



## Project Information Sheet

### Food to Waste to Food (F2W2F)

<b>Programme area:</b>	Pilot and market replication projects
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<b>Website:</b>	www.food2waste2food.eu
<b>Benefits (max. 150 characters incl. space):</b>	Improved food waste handling, conversion into nutritious vegetables, independent on fossil fuels and challenging climate conditions, sustainable cycle
<b>Keywords:</b>	Greenhouse biosystem, food waste, crops
<b>Sector:</b>	Water, agriculture
<b>Type of solution</b>	Process, technology
<b>Duration:</b>	01/08/2012 – 01/08/2015
<b>Budget:</b>	€ 1.637.000 (EU contribution: 50%)
<b>Contract number:</b>	ECO/11/304388

#### Summary

The project demonstrates a closed cycle organic waste to food system, which is the integration of food waste treatment, biogas digestion, growing crops with the digester residue and a new sustainable greenhouse technology, applicable to any community or geographic area. This is performed by commercial and university partners from Norway, Netherlands and Poland, representing the waste, greenhouse and agricultural sectors. A pilot is operating in Drammen, Norway. In Poznan, Poland, one is currently under construction (2014). Two larger ones, one in Norway and one in the Netherlands, are due in 2015.

The challenge: Food production must increase, while natural soil and resource utilisation must not. This must be achieved in an unpredictable climate, often in an urban setting. At the same time there are increasing problems related to waste and greenhouse gas emissions.

Our solution: The integrated F2W2F system. It can be seen as a box: into the box go food and green waste, water and labour, out from the box go mushroom and vegetable crops, biogas or biomethane, and fertilisers for surrounding fields. No dependence on fossil fuels, peat, additives, fertilizers or pesticides. Water usage is minimal due to the closed intelligent bubble greenhouse technology.

#### Expected and/or achieved results

- F2W2F works!
- Replication in different geographic areas
- Stimulate new food waste source separation initiatives in communities, hotel areas etc
- Greatly reduce greenhouse gas emissions from waste and food production
- Increased crop output and reduced water consumption per production area