



2023/24 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 29 April 2022

27 June 2024

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1 Purpose of this report

In compliance with the Climate Cent Foundation (CCF)'s obligation under clause 2 of its agreement with the Swiss Confederation dated 29 April 2022, the present report details the Foundation's use of its financial resources in conformity with its goal and purpose. The report takes stock of the CCF's activities since 1 July 2023 and explains that and how the CCF has met its obligations as set out in clause 2 of the aforementioned agreement.

2 Conditions to be met by the Climate Cent Foundation

The Climate Cent Foundation is to use its financial resources mainly to support projects carried out chiefly in the private sector in Switzerland and abroad that harness technologies which durably remove CO₂ from the atmosphere (Negative Emissions Technologies [NET]) or which directly capture fossil resp. geogenic CO₂ at source to be durably stored underground or in materials (Carbon Capture and Storage [CCS] resp. Carbon Capture and Utilisation [CCU]).

The Foundation is further to keep supporting projects abroad expected to yield attestations that can be credited toward the Swiss Confederation's commitments under international law.

As far as possible, the projects are to yield attestations that meet the quality requirements set out in the Swiss CO₂ Ordinance. All attestations are to be handed over to the Swiss Confederation.

3 Available resources and commitments

The Climate Cent Foundation reported no revenues in the period under review. A total of CHF 2'191'988 was paid out to meet incurred commitments (see table below) and to cover the CCF's operating expenses.

Taking into account investment profits, as per 21 June 2024 the CCF's resources stood at CHF 89'364'241.

4 Collaboration with the Swiss federal authorities

In the period under review, according to the agreement in place, delegations of the Compensation Directorate and the CCF's Foundation Council mutually attended a meeting of the other body.

Table: Commitments incurred by the CCF and payments made

	Commitments (in CHF)	Paid out 1.1.2014 to 30.6.2024 (in CHF)	of which paid out in the period under review (in CHF)	Attestations delivered from 1.7.2022 to 30.6.2024 (units)
Ci-Dev	21'850'000 (23'000'000 USD)	8'155'672	122'665	185'141 (CER2)
TCAF	11'875'000 (12'500'000 USD)	1'241'137	288'804	–
Tuki Wasi, Peru	15'356'000 (15'356'000 EUR)	8'105'010	1'439'292	–
NET / CCS	50'000'000	–	–	–
Total	109'081'000	17'501'819	1'850'761	185'141 (CER2)

5 Ongoing activities

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

Since early 2014, the CCF has held a share of USD 23 million in the World Bank's *Carbon Initiative for Development* (Ci-Dev), in operation until the end of 2025 (www.ci-dev.org/). The fund also numbers among its investors the governments of Great Britain and Sweden, which hold shares of respectively GBP 50 million and USD 23 million. Out of these amounts, GBP 35 million and USD 40 million are available for the purchase of certificates; the remaining funds go toward activities granting governments, financial institutions, the private sector and civil society improved access to the carbon market.

The portfolio currently numbers nine programmes, with negotiations underway for one further agreement. The Ci-Dev had signed purchase agreements with another five programmes, which in the meantime have been terminated because for various reasons the programmes did not make headway or reach implementation. Due to the loss of these programmes as well as cutbacks in the delivery volumes of existing programmes in the portfolio, the Ci-Dev is not fully invested.

In the period under review, the CCF received delivery of a total 51'012 CER2 from three programmes in the portfolio. Over the fund's operation to date, it has received 277'968 CER2.

Without exception, the programmes were originally registered under the Kyoto Protocol. From 2021 onward, their emission reductions are to be certified according to the *Standardised Crediting Framework* (SCF) developed by the World Bank. Certification under the SCF is agreed individually with partner countries within the framework of *Host Country Agreements* (HCA). In these agreements, partner countries further commit to meeting the requirements applicable under the Paris Agreement, so that verified emission reductions may lead to the issuance of *Internationally Transferred Mitigation Outcomes* (ITMOs).

According to the current Swiss CO₂ Ordinance, ITMOs can only give rise to the issuance of international attestations if the partner country has signed an implementation agreement with Switzerland in view of implementing Article 6.2 of the Paris Agreement – this is currently the case for none of the Ci-Dev's partner countries.

5.2. Participation in the Transformative Carbon Asset Facility (TCAF)

The CCF and the Swiss State Secretariat for Economic Affairs (SECO) are jointly participating in the World Bank's *Transformative Carbon Asset Facility* (TCAF), in operation since 2017 and until the end of 2031. They hold shares of USD 12.5 million each, thereby in total meeting minimal share requirements for having a say in the selection of funded activities. The other major investors are the governments of Great Britain (GBP 60 million), Norway (USD 80 million) and Sweden (USD 25 million). Germany, Canada and Spain also hold shares on a smaller scale. In June 2024, investors extended the fund's period of activity by three years through the end of 2031.

Countries involved in the TCAF aim to make use of the possibility set out in Article 6 of the Paris Agreement for signatory states to cooperate on a voluntary basis. Like Norway and Sweden, the CCF plans to use the certified emission reductions toward fulfilling national emission targets. Great Britain and the SECO, on the other hand, plan to use their resources toward climate finance, which explicitly precludes counting certificates toward national emission targets.

Unchanged from the previous year, only one agreement has been concluded for the purchase of certificates. It was signed with the project "Innovative Carbon Resource Application for Energy Transition" (iCRAFT) in Uzbekistan. The project creates incentives for the Central Asian country of Uzbekistan to reform its energy subsidy system with the aim of reducing fossil energy use and thus carbon emissions. By 2026, the government aims to reform energy subsidies in such a way that prices in the power and gas sectors cover costs. The funds provided by the TCAF are used to cushion the impact of rising energy prices for lowest-income households and to fund campaigns to raise awareness as to the necessity and the benefits of cost-covering energy prices.

With these reforms, over the years 2022–2027 Uzbekistan is anticipated to reduce its greenhouse gas emissions by an estimated 60 million tonnes of CO₂ in total. The

verification of emission reductions achieved in 2022 was finalised in April 2024. Of the verified 3.6 million tonnes of CO₂ reductions, climate finance investors took on and paid for 500'000 tonnes.

Funding possibilities are being assessed for a handful of other activities. These are located in Egypt, Nepal, Pakistan, Thailand and Vietnam and belong to the fields of waste management, energy, transport and rice cultivation.

5.3. Pilot activity Tuki Wasi

In development since 2017 and in operation since February 2019, the pilot activity "Tuki Wasi, Peru" is aimed at the country's poorest households and strengthens the Peruvian market for improved cook stoves by means of competitive calls for tenders and standardisation (www.tukiwasi.org). In November 2021, the CCF signed a purchase agreement for ITMOs with the programme owner Microsol S.A.S., after a legal framework had been established for the issuance and transfer of such certificates with an implementation agreement signed between Switzerland and Peru in October 2020.

More specifically, the CCF – and in a downstream transaction the KliK Foundation – will purchase up to 960'000 ITMOs from Microsol until 2030. Up to 60'000 improved cook stoves are to be installed over the period 2022–2025.

Following completion of the pilot phase launched in 2018, in which 1'000 cook stoves were installed according to defined specifications, the actual project started in summer 2022. Three public calls for tenders secured contracts with four companies, which have committed to building 35'000 cook stoves. The CCF has prefinanced the construction of these cook stoves with USD 5.53 million. Around 28'000 cook stoves are already in operation to date.

The project's authorisation by the two partner states remains pending, as Peru has still not established the necessary national processes.

5.4. NET / CCS projects

In order to identify projects worth funding in the fields of NET / CCS, in summer 2022 the CCF carried out a call for proposals. Of the 21 projects submitted, 14 have been detailed further. In the end, five projects were granted funding approval for CHF 10 million each. The funding agreements were signed in August 2023.

All five projects involve carbon capture in Switzerland, mainly in biogas facilities. Three of the projects are aimed at storing the CO₂ in building materials in Switzerland, while the other two plan to transport the CO₂ to other countries to be durably stored underground. The projects' status is currently as follows:

- **Sika, ReCO₂ver:** Sika Services Ltd has developed a process named ReCO₂ver, in which demolition concrete is mechanically separated and broken down into its main components gravel, sand and cement powder using additives. In a tank, the cement powder is then injected with CO₂ from various capture points. A

mineralisation process transforms it into carbonated powder, which can in turn be used for the production of cement / concrete / mortar. Next to the sequestration of CO₂ in the carbonated powder, the technology reduces resource consumption by making it possible to reuse the original components of demolition concrete. The carbon sink performance under contract amounts to 16'500 t CO₂ until 2030.

The request for assessment of the project's suitability for the issuance of attestations was submitted to the Swiss Federal Office for the Environment (FOEN) in due time before the end of 2023 and is currently being processed.

- **Zirkulit, sequestration of biogenic CO₂ in concrete granulate:** Zirkulit Ltd has developed a circular concrete whose special formulation ensures a lower proportion of cement and thus a reduced carbon footprint compared to conventional concrete. Under the project, this concrete granulate is further injected with biogenic CO₂ captured in biogas plants, storing the CO₂ in concrete via mineralisation. The contracted quantity amounts to 16'500 t CO₂ until 2030.

The request for assessment of the project's suitability for the issuance of attestations was submitted to the Swiss Federal Office for the Environment (FOEN) in due time in March 2024 and is currently being processed.

- **Neustark, BEST:** Neustark Ltd has developed and brought to market maturity a process for storing CO₂ in recycled concrete. The project involves setting up liquefaction facilities for CO₂ captured in biogas plants as well as carbon sequestration facilities next to recycled concrete factories, in which concrete granulate is injected with CO₂ in special reaction containers, durably storing the CO₂ in concrete through mineralisation. The project focusses on the gassing of concrete granulate that is subsequently used not to produce recycled concrete but rather as loose crushed material, for example in road construction. The contracted quantity amounts to 16'500 t CO₂ until 2030.

The request for assessment of the project's suitability for the issuance of attestations was submitted to the Swiss Federal Office for the Environment (FOEN) in due time before the end of 2023 and is currently being processed. The first capture resp. sequestration facility was put into operation in March 2024.

- **CO₂ Energie, Nesselbach Extension:** The biogas plant in Nesselbach processes food waste to produce methane, which is fed into the natural gas grid. To this end, CO₂ is captured from the biogas. Since November 2022, a liquefaction facility has been in operation to bring the CO₂ to food grade quality. Following an expansion of the biogas plant, an additional processing facility is under construction to scale up the feed-in of natural gas. Under the project, the CO₂ captured in this process is to be liquefied and durably stored underground. As such storage sites are not yet available in Switzerland, the CO₂ will be exported by truck, train and boat – storage sites are already under development in Norway, Iceland, the Netherlands and Denmark. The contracted quantity amounts to 21'800 t CO₂ until 2030.

The project is currently undergoing validation. The request for assessment of its suitability for the issuance of attestations should be submitted to the Swiss Federal Office for the Environment (FOEN) in due time before the end of October 2024. The investment decision to implement the project has not as yet been made.

- **Neustark, TOGETHER:** Under this project, Neustark Ltd plans to build liquefaction facilities next to several biogas plants in Switzerland that already capture CO₂ for natural gas processing, and to transport the liquefied CO₂ to storage sites in Iceland by truck, train and boat. The contracted quantity amounts to 13'000 t CO₂ until 2030.

The project is currently undergoing validation. The request for assessment of its suitability for the issuance of attestations should be submitted to the Swiss Federal Office for the Environment (FOEN) in due time before the end of October 2024. The necessary storage capacity in Iceland has already been secured by contract.

6 Outlook

In the 12 months ahead, just as during the preceding period, the focus of the Climate Cent Foundation will be twofold. On the one hand, it will be working toward the "Tuki Wasi" programme's authorisation and first verification. On the other hand, it will be supporting the implementation of selected programmes and projects in the fields of NET / CCS as well as their registration by the Swiss Federal Office for the Environment (FOEN) as suitable for the issuance of attestations.
