

1. Total Synergy



European Research Council
Synergy Grant 2012 Call

2. OILECO



NATT, National Association for the Transfer of Technologies

Total Synergy

Synergetic Production Complexes for
Sustainable Rural Development

NATT

Growth through synergies...

Synergies...



Synergy...

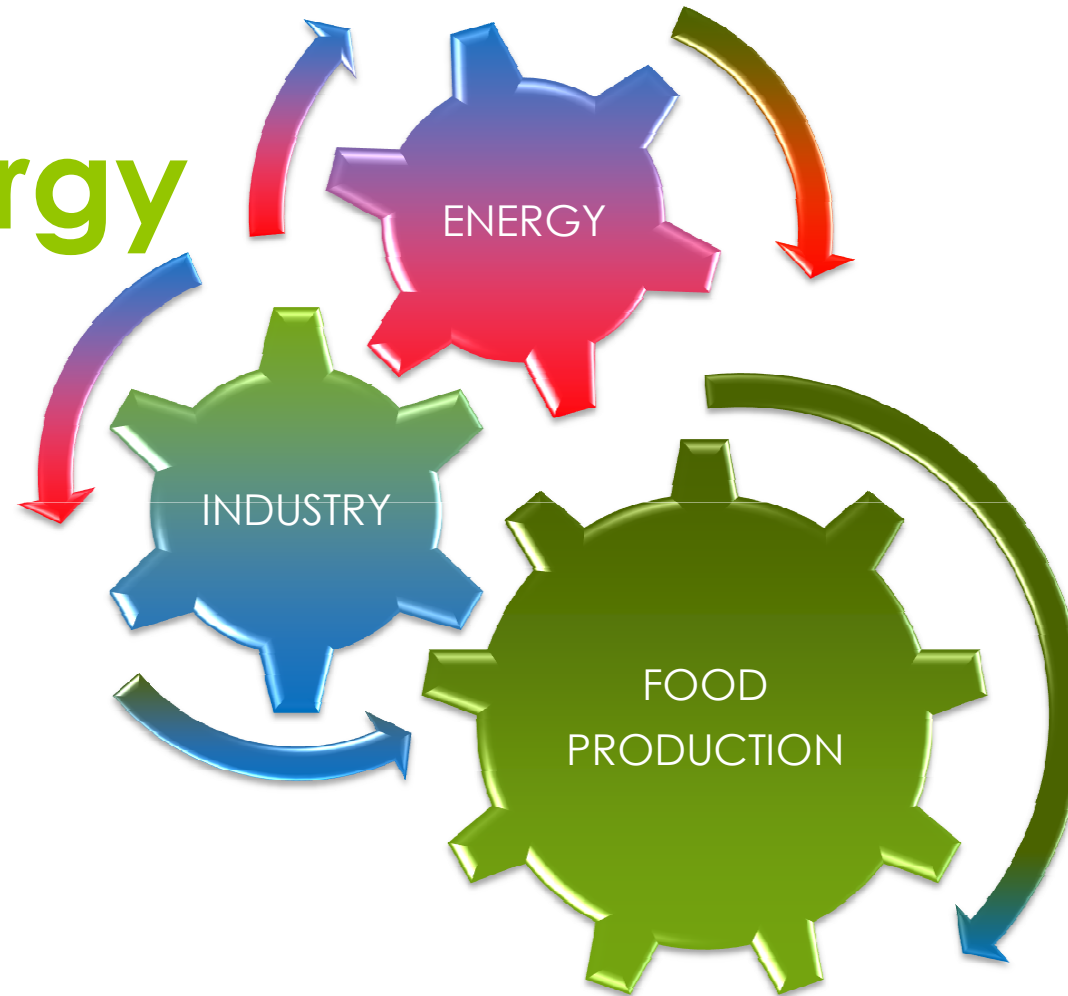
$$1 + 1 + 1 + 1 = \cancel{4} 6$$

Synergy is the ability of a group to outperform even its best individual member...

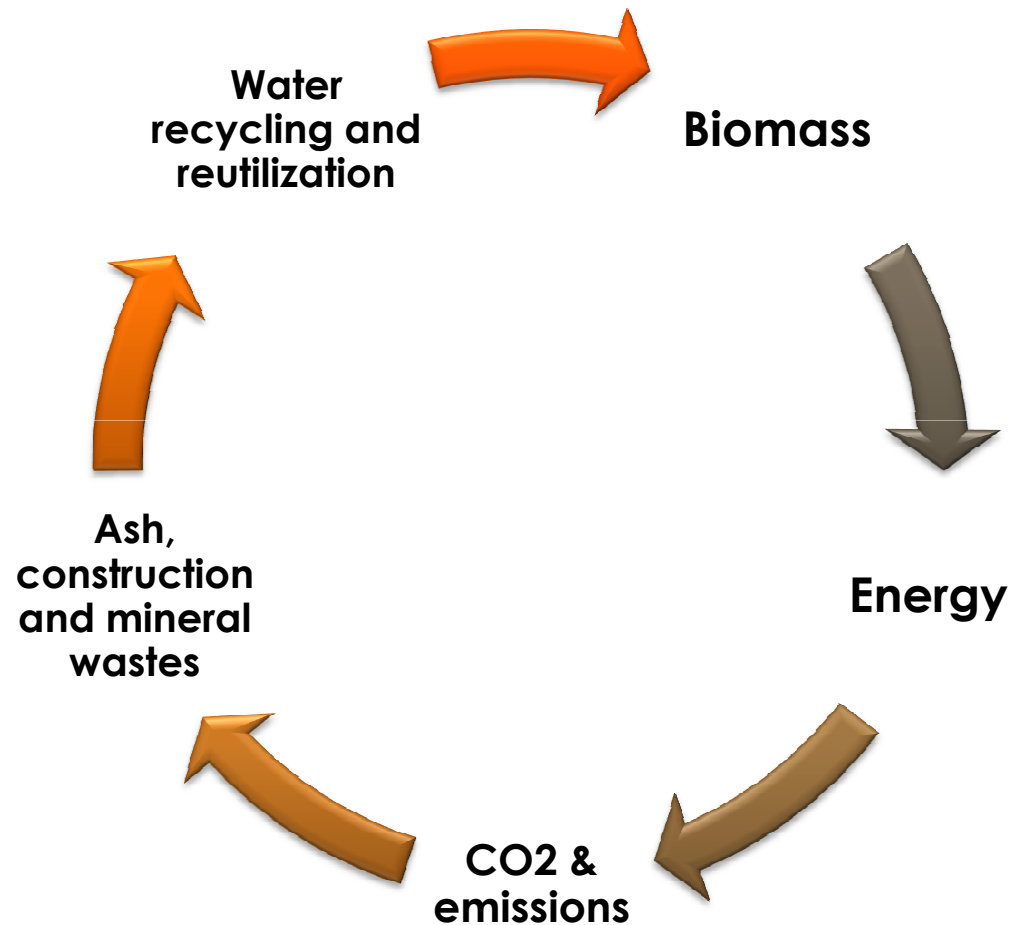
NATT

Growth through synergies...

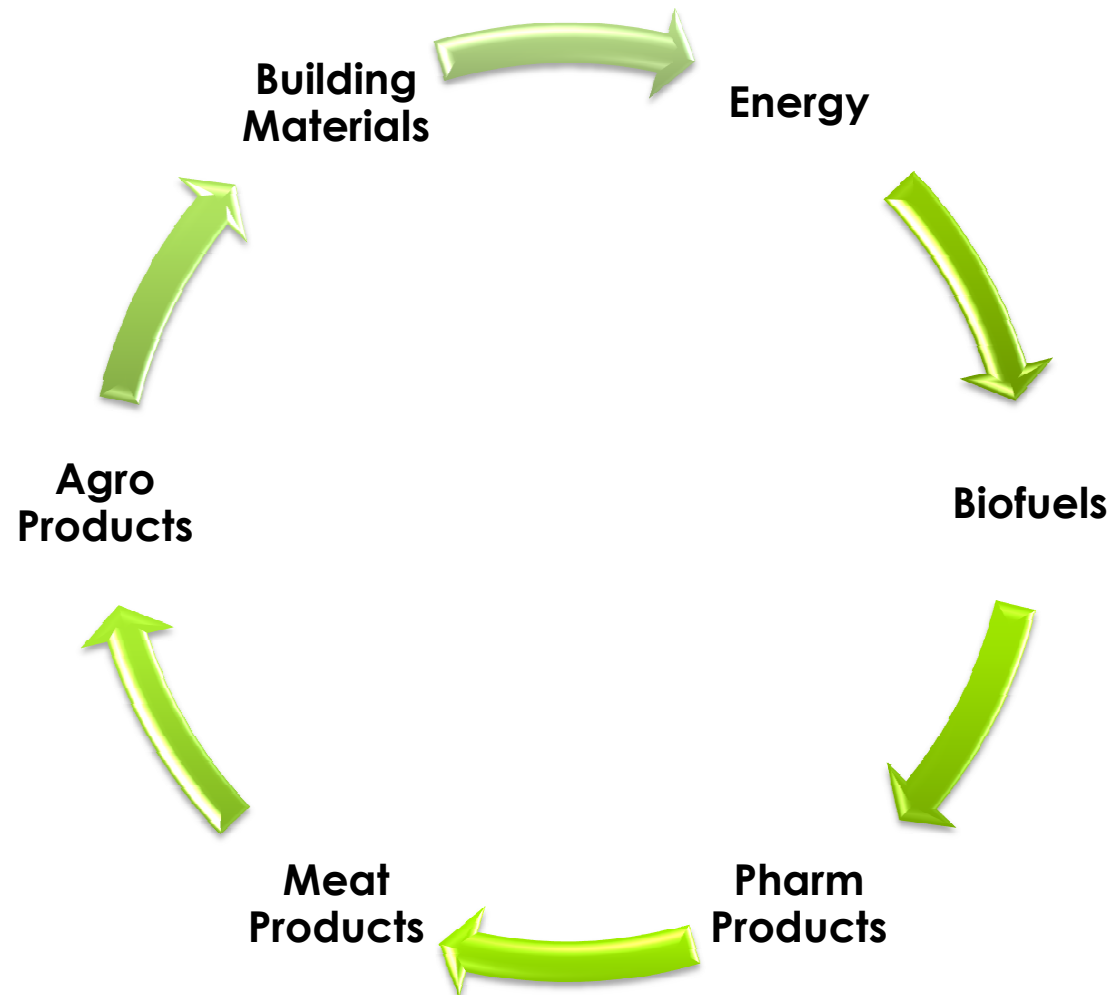
Total Synergy



Full cycle resource utilization



Full cycle resource production



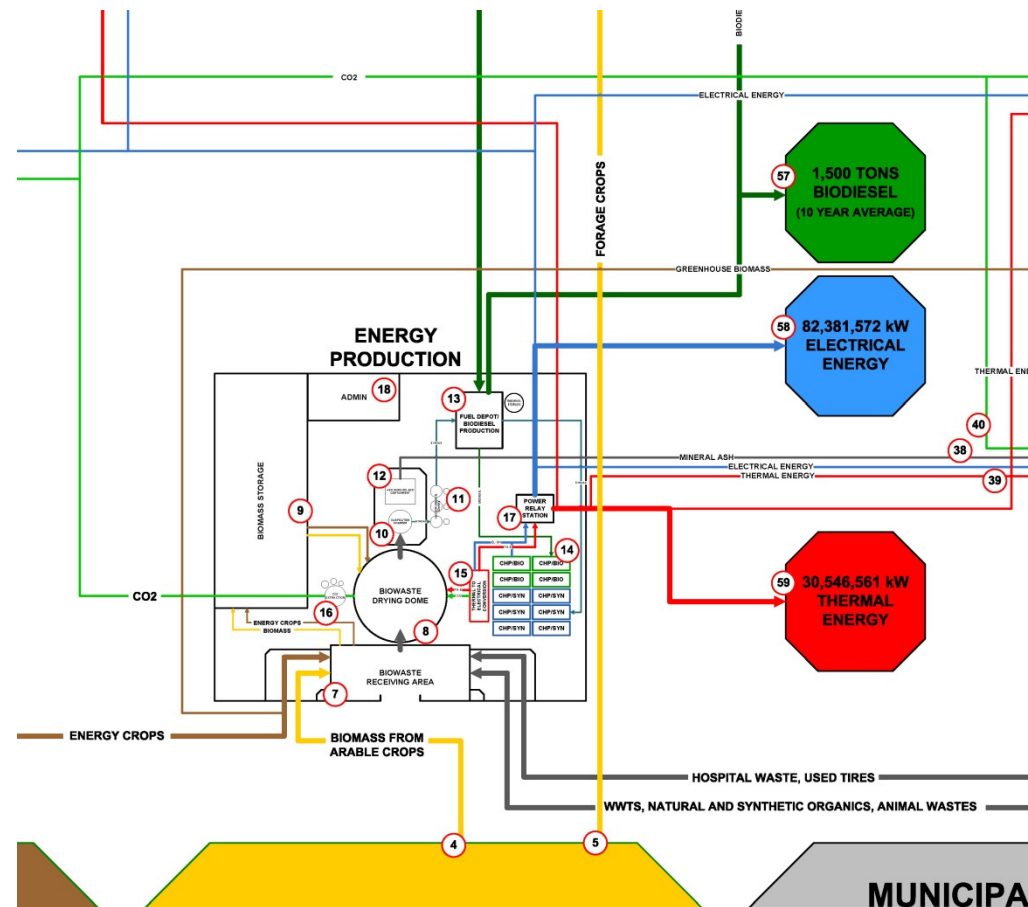
NATT

Growth through synergies...

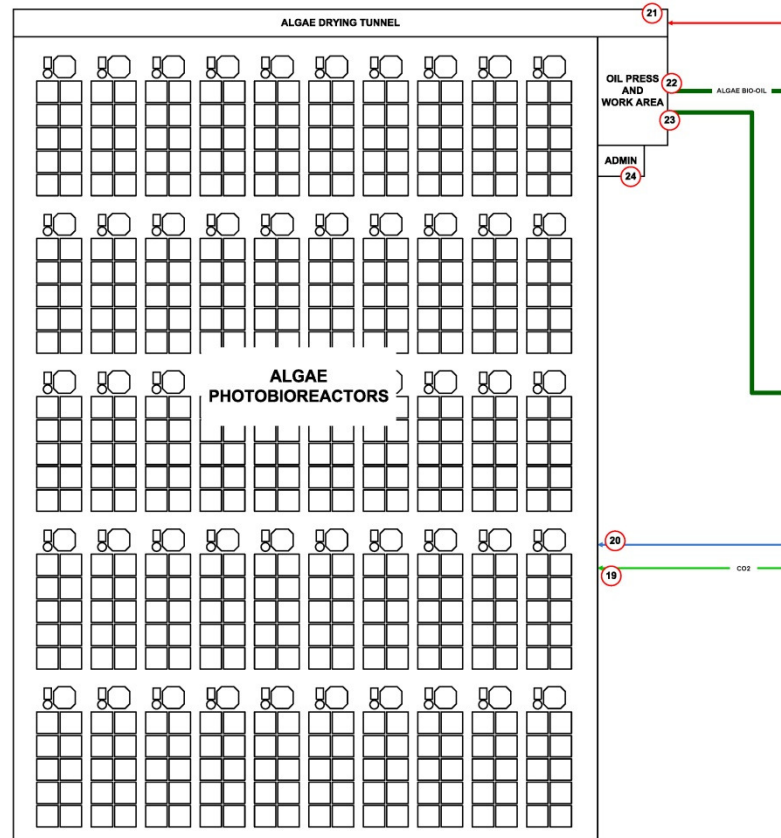
Total Synergy

The diagram illustrates the production of biochar and bio-oil from various feedstocks. The feedstocks are categorized into three main groups: Energy Crops (brown), Biomass from Forage Crops (yellow), and Municipal Waste; Water Treatment Solids, MSW, Animal Wastes, Hospital Wastes, Used Automobile Tires (grey). These feedstocks are processed in a central unit. The resulting products are Biochar (brown), Bio-oil (yellow), and Gas (grey). The biochar is used for energy crops, and the bio-oil is used for biomass from forage crops. The gas is used for hospital waste, used tires, and WWTS, natural and synthetic organics, animal wastes.

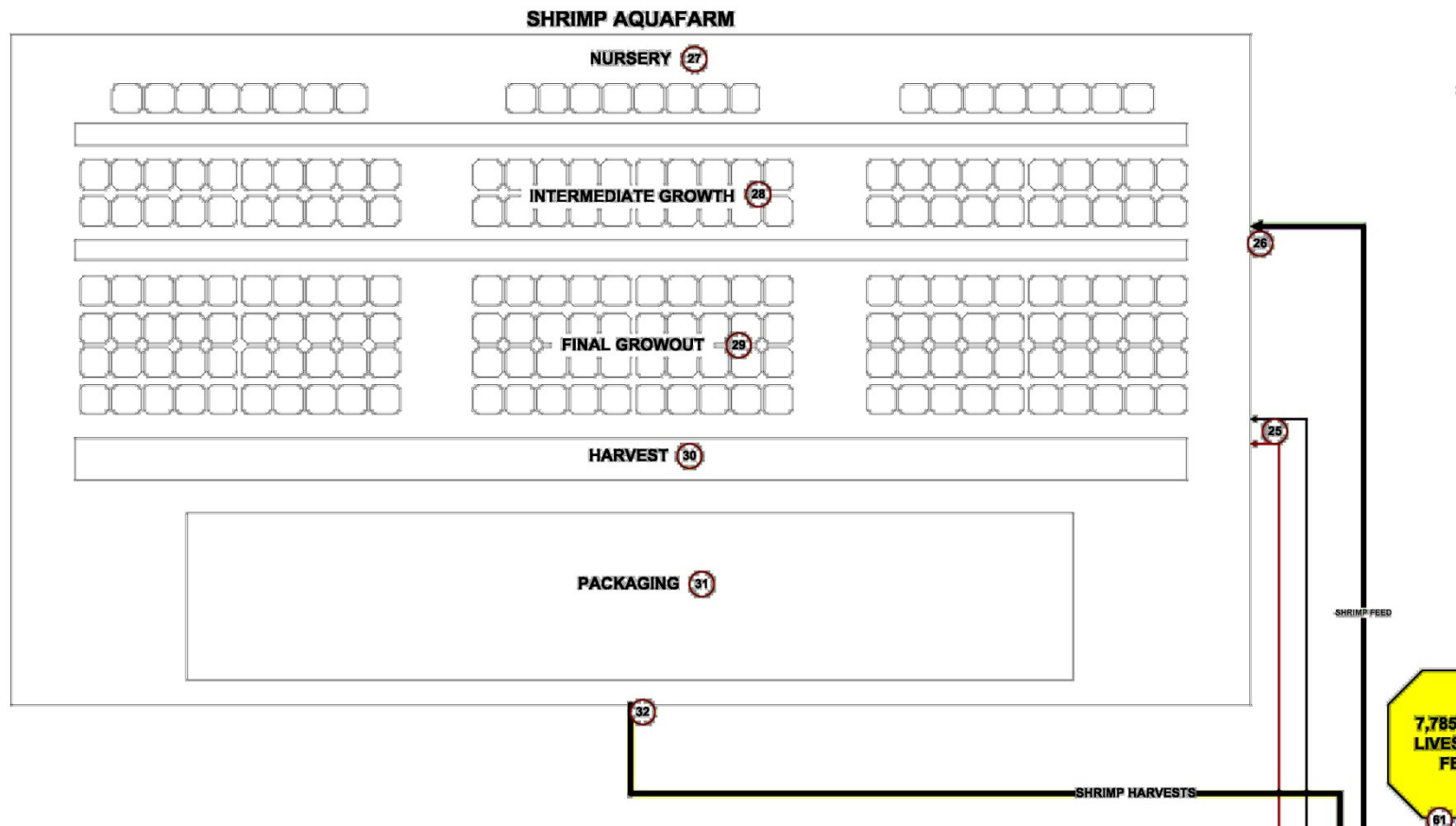
Energy from biomass



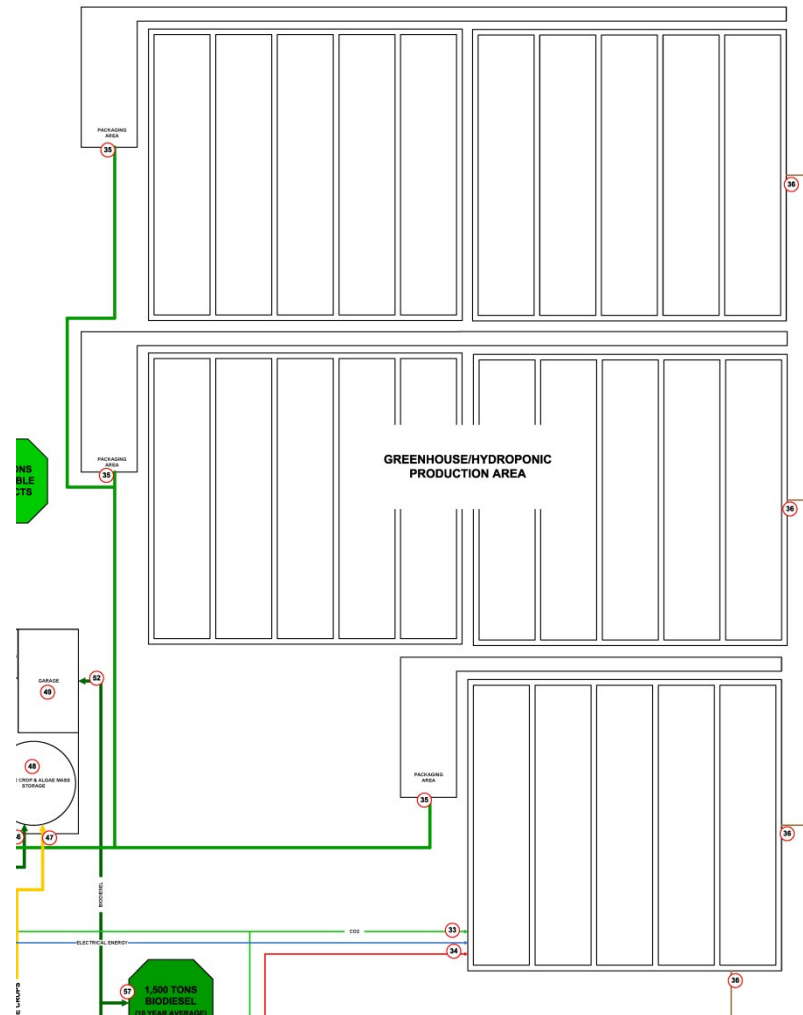
Algae for food, fuel and life



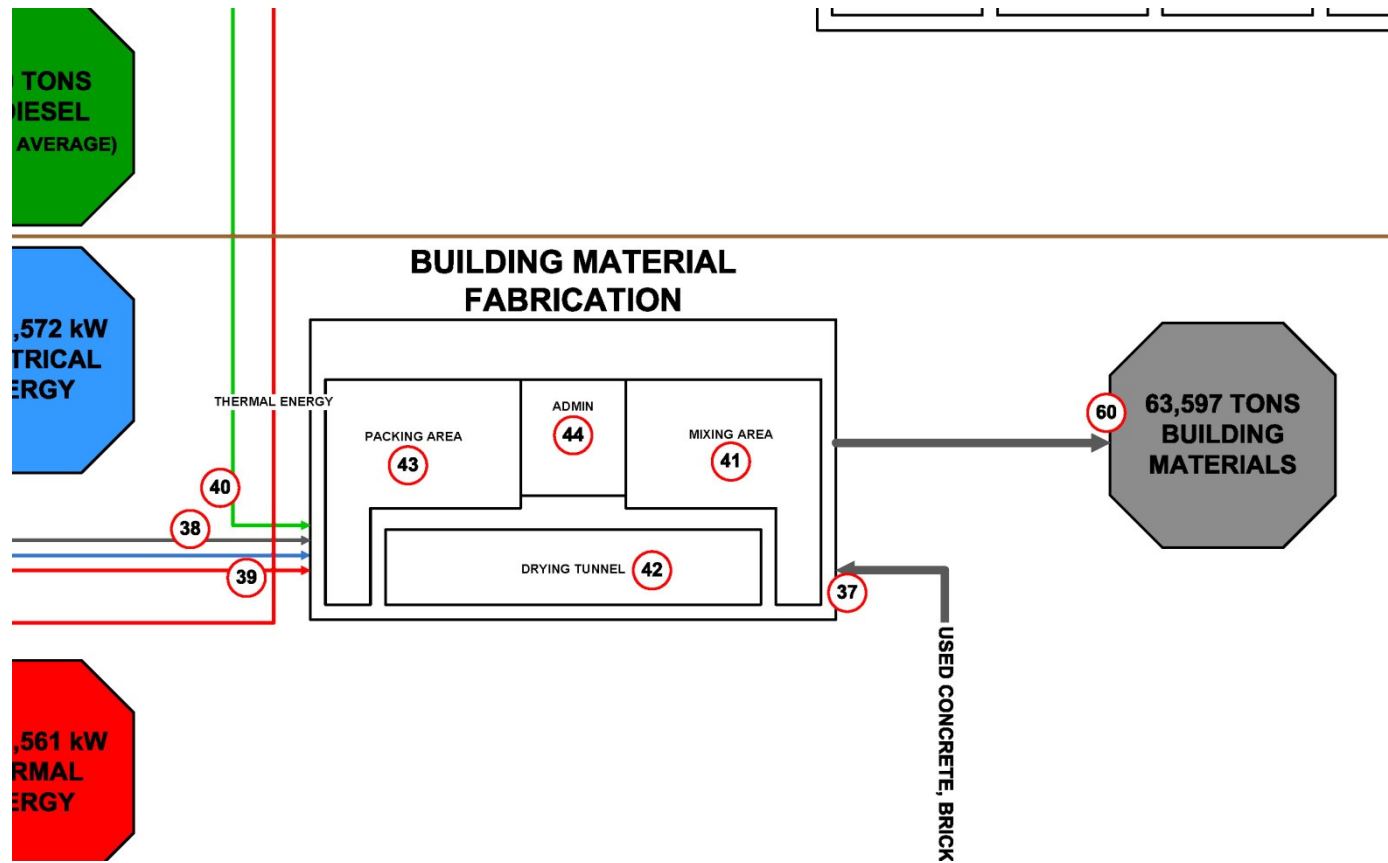
Aquacultures



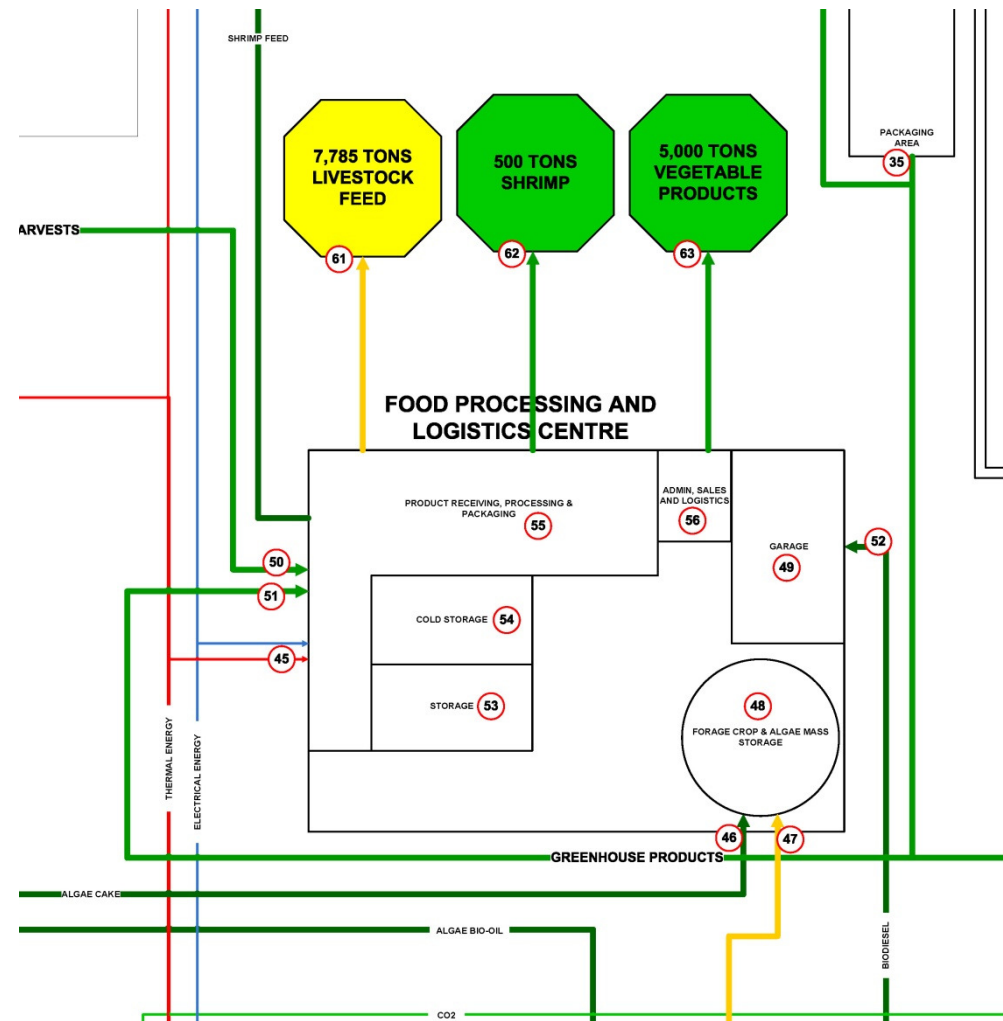
Greenhouse / hydroponics



Building materials



Processing /storage / logistics



ERC - Synergy 2010

- Currently negotiating with CRES and CERTH from Greece
- Need 2 to 4 top Principle Investigators (PIs)
 - Multidisciplined
 - Of the largest in the EU and Associated Countries
- Max 6-year €15 million project

NATT

Growth through synergies...

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Fostering Public-Private Partnerships for local **bio**-business value chains of **used cooking oils**

OILECO

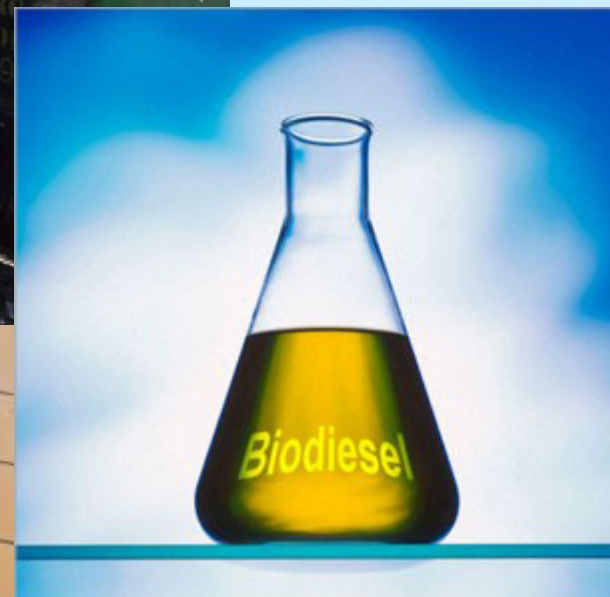
UCO's for Biofuels

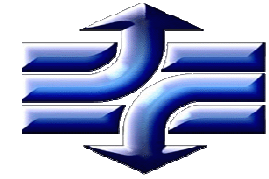
Mr. MarkAnthony Chesner
Project Director

NATT, National Association for the Transfer of Technologies
Sofia, Oct. 10th 2012

Fostering Public-Private Partnerships for local **bio**-business value chains of **used cooking oils**

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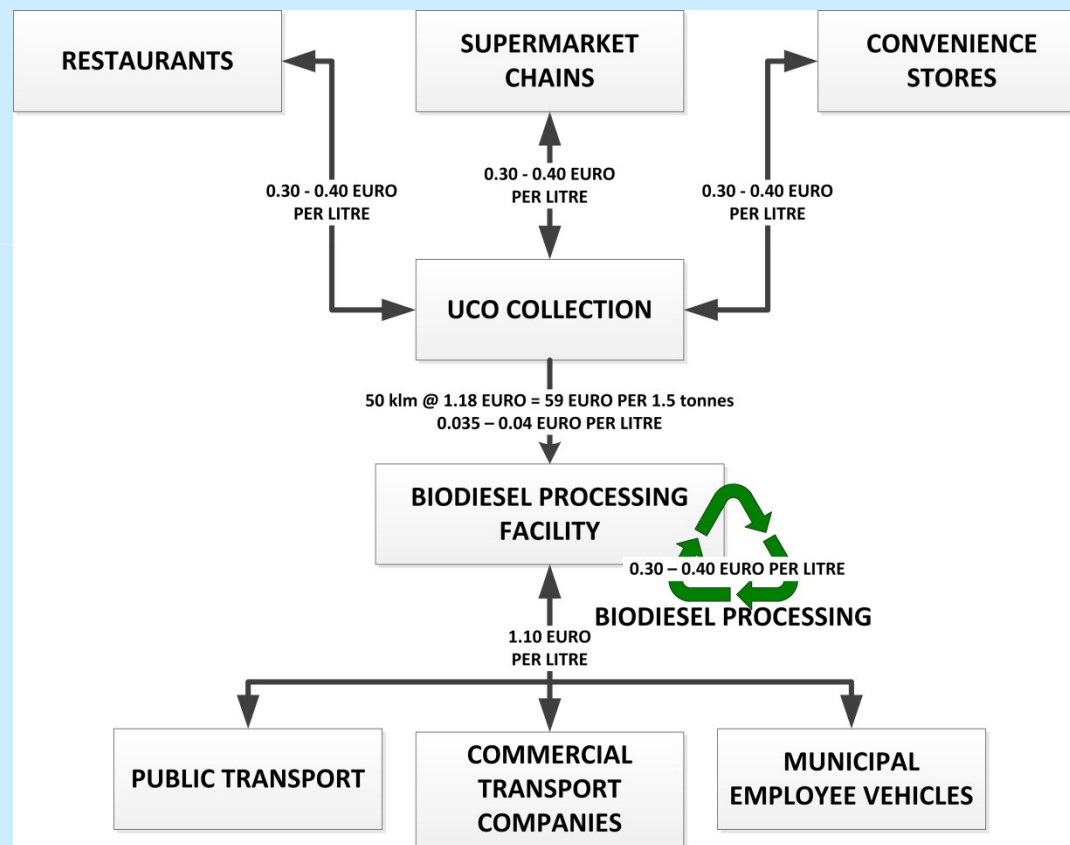
Fostering Public-Private Partnerships for local **bio**-business value chains of **used cooking oils**

OILECO - Major outputs and Results

- A minimum of seven UCO value chains, established ex novo and functional in the energy sector (UCO-based fuels used in distributed h&p generations, and, to a lesser extent, in adapted large vehicles);
- A minimum of seven model participatory itineraries allowing establishment of PPPs valorising UCOs in the energy sector;
- Legal, regulatory, administrative requisites for maximizing UCOs interception;
- Options for minimizing the transport component in the interception and collection of UCOs, especially those from households;
- Communication- and trade options preventing UCO consignments against payments;
- Procedures/criteria for calculating maintenance costs caused by UCOs to waste-water systems.

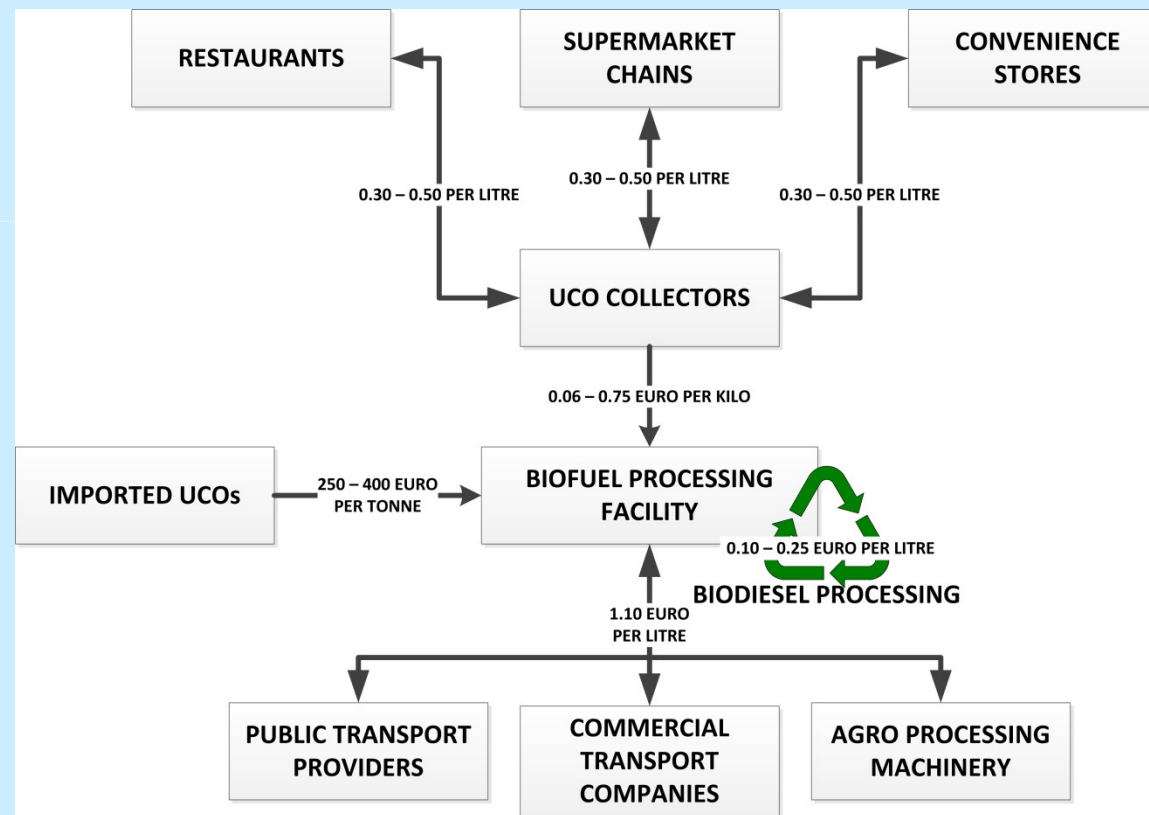
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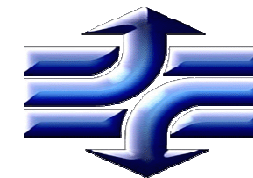
OILECO - Plovdiv Region



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OILECO – Varna Region

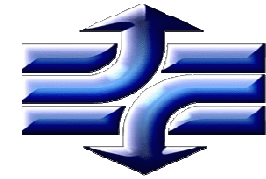




Fostering Public-Private Partnerships for local **bio**-business value chains of **used cooking oils**

OILECO Partners

Partic N°	Participant name	Participant short name	Country code	Main activities in Consortium
CO 1	European Consulting Brussels	ECBrussels	BE	Coordinator, project management, facilitation of Belgian initiatives, dissemination.
CB 2	AGROILS	AGROILS	IT	Support and Analysis of initiatives related to the development of biodiesel production plants
CB 3	Ecosoluzioni	Ecosoluzioni	IT	Development of methodology, analysis and facilitation of Italian initiatives, dissemination
CB 4	National Association for the Transfer of Technologies	NATT	BG	Analysis and facilitation of Bulgarian initiatives
CB 5	Bay Zoltan Foundation	BZAKA	HU	Analysis and facilitation of Hungarian initiatives
CB 6	Regional Energy Agency of Madrid	FENERCOM	ES	Analysis and facilitation of Spanish initiatives, dissemination
CB 7	AWV	AWV	AT	Support and analysis on the UCO from collection through final fuel use
CB 8	Biodiesel Technology	BDT	SK	Support and analysis for the biodiesel equipment in Europe



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OILECO - Contact

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