



Biogas installation in Thailand



Construction work on a biogas pipeline, with the SWI facilities in the background



The manioc root is ready for processing

Abroad

Within the framework of the acquisition programme "Kyoto certificates", the Climate Cent Foundation has acquired a further 2 million CERs on the secondary market (one CER is equivalent to one reduced tonne of CO₂). The CERs stem from 32 projects in the fields of biomass, wind power, hydropower, geothermal energy, energy efficiency, fuel switch, agriculture, landfill gas and laughing gas (nitrous oxide).

Overall, by late October 2009 the Foundation had contracted an expected 11.5 million tonnes of CO₂ emissions reductions. Around 4 million Kyoto certificates stemming from 41 projects have already been transferred to the Foundation's account in the National Emissions Trading Registry.

Biogas installation in Thailand - One of the 32 new projects

Sanguan Wongse Industries (SWI) is a Thai company headquartered in Korat, which produces starch. SWI processes a daily 7'500 tonnes of manioc root, generating 300 m³ of wastewater per hour. This wastewater is fed into a reactor, where the separation of liquids and organic waste takes place. The organic waste is then deposited in digesters. The gas generated in them through fermentation was previously released into the atmosphere, while it is now used to produce electricity. The electricity thus generated replaces electricity from fossil power, covers SWI's energy requirements and is injected into the national grid. The project was developed by Korat Waste to Energy Company Ltd. (KWTE).

It started in 2002 with the construction of a pilot installation. In 2003, this was already used to cover SWI's energy requirements. In a next phase, the plant was extended and completed in late 2003.

The Foundation has acquired 700'255 CERs from the project (one CER is equivalent to one reduced tonne of CO₂).

[» For more projects abroad please click here](#)

Contracted certificates by project type

	2008 to 2012	in tonnes
● Wind power		2 550 043
● Hydropower		850 435
● Biogas Biomass		1 145 255 2 007 793
● Geothermal power		117 275
● Energy efficiency Fuel switch Transports		141 861 76 708 167 167
● Agriculture Waste management Landfill gas Mine gas		558 968 54 014 1 319 895 55 688
● Laughing gas		1 582 000
● Still open		880 000



Contracted certificates by origin

2008 to 2012	in tonnes
Asia	6 602 843
China	4 343 212
India	760 048
Vietnam	374 520
Thailand	700 255
Malaysia	355 117
Indonesia	23 057
Philippines	39 232
Fiji	7 402
Middle- / South Amerika	3 624 259
Brazil	2 322 422
Argentina	42 270
Chile	325 849
Peru	140 000
Ecuador	222 704
Colombia	167 167
Panama	83 700
Honduras	175 405
Nicaragua	18 399
Mexico	126 343
Oceania	400 000
New Zealand	400 000
Still open	880 000



Do you have any suggestions or questions about our work?
Please contact us!

For further information:
 Climate Cent Foundation
 Dr. Marco Berg
 Managing Director
 Freiestrasse 167, 8032 Zürich
 T +41 (0)44 387 99 02
 F +41 (0)44 387 99 09
<http://www.stiftungklimarappen.ch/>

Switzerland

Target Agreements Programme – Within the framework of the Target Agreements Programme / Combustibles, the Foundation conducted its second and last auction round in 2009. The Foundation acquired CO2 emissions reductions of around 378'000 tonnes, operated over the period 2008 to 2012. Overall, 123 companies offered CO2 emissions reductions at a price of 100 Swiss Francs per tonne. Bids ranged in volume from 250 to 65'000 tonnes. All companies were eligible, which were members of Energie-Agentur der Wirtschaft (EnAW) before 1 January 2009 and are party to an approved target agreement with the Swiss Confederation by the end of 2009 at the latest.

The Foundation has thus contracted a total of 1.3 million tonnes of CO2 emissions reductions under the auspices of the Target Agreements Programme / Combustibles.

» [For more projects in Switzerland please click here](#)

Contracted emissions reductions by programme

2008 to 2012	in tonnes
Buildings Programme	191 587
Auction Programme	297 072
Intermediaries Programme	295 909
Large-Scale Projects Progr.	376 599
EnAW / Motor fuels	224 435
EnAW / Combustibles	1 312 241

