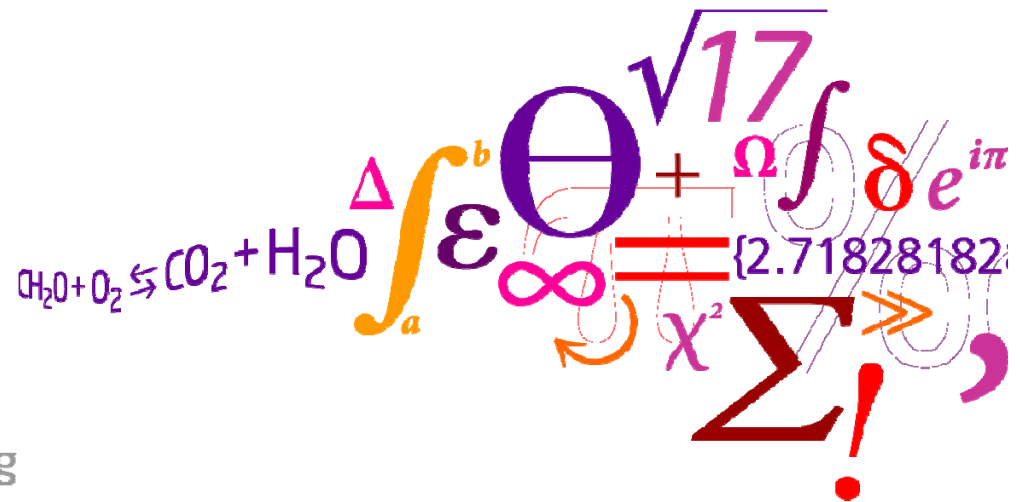


CEESA meeting

January 25, 2010, Aalborg

Thomas Astrup



Waste resources

	Fraction	LHV (GJ/tonne)	1000 Tonnes	Fossil CO ₂ (kg/GJ)	Storage	Biogas	Incineration	Gasification
Organic waste	10%	4.5	348	0.4	No	Yes	Yes	No
SRF	30%	16.5	1043	37	Yes	No	Yes	Yes
Mixed materials	60%	8.5	2085	34	No	No	Yes	No
Total	100%	10.5	3475	32				

Data based on simplified assumptions about material distribution, calorific values, quantities, etc. Total waste quantities are assumed equal to what is today incinerated.

Waste resources - BAU

BAU (PJ)	2005	2010	2020	2030	2040	2050
<i>Annual increase</i>		<i>0.02</i>	<i>0.02</i>	<i>0.01</i>	<i>0</i>	<i>0</i>
Organic waste	1.6	1.7	1.9	2.0	2.0	2.0
SRF	17	19	21	22	22	22
Mixed materials	18	20	22	23	23	23
Total	36	40	44	47	47	47

"Realistic" scenario, considering likely trends within immediate future and possible increased recycling within longer term future

Waste resources - HIGH

BAU (PJ)	2005	2010	2020	2030	2040	2050
<i>Annual increase</i>		<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>
Organic waste	1.6	1.7	1.9	2.1	2.3	2.6
SRF	17	19	21	23	26	28
Mixed materials	18	20	22	24	26	29
Total	36	40	44	49	54	60

"High amount" scenario with simple continuation of recent year's increase in waste generation