

**ECN/ORBIT e.V. Workshop 2008 „The future for Anaerobic Digestion of Organic Waste in Europe“
 Pres. Nr. 27 „Contribution of cost effective anaerobic digestion to sustainable biowaste management and climate protection in The Netherlands“ – W. Elsinga**

Source separation of municipal biowaste =
‘cradle to cradle’

WASTE = FOOD

Contribution of cost effective anaerobic digestion to sustainable biowaste management and climate protection in The Netherlands

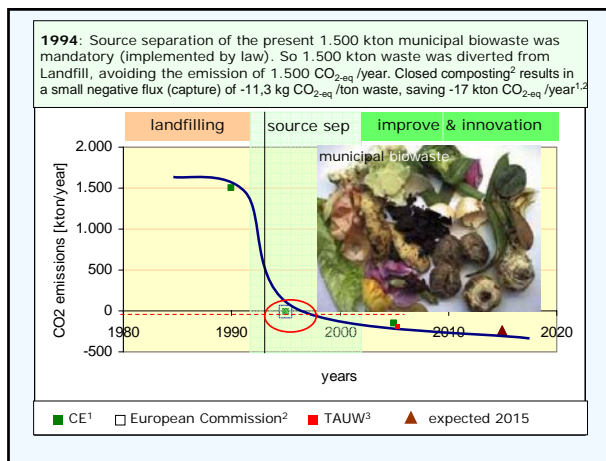
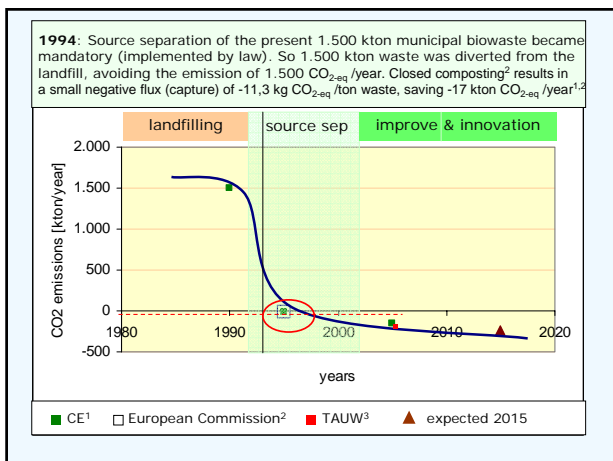
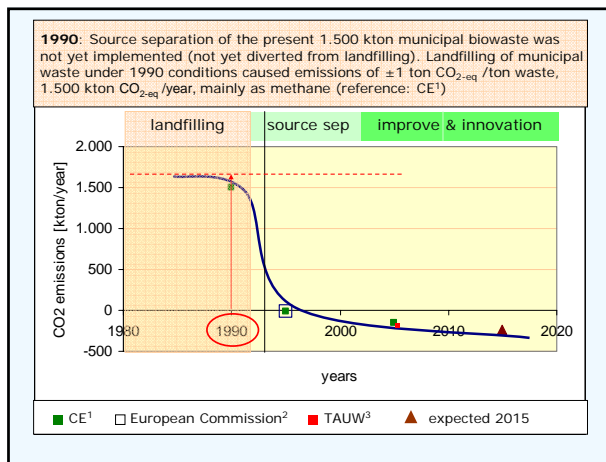
1. Development of environmental performance municipal biowaste
2. Cost structure and required fee for electricity (including SDE)
3. Project portfolio and projected development in The Netherlands

Ing. Willem Elsinga MBA
 w.elsinga@policyplanning.eu
 www.policyplanning.eu

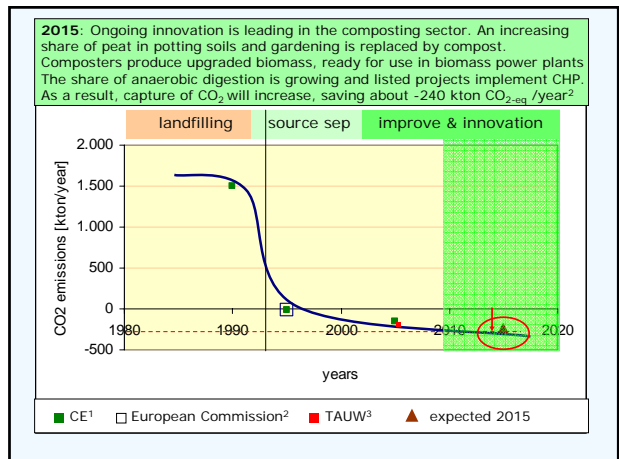
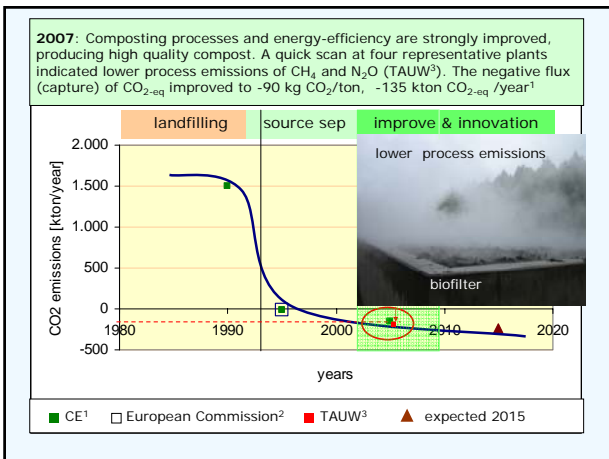
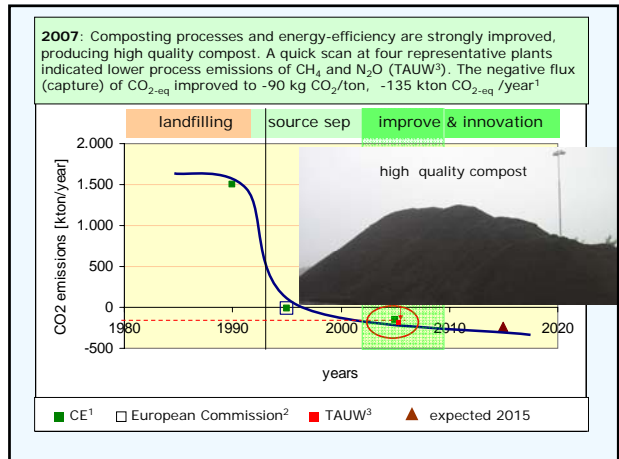
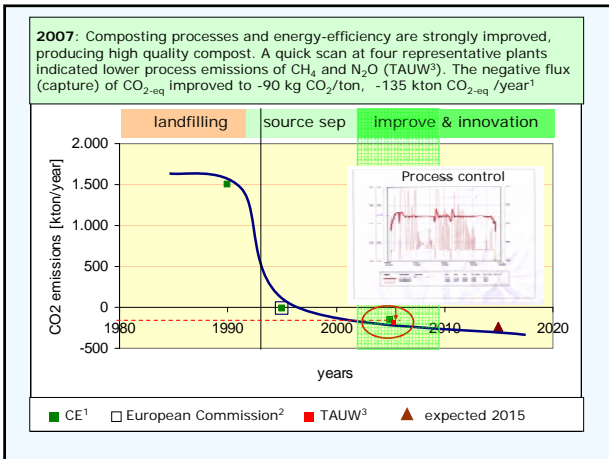
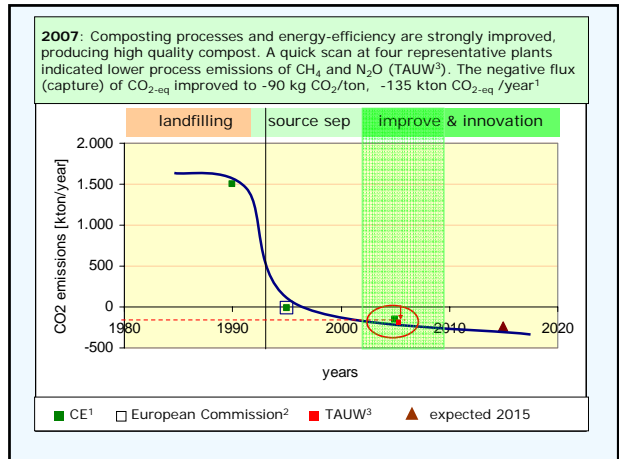
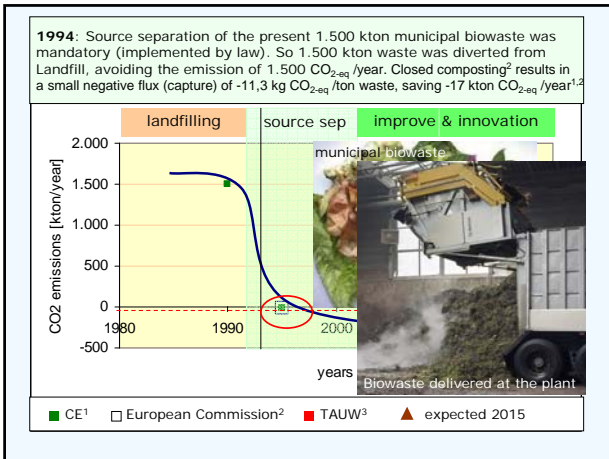
Contribution of cost effective anaerobic digestion to sustainable biowaste management and climate protection in The Netherlands

1. Development of environmental performance municipal biowaste
2. Cost structure and required fee for electricity (including SDE)
3. Project portfolio and projected development in The Netherlands

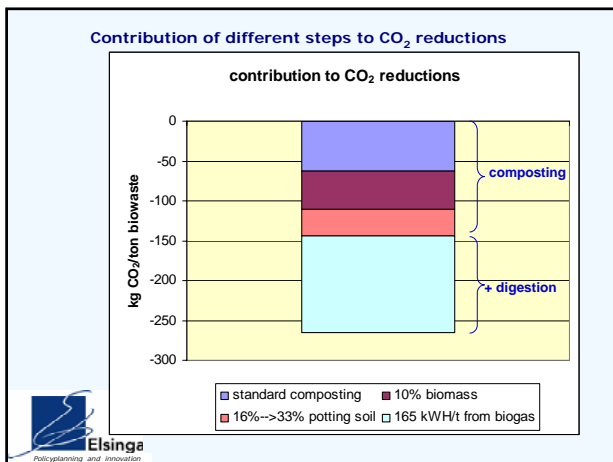
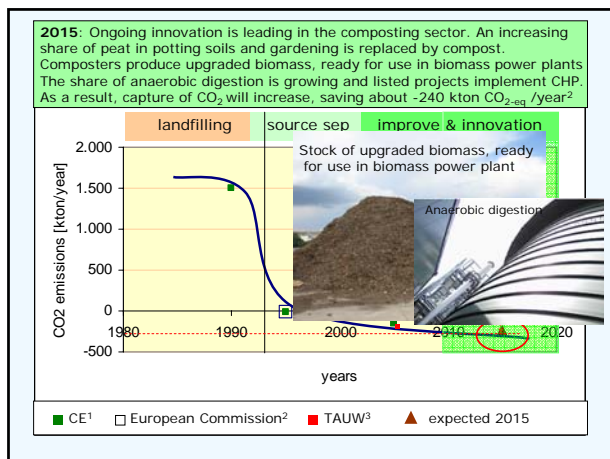
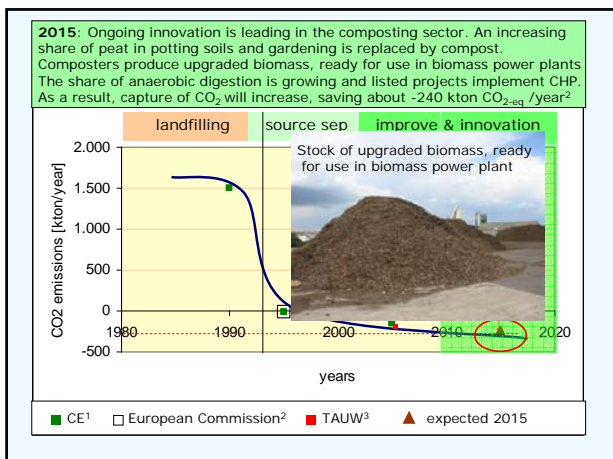
Ing. Willem Elsinga MBA
 w.elsinga@policyplanning.eu
 www.policyplanning.eu



**ECN/ORBIT e.V. Workshop 2008 „The future for Anaerobic Digestion of Organic Waste in Europe“
 Pres. Nr. 27 „Contribution of cost effective anaerobic digestion to sustainable biowaste
 management and climate protection in The Netherlands“ – W. Elsinga**



**ECN/ORBIT e.V. Workshop 2008 „The future for Anaerobic Digestion of Organic Waste in Europe“
 Pres. Nr. 27 „Contribution of cost effective anaerobic digestion to sustainable biowaste management and climate protection in The Netherlands“ – W. Elsinga**



- Contribution of cost effective anaerobic digestion to sustainable biowaste management and climate protection in The Netherlands**
1. Development of environmental performance municipal biowaste
 2. Cost structure and required fee for electricity (including SDE)
 3. Project portfolio and projected development in The Netherlands

	30 kton/year		50 kton/year	
	Comp VAR	+Kompogas	Comp tunnel	+Biocel
investment	€ 4.250.000	€ 7.405.000	€ 7.593.600	€ 12.831.150
capital cost	€ 542.500	€ 852.483	€ 736.478	€ 1.271.391
€/ton	€ 18	€ 28	€ 14,73	€ 25,43
running cost	€ 470.551	€ 921.776	€ 1.233.000	€ 1.409.000
€/ton	€ 16	€ 31	€ 24,66	€ 28,18
Gate fees	€ 1.200.000	€ 1.200.000	€ 2.000.000	€ 2.000.000
KWh/ton		175		115
results	€ 222.949	-€ 538.259	€ 30.523	-€ 680.391
Sales electr € 55/MWh		€ 288.200		€ 317.167
results		-€ 250.059		-€ 363.222
Sales el + SDE € 140/MWh		€ 733.600		€ 807.333
results		€ 195.341		€ 126.942

- Contribution of cost effective anaerobic digestion to sustainable biowaste management and climate protection in The Netherlands**
1. Development of environmental performance municipal biowaste
 2. Cost structure and required fee for electricity (including SDE)
 3. Project portfolio and projected development in The Netherlands

**ECN/ORBIT e.V. Workshop 2008 „The future for Anaerobic Digestion of Organic Waste in Europe“
 Pres. Nr. 27 „Contribution of cost effective anaerobic digestion to sustainable biowaste
 management and climate protection in The Netherlands“ – W. Elsinga**

