



2015/16 Report on the Climate Cent Foundation's Allocation of Resources

for the attention of

the Federal Department of the Environment, Transport, Energy, and Communications  
(DETEC)

in compliance with the agreement dated 8 October 2013

30 June 2016

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## **1 Purpose of this report**

The present report details the Climate Cent Foundation (CCF)'s use of its financial resources in conformity with its goal and purpose. The Foundation thereby complies with its obligation under clause 3.1.2 of its agreement with the Swiss Confederation dated 8 October 2013. The report takes stock of the Foundation's activities since 1 July 2015 and explains that and how the Foundation has met its obligations as set out in clause 3.1.2 of the aforementioned agreement.

## **2 Conditions to be met by the Foundation**

The Foundation is to use its financial resources solely for emission reduction schemes carried out abroad. In doing so, it is to focus its support on projects expected to yield the greatest possible amount of CER2<sup>1</sup> that meet the quality requirements set out in the Swiss CO<sub>2</sub> Ordinance. These certificates are to be handed over to the Swiss Confederation so it may meet its commitments under international law.

Insofar as, in order to generate CER2, the Foundation invests in the development of its own pilot projects and programmes in line with Swiss negotiating positions under the UNFCCC regime as well as in international initiatives that are complementary to the UNFCCC regime, this is to take place in consultative collaboration with the Swiss Interdepartmental Committee on Climate (IDC Climate)'s Field of Activity n° 6 "Emissions Trading and Flexibility Mechanisms".

## **3 Available resources**

In the period under review, the Climate Cent Foundation reported revenues of 6'761'920 Swiss francs, which resulted from the sale to the KliK Foundation of 42'262 tonnes of CO<sub>2</sub> emission reductions generated by its Buildings Programme in 2014. The KliK Foundation may impute these emission reductions as a so-called "self-realised project" toward meeting its carbon offset obligation. Until 2020 included, the Climate Cent Foundation expects the sale of its Buildings Programme's continuing impact to generate further total revenues of 36 million Swiss francs.

In the reporting period, a total of 2'469'078 Swiss francs were paid out to meet various incurred commitments (see section 5).

Taking into account investment profits, as per 30 June 2016 the Foundation's resources stood at 105'853'006 Swiss francs.

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<sup>1</sup> The term CER2 (Certified Emission Reductions) applies to certificates yielded by projects carried out under the Clean Development Mechanism (CDM) according to article 12 of the Kyoto Protocol that may be used over the course of the second commitment period (2013-20).

## 4 Collaboration with the IDC Climate's Field of Activity n° 6

Over the course of the period under review, the FA6 group held three meetings, which the Climate Cent Foundation attended as a guest. At these meetings, possible activities of the Foundation were discussed and assessed. Discussions centred mainly on the requirements the Swiss Confederation would place on pilot activities supported by the Foundation should these activities not meet the provisions of the Swiss CO<sub>2</sub> Ordinance, particularly should their impact make itself felt only post-2020 (see also section 6).

## 5 Ongoing and new activities

In the reporting period, the Foundation – in cooperation with the State Secretariat for Economic Affairs (SECO) – has authorised an investment in a further World Bank scheme, taking a share of 12.5 million US\$ in the *Transformative Carbon Asset Facility (TCAF)* (see section 5.3).

In addition, the Foundation has concluded an agreement with an intermediary for the delivery of a total of 2.5 million CER2 originating from landfill gas projects in Latin America, purchased significantly above market price (see section 5.5).

### 5.1. Participation in the *Carbon Initiative for Development (Ci-Dev)*

In early 2014, the Foundation took a share of 23 million US\$ in the World Bank's *Carbon Initiative for Development (Ci-Dev)*. The fund also numbers among its investors the governments of Great Britain and Sweden, which hold shares of respectively 50 million £ and 23 million US\$, of which 35 million £ and 40 million US\$ are available for the purchase of CER2; the remaining funds go towards activities granting governments, financial institutions, the private sector and civil society improved access to the carbon market. For a more detailed description of the Ci-Dev, please refer to last year's report to the DETEC.

There are currently 13 projects in the pipeline. A purchase agreement was signed with two projects in the first semester of 2016; agreements with the other projects should be concluded by the end of this year provided the parties can agree on suitable conditions. As things currently stand, prices should average 8 to 12 US\$ per CER2. The Foundation can thus expect its share to yield around 2 million certificates.

- **SimGas, Kenya:** The first project, signed in January 2016, involves the reduced-price sale of biogas facilities made of recycled plastic to rural households in Kenya (price reduced by 200 USD to roughly 700 USD) as well as the trust-enhancing granting of a warranty extended by 2 years to a total of 5 years. Developed by the project owner himself and mass-produced in Tanzania, the facilities are easily scalable to meet household size and are cheap to install. Available manure produced by at least one head of cattle is processed into biogas, providing cooking energy and replacing fossil liquid gas or non-sustainably used biomass (wood). The nutrient-rich sludge generated as a by-product can be used

as fertiliser. Households are thus able to reduce their fuel and fertiliser expenses, spend less time gathering wood, and improve their health by inhaling fewer pollutants when cooking.

Over the duration of the project, more than 75'000 biogas facilities are to be sold to households, reducing emissions by roughly 2.5 million tonnes of CO<sub>2</sub> equivalent. In order to cushion the risk of underdelivery, Ci-Dev is purchasing a maximum amount of 1 million of the CERs generated by the project over the period 2014 to 2023. The PoA was registered in December 2012 as n° 7734.

- **Green Development, Madagascar:** In Madagascar, non-sustainably obtained wood charcoal is widely used to cook. Instead, the project aims to develop the use of sustainably produced bioethanol. On the one hand, the project involves the installation of more than 60 ethanol micro-distilleries to produce the necessary fuel. Two pilot facilities have been set up to establish the best available technology and the optimal raw material based on sugar cane. Furthermore, the government is being assisted in designing and implementing regulation in order to ensure that the raw material is obtained in an environmentally and socially sound manner and that the distilleries and the cookers are of good quality.

On the other hand, the project subsidises the planned sale of 100'000 ethanol cookers to private households in cities and agglomerations. An information campaign has been designed to convince consumers of the benefits of using ethanol cookers: less deforestation, improved rural livelihoods and less air pollution near cooking sites.

The project should reduce emissions by at least 3 million tonnes of CO<sub>2</sub> equivalent. In order to cushion the risk of underdelivery, Ci-Dev is purchasing a maximum amount of 2.1 million of the CERs generated by the project over the period 2016 to 2024. The PoA was registered in November 2012 as n° 7359.

The other 11 projects in the pipeline are located in Burkina Faso, Ethiopia, Kenya, Mali, Nigeria, Rwanda, Senegal and Uganda. All of them are also PoAs, covering the following areas: biogas production, small-scale hydropower, solar energy, efficient cooking devices and power grid extensions. Most programmes are in the process of being set up, a few have already been registered with the UN.

## **5.2. Participation in the *Pilot Auction Facility for Methane and Climate Change Mitigation (PAF)***

For several years now, the prices for market-traded CER2 have been exceptionally low, threatening the launch or the continued operation of many already registered CDM projects. The World Bank's *Pilot Auction Facility for Methane and Climate Change Mitigation (PAF)* offers a way to determine a price for such projects that is both acceptable from the seller's point of view and efficient from the buyer's point of view.

The Foundation and the State Secretariat for Economic Affairs (SECO) are jointly participating in the PAF with a share of 2.5 million US\$ each, thereby in total meeting minimal share requirements. The modalities of collaboration have been set out in an MoU. The governments of the US, Germany and Sweden have also invested in the fund. The fund has a total endowment of 55 million US\$.

With the PAF, the seller of a certificate – which meets certain predefined requirements – is guaranteed a minimum price, while retaining the freedom to forego the sale should the market price lie above the minimum price. In return, the buyer who guarantees the minimum price is given the lowest offer acceptable by the seller. This transaction takes the form of auctioning off put options.

The buyer of the put option buys the right to sell a specified amount of certificates at strike price at expiry date. He may also choose to let the option expire. When purchasing the option, he will however have paid a premium, which he needs to factor in when deciding whether or not to let the option expire. Auctioning off the options makes it possible to ensure that bidders will go to the limit of what constitutes an acceptable minimum price for the sale of their certificates.

The put options are issued as tradable bonds. If the holder of a bond no longer wants to operate a project or finds himself unable to do so, he may sell the bond to a third party. The PAF must set aside the funds needed to purchase the certificates until the bonds mature, without knowing for sure that certificates will indeed be delivered and that the funds will thus be required.

The first auction took place on 15 July 2015. The option premium was set at 0.30 US\$ per certificate and the strike price was auctioned down. 28 bidders took part in the auction and 12 bidders won at a strike price of 2.40 US\$ per certificate. The net price was thus 2.10 US\$ per certificate. The available auction sum was 25 million US\$ and options were issued for the delivery of 8.7 million certificates.

Exercising the option is possible each autumn from 2016 to 2020 at a rate of one fifth of the purchased quantity. Delivery will only be accepted for CER2 originating from projects that reduce methane emissions in the field of waste management (landfills, wastewater treatment plants, agricultural waste). The delivery of CER2 originating from projects in China is not allowed.

At the second auction, held on 12 May 2016, admission criteria for projects were largely maintained (while newly also allowing the delivery of certificates issued according to the “Verified Carbon Standard” or the “Gold Standard”). However, this time the strike price was preset at 3.50 US\$ per certificate and the option premium was auctioned up. 9 out of 21 bidders won the auction at a premium level of 1.41 US\$ per certificate. The net price was thus 2.09 US\$ per tonne and was quasi-identical to the price reached in the first auction. Options are issued for the delivery of 5.7 million certificates, a direct consequence of the given auction sum of 20 million US\$.

A comparative analysis of both auctions is still pending, as is an assessment of the way the minimum price guaranteed by the PAF has impacted projects; this latter analysis can be performed at the earliest once the first certificates have been delivered in the autumn of 2016. A third auction will be held before the year ends; in view of available funds remaining, it will most likely be the last. The auction's design and criteria will be defined in July 2016.

### **5.3. Participation in the *Transformative Carbon Asset Facility* (TCAF)**

Ahead of the 21<sup>st</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change (CoP21) in Paris, many emphasised the significance of a long-term price signal for greenhouse gas emissions for achieving the 2° target, as it would trigger investments in greenhouse gas reduction technologies. With this in mind, the “Partnership for Market Readiness” (PMR), co-funded by Switzerland, supports countries in setting up and putting in place various pricing tools.

Against this backdrop, the World Bank, entrusted with implementing the PMR, designed the *Transformative Carbon Asset Facility* (TCAF) as a new scheme with which to financially support the implementation of sector-specific or cross-sector political measures and programmes (e.g. emission trading schemes, buildings and vehicle requirements, feed-in tariffs). This should encourage countries to outperform their internationally agreed emission targets and create the conditions for private investments in greenhouse gas reduction technologies.

Even after the adoption of the Paris Agreement, future demand for emission reduction certificates, as well as the rules governing their issuance, remain unclear. The TCAF explicitly aims to provide its investors with certificates they may impute toward meeting their emission target if they so wish. Its activities therefore aim to help establish the necessary international set of rules, focussing mainly on two aspects: ensuring the environmental soundness and the verifiability of certified emission reductions.

The scheme's target endowment is 500 million US\$ and pledged funds of 250 million US\$ are required for it to go ahead. A minimum stake of 25 million US\$ is required to have a say in programme selection. In November 2015, the Foundation decided to invest 12.5 million US\$ in the TCAF. As it did with the PAF, it is teaming up with the SECO in order to jointly reach the minimum 25 million US\$ necessary for being involved in programme selection.

Other potential investors are: Germany, Great Britain, Norway and Sweden. Their formal commitments are expected only in autumn 2016, yet the funds held out in prospect should suffice for the TCAF to become operational.

### **5.4. Purchase of 12 million CER2**

In June 2014 and in March 2015, the Foundation carried out calls for tenders to purchase 4 resp. 1 million CER2. Only CER2 originating from projects featured on the Swiss Confederation's “White List” were admitted. In total, four bidders won. The average price per certificate was 0.51 € in the first and 0.49 € in the second call for tenders. 4.1 million CER2 have already been delivered.

In addition, three suppliers were specifically invited to procure CER2 up to a maximum limit defined in terms of quantity and price. The certificates were to meet the requirements set out in the Swiss CO<sub>2</sub> Ordinance. A further 7 million CER2 were thus purchased at an average price of 0.52 € per certificate. 1.7 million of these CER2 have already been delivered.

Overall, 12 million CER2 were purchased at an average price of 0.51 € per certificate. In view of the certificates' high quality, this may be viewed as an excellent result. The 5.8 million CER2 that have already been delivered originate from 120 projects in Brazil, China, Colombia, Egypt, India, Mexico, South Korea, Thailand and Vietnam (China stands out with a share of two thirds). Almost two thirds of certificates originate from wind power projects and over one fifth from landfill gas projects.

## **5.5. Direct purchase agreements with project owners**

### ***Micro Energy Credits***

The Foundation is buying 2 million CER2 from US company Micro Energy Credits Corp. (MEC), to be delivered by 2021. MEC operates a programme that was registered with the UN as n° 9181 and supports microloans for greenhouse gas reducing household devices in India. Microloans for efficient cooking stoves, solar systems/lamps and drinking water preparation devices are subsidised with the proceeds from the sale of CERs. For a more detailed description of the programme, please refer to last year's report to the DETEC.

The programme is being operated by MEC with great success. For the monitoring period 2013 to mid-2015, 41'612 CERs have been issued for 5 CPAs and delivered to the Foundation in March 2016. For the period up to late January 2016, the issuance of a further 110'000 CERs was requested from the UN; their delivery is expected in the summer of 2016.

### ***South Pole***

The Foundation is buying 2 million CER2 from Pure Water Ltd, a 100% subsidiary of Swiss company South Pole Group, to be delivered by 2021. The certificates originate from the "International Water Purification Programme" registered with the UN as n° 5962. Together with implementation partner Evidence Action, the plan is to set up drinking water purification schemes over a large territory in Malawi and in Kenya. 22'000 wells and springs are to be fitted with chlorine dispensers, enabling over 3.2 million people to purify their drinking water in a safe and simple manner. For a more detailed description of the programme, please refer to last year's report to the DETEC.

Evidence Action has installed most of the planned 22'000 chlorine dispensers, of which 4'000 in Malawi. Chlorine quantities are logged and water quality is regularly monitored directly in households. Currently, 2 CPAs are registered in each Kenya and Malawi; by late 2016, another 7 will follow in Kenya and one (maybe 2) in Malawi. The CERs issued for emission reductions achieved from November 2015 to late 2016 will be delivered to the Foundation in 2017.

### ***First Climate***

The issuance of CERs originating from registered CDM projects aimed at collecting and destroying landfill gas is in sharp decline. Due to low market prices, it is no longer economically viable to operate, service and develop torches and collection systems. Remaining emission reductions are no longer verified and credit periods are no longer

renewed. Small and medium-sized landfills are particularly affected because they lack access to adequate funding.

In order to make it possible to keep operating such stranded projects, in December 2015 the Foundation signed a purchase agreement with First Climate (Switzerland) AG for the delivery of 2.5 million CER2 by 2021. First Climate will in turn conclude separate purchase agreements with 8 to 12 landfill gas projects in Latin America, each generating a maximum of 200'000 CER2 per year. An innovative pricing structure, which follows the marginal costs of methane production, lowers risk for project owners and sets incentives to maximise emission reductions, e.g. by optimising torch maintenance or setting up additional gas wells.

Over the past months, First Climate has received more than 20 project offers from all over Latin America, and it is expecting more offers in the near future. Negotiations are currently underway to conclude purchase agreements with projects located in Brazil, Colombia and Mexico.

## **6 Outlook**

The Foundation Council has informed the DETEC of its willingness to extend the current contract by ten years to 2032. It has also decided to make available 20 million Swiss francs for the promotion of activities serving to concretise and implement the possibilities set out by article 6 of the Paris Agreement until and after 2020. Negotiations on an extended contract, which would also outline in more detail how the Foundation should proceed to support pilot activities, are currently underway and should come to a conclusion by autumn 2016.

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