



Vlaanderen
is energie



SAMEN MAKEN WE
MORGEN MOOIER
OVAM



EFRO
EUROPEES FONDS
VOOR REGIONALE
ONTWIKKELING



Europese Unie



Intercommunale
Ontwikkelingsmaatschappij
voor de Kempen

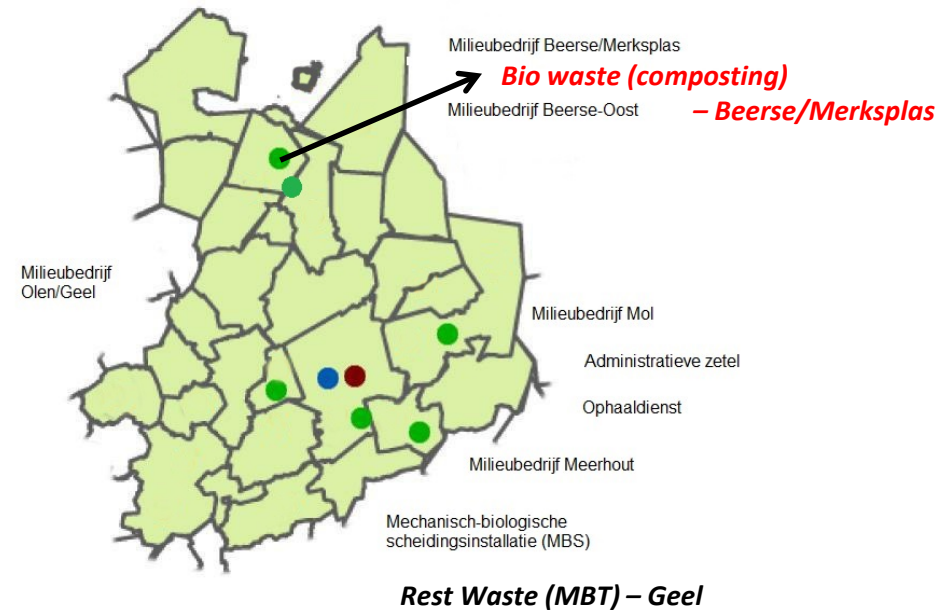
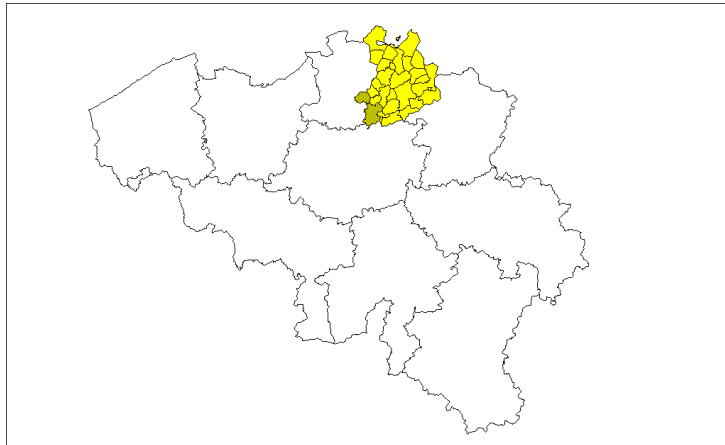
Turning Municipal Waste into Green Gas

Jonathan De Witte
IOK Afvalbeheer

Eerste installatie afvalbewerking tot
groen gas in België



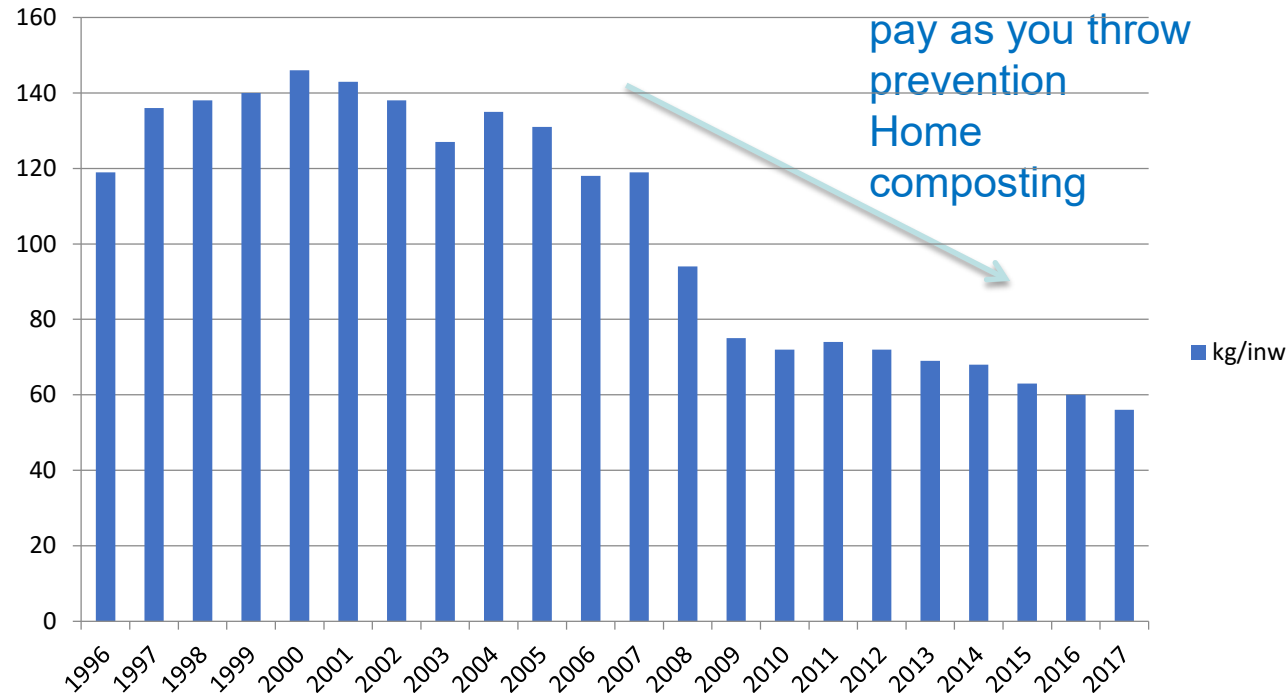
IOK Afvalbeheer



Intermunicipality

Waste management for 520.000 inhabitants (29 cities), rural area
Complete services (prevention, collection and waste treatment,...)

Collection of bio waste (1)



30.000 ton/yr
56 kg/inh

Door-to-door collection of 'bio waste' in bins:
kitchen and garden waste of households



Collection of organic waste (2)



28 recycling stations – collection of ‘organic waste’:
garden waste of households

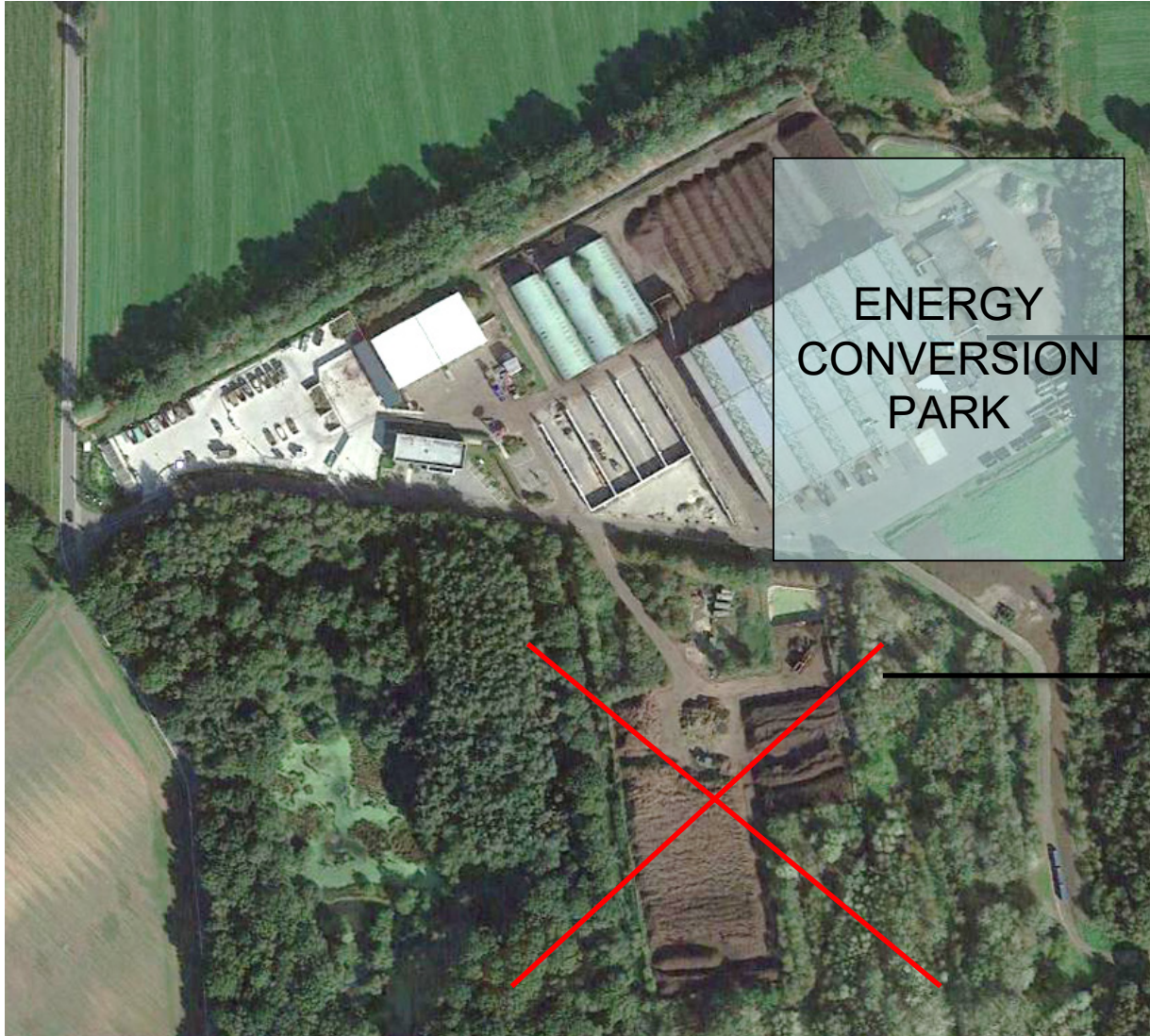
33.000 ton/yr
63 kg/inh



Case Study in 'ECP' – INTERREG (2012)

www.ecp-biomass.eu

Energy Conversion Park

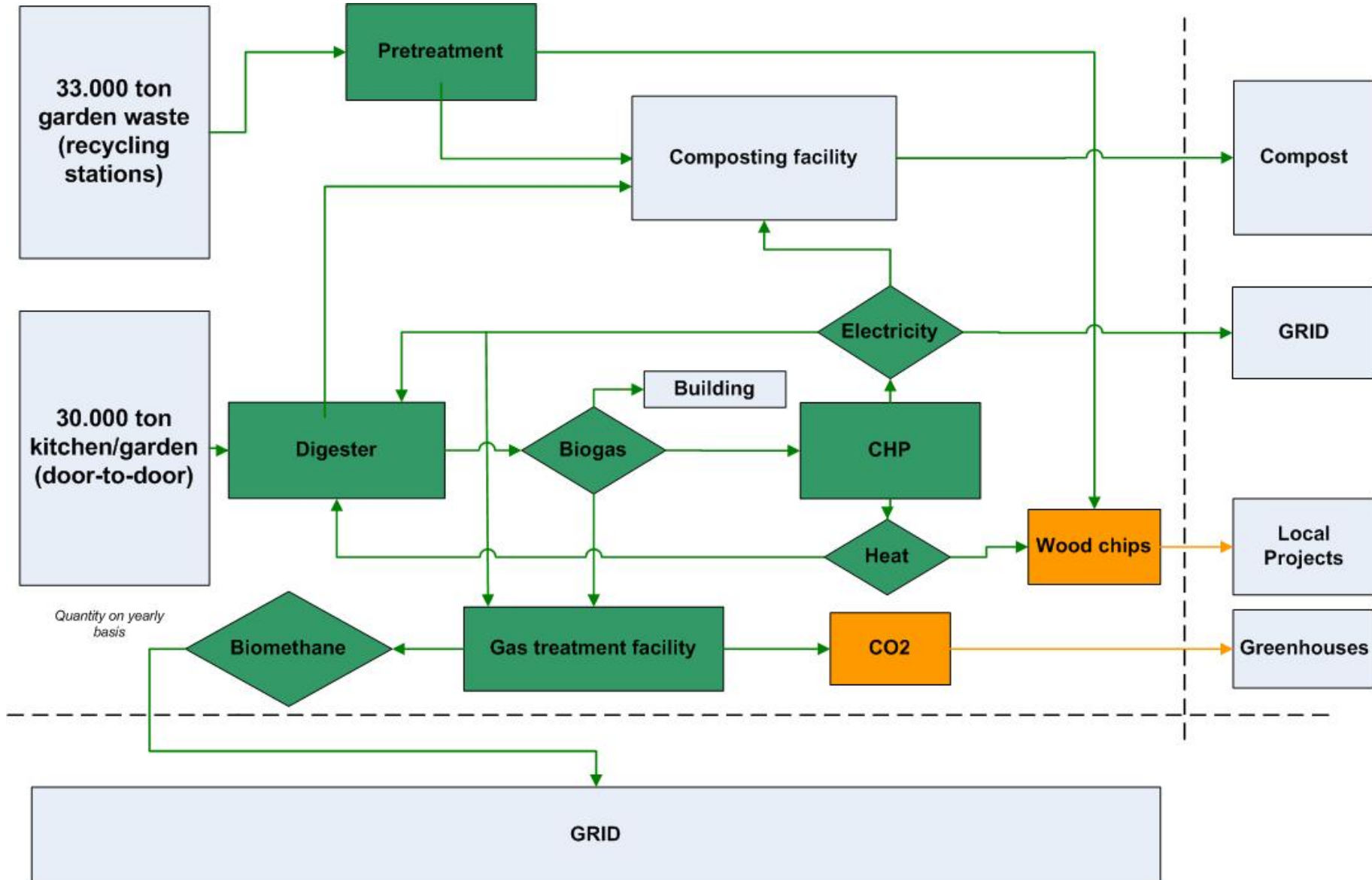


Indoor composting
facility (60.000 t/yr)



Outdoor composting
facility (15.000 t/yr)









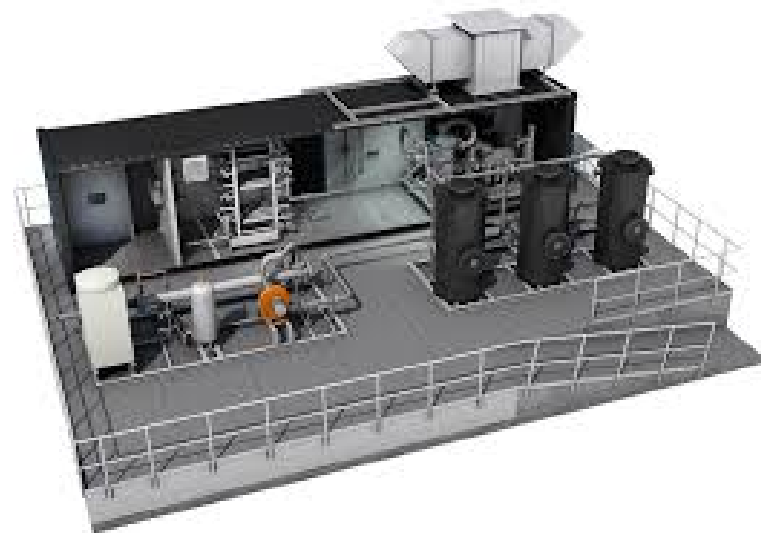


Biomethane/green gas

Focus on production of biomethane → *a flexible way of making transportable energy that can be used where necessary.*

25 – 50% of biogas is upgraded to biomethane and injected in the grid (max. 1.000.000 m³/yr – eq. 500 households/yr).

Using a membrane unit the CH₄ content is upgraded to max. 95% by removing CO₂ and injected in the grid







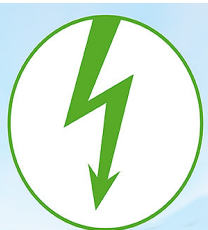
Biomethane/green gas - usage

Partnership with the city of Merksplas:

an equivalent volume of green gas is taken of the grid used in a CHP to provide heat and electricity for a unique site that contains 15 historical buildings and a prison.



Biomethane and more !!



5,9 GWh/yr: local consumption/injection



6,5 GWh/yr: local consumption digester
+ project for preparation of local biomass



554 – 1108 t/yr direct capture of CO2
used in local greenhouse



25.000 t/yr compost (organic –
improvement of soil – CO2-sink)