

# **SME's and monitoring**

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### **Definitions**



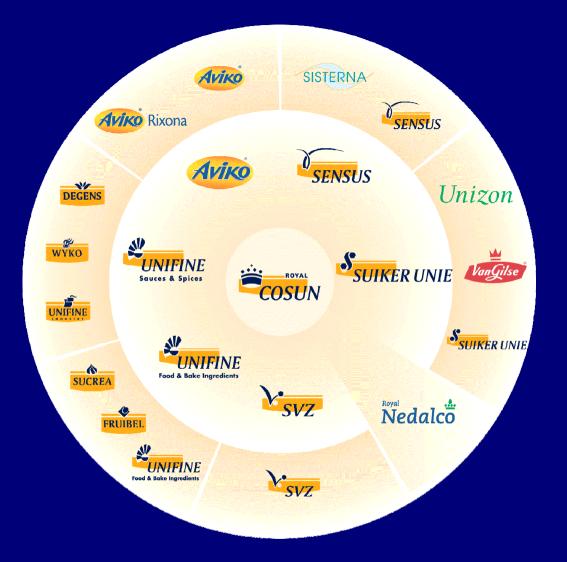
- Mini installations 0 25 kton CO<sub>2</sub>
- Small installations 25 50 kton CO<sub>2</sub>
- Medium installations 50 500 kton CO<sub>2</sub>
- Large installations > 500 kton CO<sub>2</sub>
- SME's have mini and small installations





















## **The Cosun installations**

Compagny	Town	kTon CO2 / year	firs	t //	second period
Suiker Unie	Breda	192	+	//	+
Suiker Unie	Dinteloord	318	+	//	+
Suiker Unie	Groningen	267	+	//	+
Suiker Unie	Puttershoek	217	+	//	+
Suiker Unie	Vierverlaten	320	+	//	+
Sensus	Roosendaal	68	+	//	+
Sensus	Zwolle	8		//	- (<3 MW)
Aviko	Steenderen	235	+	//	+
Aviko	Lomm	18		//	+
Rixona	Warfum	23		//	- (definition)
Rixona	Venray	77	(+)	//	+









### 2005-2007



- Monitoring is expensive. This is confirmed by a governmental study (Actal IV and Actal V)
- Big companies (ca. 10) dominate the discussion
- Through the opt-out 25 kton monitoring problems were small
- For 2008-2012 Calimero group formed









- Initiative of SME's
- Examples: Hospitals, food industry, peppermills, grass dryer etc
- Internal discussion led to a balanced proposal
- SME is a category now and have a reputation
- Importance based on number (199) of sites, not on the emission of CO<sub>2</sub>





# Results



Cost of monitoring									
	First period			Second period					
Size	Installation	Mton/Y	€/ ton CO <sub>2</sub>	Installation	Mton/Y	€/Ton CO <sub>2</sub>			
mini	30	0,45	0,57	145	1,8	0,34			
small	51	1,9	0,22	54	1,9	0,11			
medium	96	13,0	0,13	77	12,0	0,11			
large	18	73,3	0,03	28	64,4	0,03			









- The corporate controllers verify the fuel bills and certify it. Review by the government.
- No costs on bio fuel if monitoring does not pay
- If monitoring applicable to one installation, it must be allowed to bring the whole site in
- No monitoring on spare boilers









#### Conclusion



- New monitoring system reduced the cost for SME's with 40%
- Cost per ton CO<sub>2</sub> are still 17 times higher then for large installations
- Improvements are possible
  - The corporate controller verifies
  - No monitoring on bio fuel or credits
  - No discrimination on site; one meter monitors
  - Spare boilers not encompassed



