogas

- Project Number: Grant 241334
- Call (part) identifier: FP7-ENERGY-2009-1
- Funding scheme: Collaborative project
- Duration 1 March 2010 - 31 August 2013

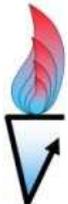
- Coordinator: Dr Sonia Heaven, University of Southampton

- Total budget: € 4.65 million
- EU contribution: € 3.49 million
- Partners: 12 European + 1 Indian

- Deliverables : 31

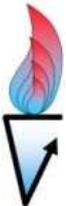


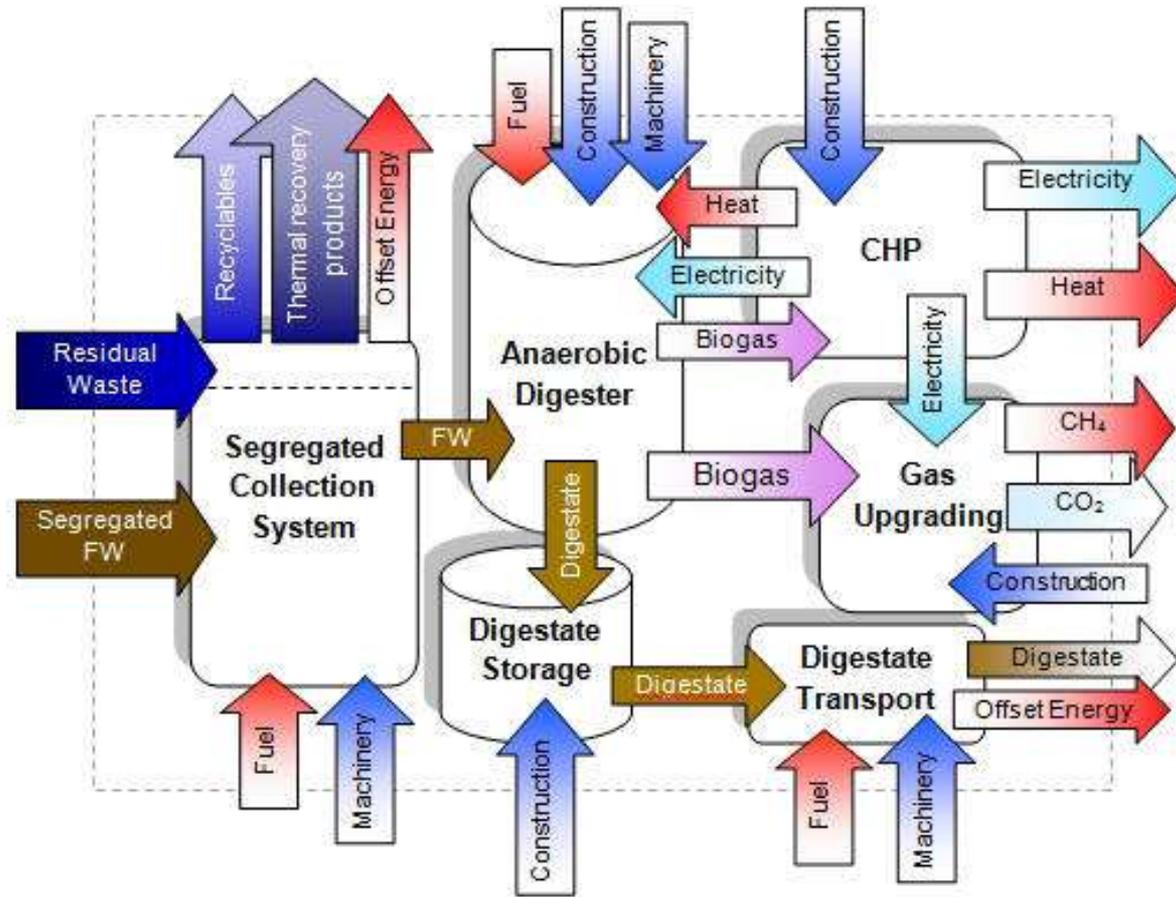
Partners of Valorgas project



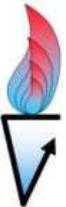
Scope of Valorgas project

- Food waste accounts for 20% of the domestic waste stream in the EU
- Total food waste available in EU : 200 million t/yr, If food wastes from agro- and food industries are included



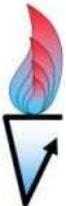


- To explore the energy potential in foodwaste through effective collection, pre-processing and optimisation of the fuel conversion technology
- How integration of these aspects with improvements to conversion efficiencies can maximise the net energy gains.



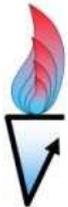
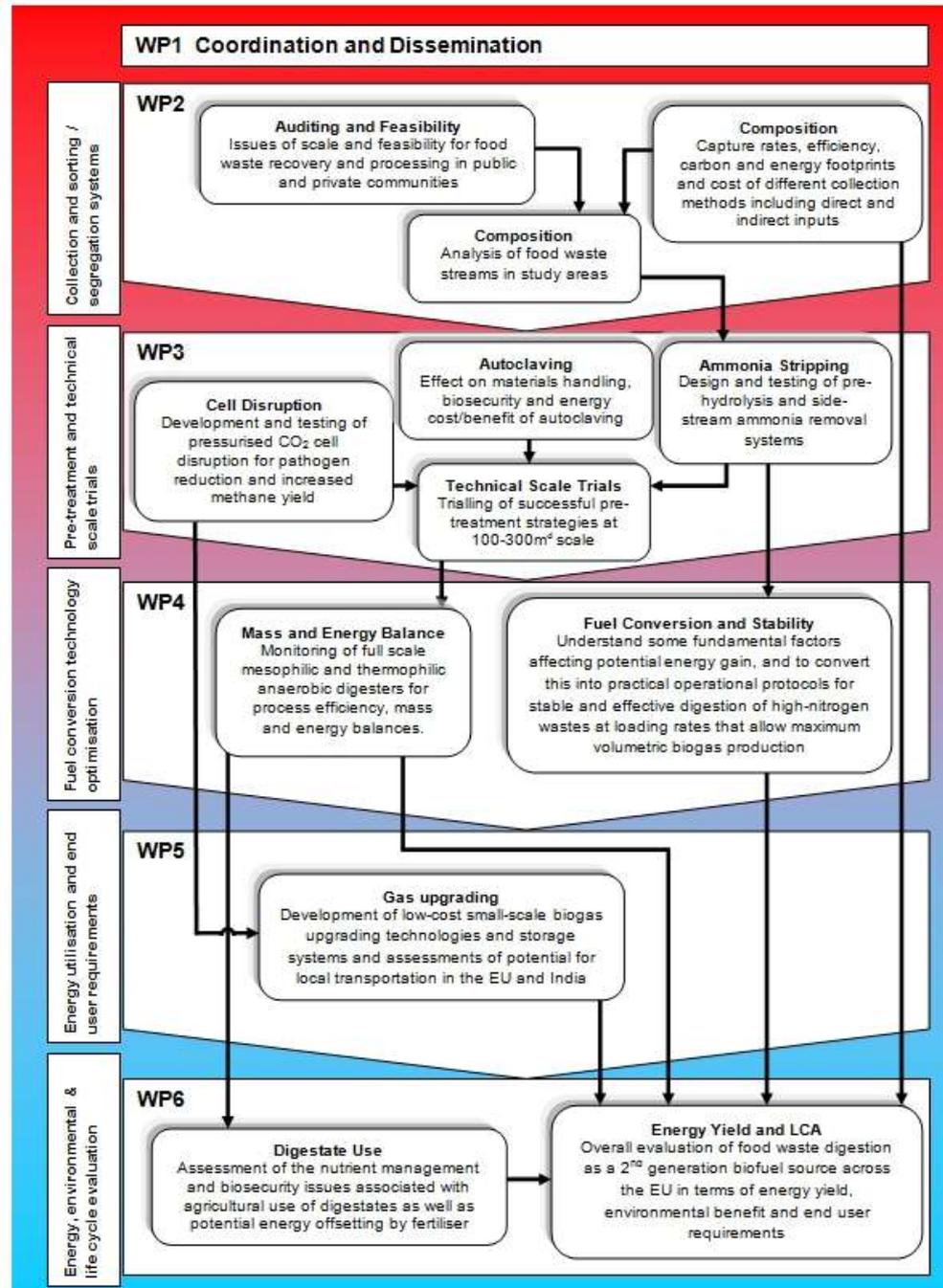
Objectives of Valorgas project

- To evaluate the efficiency and yield of source segregated food waste collection schemes from domestic properties, restaurant and catering facilities, food markets and food manufacture.
- To determine the energy and carbon footprint of the biowaste-to-energy process including collection, transport, treatment and final product use.
- To optimise pre-treatment of the source segregated waste stream for biogas production and biosecurity of the residual product
- To develop low-cost small-scale biogas upgrading technologies and storage systems for application in transportation and local low-pressure distribution systems.
- To estimate the potential for small-scale biogas upgrading in local transportation in the EU and in India.
- To evaluate the potential for food waste digestion as a second generation biofuel source across the EU in terms of energy yield, environmental benefit and end user requirements



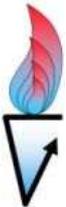
Work Packages

- WP5:
 - Biogas upgrading
- Partners
 - IIT Delhi
 - Metener Ltd (Finland)
 - University of Jyväskylä



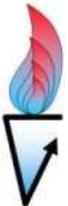
WP 5 Deliverables

- Evaluation of potential technologies and operational scales reflecting market needs for low-cost gas upgrading systems
- Evaluation of existing low-cost gas bottling systems for vehicle use adaptation in developing economies
- Case and feasibility studies of small-scale upgrading applications in Europe and India
- Results of design, construction and testing of low-cost modular biogas upgrading systems
- Potential for pressure-swing cell disruption as a biogas upgrading method
- Evaluation of the role of small-scale biogas upgrading as a means of contributing to local transportation needs in the EU and India



Useful links

- Valorgas project
<http://www.valorgas.soton.ac.uk/index.htm>
- FP 7 Programme:
http://cordis.europa.eu/fp7/home_en.html



VALORGAS

Thank you for your attention

