

Annual Report

EthioTrees Project



February 2022 – January 2023

Annual Report

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EthioTrees Project

Annual report February 2022 – January 2023

Submitted by: EthioTrees

Date of submission: 01 – 02 – 2023

Summary

Project overview	
Reporting period	1 st February 2022 – 31 st January 2023
Geographical areas	Tigray Region, Ethiopia
Technical specifications in use	See approved PDD EthioTrees

Table 1: Summary table

Project indicators	Historical	Added/ Issued this period (Feb. 2022-Jan. 2023)	Total
No. smallholder households with PES agreements	0	0	0
No. community groups with PES agreements (where applicable) by Feb 2023	20	1	21
Approximate number of households (or individuals) in these community groups	3,884	518	4,402
Area under management (ha) where PES agreements are in place	2,739	1,412	4,151
Total PES payments made to participants (USD)	195,308 USD*	140,332 USD**	335,640 USD
Total sum held in trust for future PES payments (USD)	0	0	0
Allocation to Plan Vivo buffer (tCO ₂)	8,188	3,176	11,364
Saleable emissions reductions achieved (tCO ₂)	73,678	28,595	102,273

Unsold Stock at time of Submission (PVC)	
-	-

Plan Vivo Certificates (PVCs) issued to date	73,678
Plan Vivo Certificates requested for issuance (Feb. 2022 – Jan. 2023 Vintage)	28,595
Plan Vivo Certificates available for future issuance	0
Total PVCs issued (including this report)	102,273

* see previous annual report.

** based on ETB to USD conversion rates on 11/11/2022 (source: www.xe.com).

Part A: Project updates

A1: Key events

- The EthioTrees project in the Tembien Highlands remains fully operational and is expanding its impact in the region.
- Despite the difficulties, the project continued its activities. In 2022, no fighting occurred in or near the project areas, but food and medicine deliveries to the participating communities and EthioTrees staff were blocked.
- Then, exactly 2 years after the fighting started, Ethiopia's federal government and leaders of the Tigray region signed the Pretoria peace accord on 2 November. The peace deal was followed by the Nairobi implementation deal ten days later. After making these formal steps toward ending the conflict, all parties broadly communicated their desire to build a solid foundation for peace.
- Both deals, brokered by the African Union (AU), proposed the integration of the Tigray Defence Forces into the formal army and/or a Tigray Regional Force. An interim Tigray government would be inclusive. In exchange, the Ethiopian military, and Eritrean troops who had been fighting alongside federal forces, halted their advance toward Tigray's capital, Mekelle, and Addis Ababa ended its de facto siege of the region.
- The parties showed commitment to the Pretoria pact, a positive sign. Most importantly, the two battle-exhausted sides have stopped fighting in November, and Eritrean and Amhara forces started to withdraw from Tigray.
- Over the past and upcoming months, the parties seek to gradually conclude a sustainable settlement that can help to heal the conflict's deep wounds.
- The EthioTrees project expanded this year into the Dawsira area (equivalent to 1319 ha). Baselineing and first year project activities were carried out successfully.
- There have been project trainings in all project areas (31 trainings). Trainings are focused on environmental management of the exclosures in times of starvation.
- Guarding by forest rangers continued, and additional environmental investments (stone bunds, percolation ponds) were made in the project zones. In total 6566 m stone bunds and 100 percolation ponds have been constructed in 2022. For the construction investments, the project worked together with community members.
- In spring 2023, the project has planned a verification audit by Mutu certification. Therefore, the exclosures have been resampled in the fifth project year 2022.
- The project continued its expansion into neighboring districts: Kolla Tembien, Kayeh Tekli,

Enderta and Geralta. Baseline and first-year project activities are ongoing and will be reported in a biannual report in August.

A2: Successes and challenges

- One of the main successes this year included the humanitarian aid support program using the Plan Vivo reinvestment budget. The project supported 29,135 vulnerable families in the project areas. Beside the direct impact, the support program also strengthened the project community base.
- Despite the conflict at the borders, the project was able to expand its activities in Dawsira (1319 ha) to strengthen its overall activities in Kolla Tembien.
- The team has grown in Kolla Tembien and currently consists of 10 fulltime employees across Tigray. The project team will further grow over the coming year.
- Over the course of 2022, the main challenge remained the humanitarian blockade. The project maintained FAO (UN) approval for direct internet access at the Mekelle office.
- The project has been able to plant *Olea africana* seedlings. Unfortunately, due to the difficult access to tree seedlings, no other species were planted.
- In total, 31 trainings and group discussions have taken place, with in total 5827 attendees. The main focus of these discussions was to maintain awareness on the environmental protection of the exclosures (keeping out grazing and illegal timber harvesting) and maintaining sustainable management of the exclosures during a humanitarian blockade.

A3: Project developments

Below, we give an overview of the project developments that have affected the governance, operations, contractual relationships or legal basis of the project:

- There are no relevant updates to the project documentation.
- The EthioTrees staff deliberated and decided to continue and expand their useful work for the citizens of Tigray.

- The field coordinator of Dawsira joined the EthioTrees Staff, overseeing monitoring activities in the expansion area.
- The project involved 618 daily labourers from the project communities to develop project activities, providing them an income stream during insecure times.

Table 2: Progress against corrective actions

Document	Corrective action	Activity against this
AR 2021-2022	The reinvestment budget varied between the communities based on the community needs and the exceptional circumstances of the conflict. In the next years differences will be smoothened.	This year the communities received early-on communication on the redistribution budgets for food-aid. We did not want to create confusion by changing the promised food aid budget to include the corrective actions. In the next year differences will be smoothened in line with the solidarity equation of the PDD.

A4 Future Developments

- Further activities next year will focus on the existing exclosures, including trainings, seedling planting and seedling irrigation, and the installation of soil and water conservation structures such as percolation ponds, trenches and soil bunds. We aim to invest the plan vivo funds in “village recovery projects”, at the initiative of the citizens.
- In 2023, the project objective is to further scale its impact to contribute to the post-conflict reconstruction in the region. The expansion into the adjacent districts (Kolla Tembien, Kayeh Tekli, Enderta and Geralta) will be reported in a bi-annual report in August.
- A verification audit by Mutu certification is planned in spring 2023, at which point carbon sequestration rates will be recalibrated and verified.

Part B: Project activities

B1: Project activities generating Plan Vivo Certificates

- We list the technical specifications being used in the project, the area covered and participants in table 2 below. We only include those areas where PES agreements

have been signed.

Table 3: Project activity summary

Name of technical specification	Area (Ha)	No smallholder households	No Community Groups
Ecosystem Restoration in the Tembien Highlands	4151 ha	4402	21

B2: Project activities in addition to those generating Plan Vivo Certificates

- The project organized meetings in all project sites to identify and support 29,135 families of the most vulnerable people in the project communities. The two main criteria to define vulnerability are wealth and health status of the households in the community. Those with the lowest wealth and weak health conditions are considered most vulnerable. These 29,135 families got direct cash-for-food support using Plan Vivo Revenues.
- It also included, with the financial support of the Tesfay project, the direct support for 124 extremely vulnerable group of people in Hagere Selam (Internally Displaced Persons (IDPs), HIV victims, sexually assaulted woman and very poor woman and children).

Part C: Plan Vivo Certificate issuance submission

C1: Contractual statement

- This issuance is based on Plan Vivo maps and signed PES agreements with participants complying with all the minimum requirements stated in these agreements.

C2: Issuance request for projects where issuance is made on the basis of ongoing activities on land already managed by the project (calculated *ex-post*).

Table 4: Statement of tCO₂ reductions available for issuance as Plan Vivo Certificates based on activity for reporting period 1st February 2022 – 31st Jan 2023 for all sites.

Area ID	Total area (ha)	Tech. Spec	Saleable ER's (tCO ₂) available from previous periods	Total ER's (tCO ₂) achieved this period	ER's minus leakage of 2%	% Buffer	No. of PVCs allocated to buffer from ER's achieved this period	Saleable ER's (tCO ₂) from this period	Issuance request (PVCs)	ER's (tCO ₂) available for future issuances
Adi Lehtsi	412	Ecosystem restoration	0	4536	4445	10	445	4001	4001	-
Gidme Gestet	46	Ecosystem restoration	0	270	265	10	26	238	238	-
Meam Atali	83	Ecosystem restoration	0	731	716	10	72	645	645	-
May Getnet	51	Ecosystem restoration	0	281	275	10	28	248	248	-
May Hibo	53	Ecosystem restoration	0	272	267	10	27	240	240	-
Afedena	81	Ecosystem restoration	0	565	554	10	55	498	498	-
Adilal*	148	Ecosystem restoration	0	1195	1171	10	117	1054	1054	-
Gemgema*	93	Ecosystem restoration	0	444	435	10	43	392	392	-
Zban Dake	300	Ecosystem restoration	0	3413	3345	10	334	3010	3010	-
May Baeti	46	Ecosystem restoration	0	291.64	286	10	29	257	257	-
Lafa	45	Ecosystem restoration	0	228.76	224	10	22	202	202	-
Daero Hidag	112	Ecosystem restoration	0	936.78	918	10	92	826	826	-
Togul	36	Ecosystem restoration	0	190	186	10	19	168	168	-

Sesemat	46	Ecosystem restoration	0	510.18	500	10	50	450	450	-
Adi Meles	65	Ecosystem restoration	0	399.72	392	10	39	353	353	-
Chele Quot	50	Ecosystem restoration	0	277.82	272	10	27	245	245	-
Katna Ruba	44	Ecosystem restoration	0	480.4	471	10	47	424	424	-
Gojam Sefra	275	Ecosystem restoration	0	3002.52	2942	10	294	2648	2648	-
Debremed hanit	647	Ecosystem restoration	0	4511	4421	10	442	3979	3979	-
Hawahiwa	199	Ecosystem restoration	0	1848	1811	10	181	1630	1630	-
Dawsira	1319	Ecosystem restoration	0	8035	7874	10	787	7087	7087	-
TOTAL	4151	Ecosystem restoration	0	32418	31770	10	3176	28595	28595	-

*Last year, slight expansions of the exclosure delineations were agreed at Gemgema (from 65 to 93ha) and Taekuro/Adilal (from 83 to 148ha).

C3: Allocation of issuance request

- The table below details the allocation of issuances from this project.

Table 5: Allocation of issuance request

Buyer name/ Unsold Stock	No. PVCs transacted	Registry ID (if available) or Project ID if destined for Unsold Stock	Tech spec(s) associated with issuance
<i>Ethiotrees (first issuance)</i>	4,873	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (second issuance)</i>	5,856	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (third issuance)</i>	9,769	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (fourth issuance)</i>	5,572	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (fifth issuance)</i>	12,530	104000000014099	<i>Ecosystem Restoration</i>
<i>EthioTrees (sixth issuance)</i>	14,819	104000000014099	<i>Ecosystem Restoration</i>
<i>EthioTrees (seventh issuance)</i>	20,259	104000000014099	<i>Ecosystem Restoration</i>
<i>EthioTrees (this issuance)</i>	28,595	104000000014099	<i>Ecosystem Restoration</i>
TOTAL	102,273	104000000014099	Ecosystem Restoration

C4: Data to support issuance request

- We provide the monitoring data for areas of land and participants which support our issuance request in Annex 1.

Part D: Sales of Plan Vivo Certificates

D1: Sales of Plan Vivo Certificates

- To date, 73,678 Plan Vivo Certificates have been sold (not including this issuance, which credits will be sold over the course of 2023).

Table 6: Sales of Plan Vivo Certificates to date

Buyer	Year of transaction	Credits bought (tCO2-e)	Value per tonne (EUR)
Carbon Sink (IT)	2018	5000	Internal reporting only
Zero Mission (SE)	2018	5000	Internal reporting only
Carbon Sink (IT)	2019a**	5000	Internal reporting only
Zero Mission (SE)	2019a**	5450	Internal reporting only
Carbon Sink (IT)	2019b**	5000	Internal reporting only
Victor Buyck (BE)	2019	162	Internal reporting only
Zero Mission (SE)	2020a**	550	Internal reporting only
Zero Mission (SE)	2020b**	5696	Internal reporting only
Carbon Sink (IT)	2020a**	5000	Internal reporting only
Zero Mission (SE)	2020c**	1660	Internal reporting only
Carbon Sink (IT)	2021 (April)***	10,000	Internal reporting only
Carbon Sink (IT)	2021 (Feb)***	941	Internal reporting only
Victor Buyck (BE)	2021	159	Internal reporting only
Zero Mission (SE)	2021	3800	Internal reporting only
Davines (IT)	2022****	9260	Internal reporting only
Climate Partner (DE)	2022	11000	Internal reporting only

*USD values based on EUR to USD conversion rates on 05/09/2019 (source: www.xe.com)

** letters a, b and c refer to the sales of credits in spring, summer and in autumn respectively

***USD values based on EUR to USD conversion rates on 17/03/2022 (source: www.xe.com)

****1 EUR = 1.0275 USD: 11/11/2022 XE.COM

Part E: Monitoring results

E1: Ecosystem services monitoring

- We provide annual monitoring results that support the request for new issuances in Annex 1.
- All monitoring targets were achieved.

E2: Maintaining commitments

- As no participants have resigned or been removed from the project, or had Plan Vivo Certificates allocated against their activities, we do not provide a table with their details in an Annex.

E3: Socioeconomic monitoring

- We provide the results of monitoring of socioeconomic impacts (survey) every 5 years after baselining (impact indicators). This will be reported during this year's verification audit. Nevertheless, on a yearly basis, the project monitors its activities (yearly activity-based indicators).
- These activities include in this reporting period the organization of 31 training sessions at 21 different sites.
- The restoration project has also clear benefits for the wider communities living around the project exclosures. The most important factors include reduction of erosion and gully, conservation of soil nutrients and groundwater. For instance, forest restoration will locally benefit water availability for the upslope communities. Overall, we expect a net gain in (ground)water availability, also for the upslope communities. More socioenvironmental investments will be made in 2023, through the sales of the Plan Vivo credits.

E4: Environmental and biodiversity monitoring

- The project expanded with 1319 ha in the Dawsira area.
- In total, 44 monitoring plots have been established to measure aboveground biomass and below ground carbon.
- No other changes to the monitoring plans or protocols of the project need to be reported in the updates section of this report.

Part F: Impacts

F1: Evidence of outcomes

- We report research outcomes, patterns or trends from ongoing monitoring or other information which supports the impacts – socio-economic, environmental or cultural – which the project has had every 5 years after baselining. Resampling data has been collected in 2022 and the verification audit is planned in May 2023. In Annex 2, we provide a short description of activities with photographs.

Part G: Payments for Ecosystem Services

G1: Summary of PES by year

- We used the following formula to allocate PEServices to n villages (see PDD):

$$\text{PES allocation} = 1/n * 50\% \text{ PES} + \text{Size}(\%) * 50\% \text{ PES}$$
- In 2023, a total of 7 425 000 ETB, 136 620 EURO or 140 332 USD (xe.com dd. 11/11/2022, i.e. transfer after peace deal) was allocated to food aid.
- The funds were allocated to 29,135 families from the project zones who got direct cash-for-food support.
- There are no funds being held by the project coordinator at reporting period end and there are no withheld payments at reporting period end.
- All payments are made in line with the terms of PES agreements signed.

Table 7: Breakdown of reinvestment budget per exclosure

Name of exclosure	Area (ha)	Allocation (ETB)	Share of allocation reinvested (%)
Adi Lehtsi	412	744166.8	103
Gidmi Gestet	46	247986.5	101
Meam Atali	83	298146.8	101
May Getnet	51	254764.9	101
May Hibo	53	257476.3	101
Afedena	81	295435.4	101
Adilal*	83	298146.8	101
Gemgema*	65	273337.8	101
Zban Dake	300	592330.2	102
May Baeti	46	247932.2	101
Lafa	45	246590.1	101
Daero Hidag	112	337529.4	102
Togul	36	234429.6	101
Sesemat	46	247986.5	101
Adi Meles	65	273459.8	101
Chelaqot	50	253409.2	101
Katna Ruba	44	245275.1	101
Gojam Sefra	275	558438.1	102
Debremedhanit	647	1062753	103
Hawahiwa	199	455406.1	102

Total area	2739	7425000	100
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* In Adilal and Gemgema there was a slight expansion of the project area in 2022. For the PES allocation the last year size (before the expansion) should be considered (since this is an ex post issuance). The expansion zones will be included in the PES redistribution of next year. Similarly, the Dawsira expansion will also be included in next year's PES redistribution.

Part H: Ongoing participation

H1: Recruitment

- Recruitment of the associations / focus groups of all exclosures was completed before. All sites comply with the eligibility criteria set out in the PDD.

H2: Project Potential

- No participant or area under management is on the project's 'waiting list' i.e. where a PES agreement is not yet signed but a *plan vivo* is in use.

H3: Community participation

- We briefly report on the community meetings held throughout the reporting period and attach the pictures of these to Annex 2.
- In total 31 trainings and group discussions were held in the past year. The focus of these meetings was on maintaining project awareness, on continued exclosure protection and management, grass management for cut-and-carry purposes and non-timber forest production by landless farmers. Note that these non-timber forest products have provided vital livelihood resources during the humanitarian blockade.
- On average 30% of the attendees to the trainings and group discussions were women.

Part I: Project operating costs

I1: Allocation of costs

- We completed the table below summarizing project costs during the reporting period and the sources of income used to meet these costs. The costs (excluding Plan Vivo investments) were fully covered using private donations and limited subsidies.
- Last year, in total 140 332 USD were used for socioecological investments (A1), this is slightly more than 60% of the revenues from the sale of PVCs from the last vintage.

Table 8: Allocation of costs (for the Feb 2022 – Feb 2023 reporting period).

Expense	Narrative	Amount (USD\$)	Contribution from sale of PVCs	Contribution from other sources (Belgian subsidies)
Investments and Functioning	Costs for soil and water investments, planting, equipment, transport	23,171	50%	50%
Personnel	Wages for project coordinators	27,963	30%	70%
Plan Vivo investments	See the socioecological investments described in section A1	140 332	100%	0%

Annexes

Annex 1. Monitoring results that supports the issuance request

Ecosystem Services Monitoring (note: red circle indicates which target value was met)

Activity	Activity Indicator (measure annually)	Annual Targets			Results
		Full Target Achievement	Partial Target Achievement	Missed Target	
Restoration activities	Area of each exclosure undergoing active restoration activities	>10%	=10%	<10%	Adi Lehtsi > 10% Gidme Gestet > 10% Meam Atali > 10% May Getnet > 10% May Hibo > 10% Afedena > 10% Adilal > 10% Gemgema > 10% Zban Dake > 10% May Baeti > 10% Lafa > 10% Daero Hidag > 10% Togul > 10% Sesemat > 10% Adi Meles > 10% Chele Quot > 10% Katna Ruba > 10% Gojam Sefra > 10% Debremedhanit > 10% Hawahiwa > 10% Dawsira > 10% → Guarding and restoration activities were covering all areas
Tree Planting	Number of seedlings	>=4000 seedlings	<4000 and >=3000	<3000 seedlings	5000 Olea seedlings planted
	Survival Rate	>=30%	<30 and >=25	<25%	Most recent survival rate estimated: 90%.

* If one or more of the indicator values is below its performance target for one monitoring period, the full issuance is received but corrective actions must be implemented. In 2023, seedlings will be planted again.

Socioeconomic Monitoring

Activity	Activity Indicator (measure annually)	Annual Targets			Results
		Full Target Achievement	Partial Target Achievement	Missed Target	
Capacity-Building	Number of organized trainings for landless farmers (M/V) per year per enclosure	1		0	Adi Lehtsi = 1 Gidme Gestet = 1 Meam Atali = 1 May Getnet = 1 May Hibo = 1 Afedena = 1 Adilal = 1 Gemgema = 1 Zban Dake = 1 May Baeti = 1 Lafa = 1 Daero Hidag = 1 Togul = 1 Sesemat = 1 Adi Meles = 1 Chele Quot = 1 Katna Ruba = 1 Gojam Sefra = 1 Debredehanit = 1 Hawahiwa = 1 Dawsira = 1
	Participants from more vulnerable groups (women, youth, elderly people)	>25%		<25%	At all sites > 35%
Availability of grass fodder	Beneficiaries of grass fodder per enclosure	>=3	<3 and >=2	0	In all enclosures: cut-and-carry system implemented
Countering displaced grazing	Number of observations of displaced grazing mentioned during the yearly meeting of association, other NTFP users and the village council	<2	2	>2	Adi Lehtsi = 0 Gidme Gestet = 0 Meam Atali = 0 May Getnet = 0 May Hibo = 0 Afedena = 0 Adilal = 0 Gemgema = 0 Zban Dake = 0 May Baeti = 0 Lafa = 0 Daero Hidag = 0 Togul = 0 Sesemat = 0 Adi Meles = 0

					Chele Quot = 0 Katna Ruba = 0 Gojam Sefra = 0 Debremedhanit = 0 Hawahiwa = 0 Dawsira = 0
Countering timber harvesting on public lands	Number of observations of timber harvesting on public lands mentioned during the yearly meeting of association, other NTFP users and the village council	<2	2	>2	Adi Lehtsi = 0 Gidme Gestet = 0 Meam Atali = 0 May Getnet = 0 May Hibo = 0 Afedena = 0 Adilal = 0 Gemgema = 0 Zban Dake = 0 May Baeti = 0 Lafa = 0 Daero Hidag = 0 Togul = 0 Sesemat = 0 Adi Meles = 0 Chele Quot = 0 Katna Ruba = 0 Gojam Sefra = 0 Debremedhanit = 0 Hawahiwa = 0 Dawsira = 0

Environmental Monitoring

Activity	Activity Indicator (measure annually)	Annual Targets			Result and mitigating actions
		Full Target Achievement	Partial Target Achievement	Missed Target	
Water Management	Number of Percolation Ponds per enclosure	>=2	<2 and >=1	0	Adi Lehtsi > 2 Gidme Gestet > 2 Meam Atali > 2 May Getnet > 2 May Hibo > 2 Afedena > 2 Adilal > 2 Gemgema > 4 Zban Dake > 2 May Baeti > 2 Lafa > 2 Daero Hidag > 2 Togul > 2 Sesemat > 2 Adi Meles > 2 Chele Quot > 2 Katna Ruba > 2 Gojam Sefra > 2 Debremedhanit > 2

					Hawahiwa > 2 Dawsira > 2
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Annex 2. Project photo report

Figures 2.1 Workshop with Dogua Tembien Woreda staff to strengthen government collaboration in supporting the communities and in creating awareness on forest protection and sustainable management.



Figure 2.2 Meeting with EthioTree committee and project rangers in Hagere Selam and Tukul in continued awareness of forest protection.



Figure 2.3 Community meetings





Figure 2.4 preparation, transportation and planting of Olea seedlings





Annex 3. Baseline of Dawsira

Here we add the baseline data and credit quantification for the new site: Dawsira. The site was baselined in January 2022. We follow the same methodology and table formats as described in the approved PDD.

Soil and biomass data

<i>Exclosure</i>	<i>Dawsira (44 plots)</i>	
<i>Compartment</i>	20x20 m	5x5 m
<i>Average DBH/DSH (cm)</i>	3.26	0.9
<i>Average height (m)</i>	3.7	0.91
<i>St. dev. DBH/DSH (cm)</i>	6.2	0.52
<i>St. dev. height (m)</i>	1.77	0.49
<i>Average number of trees per plot</i>	18	15
<i>AG biomass: carbon content per compartment (kg C)</i>	1288	2
<i>AG biomass : carbon content per ha (tonC/ha)</i>	17.3	
<i>Average SOC%</i>	1.96%	
<i>Average soil depth (m)</i>	0.2	
<i>SOC (tonC/ha)</i>	52.02	
<i>Area (ha)</i>	1319	

Carbon benefit calculation

$$\text{TCB} = (\text{TCclimax} - \text{TICS}) / 20$$

This yields:

$$\text{TCB (Dawsira)} = (\text{TCclimax} - \text{TICS}) / 20 = (102.5 - 69.32) / 20 = 1.66 \text{ tC/ha/yr}$$

Summary

By taking into account the area and the project period (20 years), as well as the molar conversion factor of 3.67 (Mekuria et al., 2011), we calculated the total benefits:

$$\text{TCB (Dawrisa)} = 1.66 \times 1319 \text{ ha} \times 3.67 = 8035 \text{ tCO}_2 \text{ per year}$$

Data collection

