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ANNEX

#### Foreword

All certified carbon offset projects are based on international standards such as the Verified Carbon Standard (VCS) and the Gold Standard. These standards set out strict, reliable rules and quality requirements that must be met and adhered to by all carbon offset projects that are certified under those standards. They are a prerequisite that must be met before carbon credits can be generated.

The carbon offset projects are audited by independent third parties at regular intervals (validation before the project is approved, plus regular verifications at the end of monitoring phases). These accredited, neutral auditors are also known as validation and verification bodies (VVBs) and must be approved by the administrators of the standards.

All information about the standards and every certified carbon offset project are available online to the general public at all times. An overview is available here: <a href="https://www.climatepartner.com/en/carbon-offset-projects/project-standards">https://www.climatepartner.com/en/carbon-offset-projects/project-standards</a>

The criticisms of the certified carbon offset projects in Uruguay and Ghana presented in the foodwatch reports, and the ZDF frontal article dated 21/06/2022 which builds on these, are largely false, tendentious, erroneous and refutable.

The statement issued by Verra, the world's leading institution for the publication of quality standards for carbon offset projects, on 22 June summarises this view as follows:

'In its June 21 episode of frontal, German broadcaster **ZDF fundamentally distorts the role that carbon finance plays** in promoting sustainable land management, thereby **undermining efforts to meet the climate challenge** that the producers purport to be supporting.

This distortion flows directly from the misstatements of two campaigners whose opinions featured prominently in the piece – despite the fact that they run contrary to the overwhelming preponderance of scientific thought and available evidence. This tendency to "magnify the minority" is exactly the kind of coverage that has undermined trust in climate science and delayed climate action for decades.'

Verra is the publisher of the Verified Carbon Standard (VCS), under which the Guanaré afforestation project is certified, and published its statement entitled 'ZDF is Wrong to Claim Magical Thinking Will Meet the Climate Challenge' on its website on 23 June. https://verra.org/zdf-is-wrong-to-claim-magical-thinking-will-meet-the-climate-challenge/

# I. Statement regarding project VCS 959: Guanaré afforestation project, Uruguay

- 1. Claim (by ZDF frontal and Foodwatch): The project is not additional.
  - This claim is incorrect.
  - Its additionality has been confirmed by independent auditors. The relevant documents are available to the general public.

The audits of the project performed as a matter of course by impartial **auditors confirm the additionality of the project unequivocally**<sup>1</sup>:

'The baseline study determined that continuation of extensive grazing is the most likely use of the land. Additionality is demonstrated through the fact that the expected internal rate of return of the proposed project activity without considering carbon finance is lower than the benchmark internal rate of return for this type of investment in Uruguay. In addition, barriers analysis and common practice analysis showed that afforestation in the area of the proposed project activity is not likely to occur without carbon financing'.

Moreover, the definition of additionality is deliberately abridged in the report. It is suggested that the afforestation and preservation of the plantation have to be financed entirely by carbon credits. This is not the case, however, according to the relevant international carbon standards. According to the definition of additionality, the revenue from carbon credits must be the deciding factor that makes the project possible – in this case, afforestation with eucalyptus and other plants – but it does not necessarily have to be the source of all of its finance. The **representation by ZDF is erroneous**. The project land was originally used for cattle grazing. The afforestation activity is only more profitable than the continued use of the land for cattle grazing due to the sale of carbon credits. The verification report prepared by the impartial auditors confirms this.<sup>2</sup>

Simon Counsell, referred to in the ZDF report as an 'expert in carbon offsetting', goes on to allege that wood production is highly profitable in this project. In his opinion, it is highly likely that the project is not additional. This statement is based on pure speculation and is not supported by evidence.

Dan Guapura, who was interviewed for the report, says:

'CO2 reduction is an additional business for our investors and an additional motivation to invest'.

The statement is to be interpreted in line with the standards that apply to the project and means that 'Without selling carbon credits, this project would not have attracted any investors.' This is substantiated by the project's certification under the Verified Carbon Standard. The interpretation in the ZDF report that 'Additional does not mean saving the climate in this case, but rather profit' is a tendentious and erroneous interpretation that blatantly contradicts the certified proof of additionality. The certification reports are not cited or verified in the ZDF report.

The statement released by Verra – the organisation behind the Verified Carbon Standard – on 23 June rejects the allegation of a lack of additionality as follows:

'The most egregious and obvious error involves the claim that carbon finance played no role in creating the project. This claim is actually proven false by another interviewee, Dan Guapura of Agroempresa Forestal SA.

<sup>&</sup>lt;sup>1</sup> Project Description (2012). GUANARÉ FOREST PLANTATIONS ON DEGRADED GRASSLANDS UNDER EXTENSIVE GRAZING, page 3

<sup>&</sup>lt;sup>2</sup> SCS Global Services. Verification Report for the 'Guanaré forest plantations on degraded grasslands under extensive grazing' project. Published on 5 April 2021.

Guapura explains, on camera, that carbon finance de-risked the project and attracted investors, but the ZDF narrator's dismissal of Mr. Guapura's statement illustrates the production team's lack of understanding of carbon finance. The project's audited documents not only explain the rationale behind the project but list the relevant methodologies and identify the auditors as well as their credentials while including notes from their investigation.

The United Nations Framework Convention on Climate Change (UNFCCC) oversaw the creation of this particular methodology through the Clean Development Mechanism, and it did so because investors were leery of the higher costs and lower returns associated with sustainable timber projects. The goal, in other words, was to improve the financial viability of sustainable forest management – an objective one of the featured campaigners has long opposed on ideological grounds. While such outlier voices should be heard, they must not be amplified above those of people with bona fide expertise in the field.

Any change in land use involves risk, and timber projects incur higher costs and risks than does the cattle grazing which dominates the region. Those risks increase when longer rotations are layered in to accommodate sustainable practices. Both the project design document and the audited verification report quantify the degree to which the internal rate of return (IRR) fell short of that needed to attract investors without carbon finance, and one section of the project area generated only half the rate that less sustainable practices would have generated.

The documents further show that the project was part of a larger and very successful effort to attract investment into such activities. Indeed, they show that carbon finance supported a staggering 94 percent of the timber plantations created in Uruguay from 2006 through 2011, and that it did so by helping to overcome multiple challenges that ZDF either ignores or scoffs at: namely, the lack of access to long-term credit, the nervousness among land owners and local communities about abandoning cattle ranching and embracing something new, the lack of local workers who could perform the task, and the cost of transporting timber from remote areas.

https://verra.org/zdf-is-wrong-to-claim-magical-thinking-will-meet-the-climate-challenge/https://verra.org/zdf-is-wrong-to-claim-magical-thinking-will-meet-the-climate-challenge/

**All registry documents** relating to project VCS 959 are available on the Verified Carbon Standard **website**:

https://registry.verra.org/app/projectDetail/VCS/959

As an **impartial auditor**, **Rainforest Alliance** carried out the project validation<sup>3</sup> as well as the first verification<sup>4</sup> for the monitoring phase from 24 April 2006 to 12 January 2013. The **impartial auditor SCS Global Services** (SCS) confirmed the issuance of carbon credits for the second verification<sup>5</sup> (monitoring from 12 January 2013 to 31 December 2018). The mandatory **change in auditors after two audit cycles further underlines the validity and transparency** of the verified carbon credits of the project.

The third monitoring period is still running and will end by 31 December 2023 at the latest. At the moment, a verification report is planned for every five years.

<sup>&</sup>lt;sup>3</sup> Validation report (2012): Validation Assessment Report for: Guanaré S.A. in Treinta y Tres, and Melo, Uruguay Rainforest Alliance, page 20

<sup>&</sup>lt;sup>4</sup> **First verification report (2014)**: Verification Report: VCS Version 3, Guanare VCS Verif 14, Rainforest Alliance, page 2

<sup>&</sup>lt;sup>5</sup> **Second verification report (2021, first submitted in 2020)**: CCB & VCS Verification Report: CCB Version 3, VCS Version 3, Verification report for the "Guanaré' Forest Plantations on Degraded Grasslands under Extensive Grazing" Project, SCS Global Services, Francis Eaton and Scott Eaton.

### 2. Claim (by ZDF frontal and Foodwatch): The afforestation is not a nature conservation project, but rather a timber plantation.

- This claim is false and tendentious.
- Sustainable forestry does not go against the character of a sustainable, certified carbon offset project. This so-called 'thinning' is taken into account in certified forest projects and is presented clearly in the project documentation.

The report suggests that the principle of a certified forest project would be mutually exclusive with simultaneous cultivation. This is not the case. The defining factor of a certified forest project is long-term carbon sequestration. This sequestration takes place even if a forest or plantation is being managed and cultivated in a sustainable manner. The determining factor in the calculation of carbon sequestration is the baseline, i.e., the most likely alternative use of the project area.

Project VCS 959 encompasses more than 20,000 hectares of land that was once used for intensive cattle grazing - it now holds sustainably managed forest plantations from which wood products are obtained. Consequently, the pivotal baseline is the continuation of cattle grazing.

The objectives of the product are sustainable wood production and carbon sequestration through afforestation. The forest plantations (consisting of Eucalyptus grandis, Eucalyptus globulus, Eucalyptus dunnii, Eucalyptus maidenii and Pinus taeda) will be planted in 22-year rotations and managed with pruning (to a minimum height of 12 m) and two to three thinning operations. The forests will be replanted on a continuous basis. This method is consistent with the requirements of the FSC<sup>7</sup> sustainable forestry standard. The project has received the corresponding FSC certification.

Quality logs and thin wood are produced as part of the project. Quality wood is used to manufacture furniture, houses and similar products. Any materials not suited to wood production are sent to be pulped. This ensures that the majority of every single tree is put to use.

Additionally, the term 'timber plantation' is used in a tendentious and suggestive way in the **report**. The fact that wood sequesters CO<sub>2</sub> is neither communicated nor explained further.

For the following reasons, the afforestation of eucalyptus as a timber forest in the Guanaré project area in Uruguay is prudent<sup>8,9</sup>:

- Eucalyptus plants are highly efficient at absorbing CO<sub>2</sub> and producing oxygen because these plants grow rapidly and have a high wood density.
- Eucalyptus grandis and Eucalyptus dunnii are particularly well suited to the afforestation of soil of low fertility and moderate dryness.
- Eucalyptus consumes water more efficiently than other species of tree because it needs less water than most other species.
- Eucalyptus plants were chosen with the availability of water in the project area in mind: eucalyptus trees become less active in dry periods (they close their stomata and lose leaves).
- The forest plantations will improve the fertility of the soil because leaves and branches will provide key nutrients.

<sup>6</sup> Project Description (2012) GUANARÉ' FOREST PLANTATIONS ON DEGRADED GRASSLANDS UNDER EXTENSIVE GRAZING, page 3

FSC certification (2021-2026): https://www.bosquesdeluruguay.com/media/2022/03/UYMVD-20130531-Grupo-AF-RC2020-AD-36-A-19.2-NM.pdf

<sup>&</sup>lt;sup>8</sup> N Sembiring et al 2020 IOP Conf. Ser.: Mater. Sci. Eng. 935 012068

<sup>&</sup>lt;sup>9</sup> See Sky Stephens, Michael R. Wagner, Forest Plantations and Biodiversity: A Fresh Perspective, Journal of

Forestry, Volume 105, Issue 6, September 2007, pages 307–313, Forest Plantations and Biodiversity: A Fresh Perspective | Journal of Forestry | Oxford Academic (oup.com)

### 3. Claims (by Foodwatch): A corollary of eucalyptus plantations would be water problems; monocultures would act as fire accelerants.

- The evidence cited for the Guanaré project specifically is irrelevant, erroneous and suggestive.
- There are no negative effects on the drainage basin. The changes in the soil composition due to the project even enable it to retain more water in winter.
- The project explicitly takes the prevention of forest fires into account and has access to a wide range of fire prevention resources.

For the Guanaré project area, it has been proven that afforestation – as is being done by the project – has no negative effects on the drainage basin and does not compete with other types of use. Furthermore, the project has caused the soil composition to change, so that certain layers of soil can now retain more water in winter. 10,11

The project named the prevention and control of forest fires as one of the most important aspects in its management plan. A plan has been in place since 2007 that encompasses the preparation of emergency plans for every area, the delivery of equipment to every site, the training of direct employees and contractors and the training of the workers in the project area.

Furthermore, the project management plan envisages membership in the PAIF GROUP, an association of 15 forestry companies that focus on the prevention of forest fires through mutual cooperation and by financing fire prevention equipment. To this end, the PAIF GROUP owns several aeroplanes, helicopters, brigades and water tanks.

# 4. Claim (by ZDF frontal and Foodwatch): The project is a business for the cellulose industry.

- This allegation is tendentious.
- The project accounts for the harvesting of wood products and manages the forest in a sustainable manner that has been certified by the FSC. Before carbon credits are issued, the use of the forest for economic purposes is taken into consideration accordingly.

The report's claim that the wood is also used to make paper is not consistent with the information available to ClimatePartner.

Additionally, the **project design factors the harvesting of wood products into its CO<sub>2</sub> calculation.** Before carbon credits are issued, the use of the forest for economic purposes is factored into the additionality assessment.

According to the project design document, the objective of the project is afforestation (i.e., carbon sequestration) and the production of high-quality logs at the same time. Other carbon offset projects in the region that are registered with the Verified Carbon Standard also produce high-quality wood, not inferior wood for paper production. These projects are situated in areas that were used for cattle grazing for over 300 years. There was no infrastructure to process quality wood products in the project region. Only the combination of quality forest management and financial resources by means of carbon credits can make such projects profitable, and it is the only way for them to be launched and implemented with the support of investors.

<sup>&</sup>lt;sup>10</sup> The Effects of Afforestation on Uruguay's Water Resources, Silveira, L.1; Alonso, J.2; Martínez, L.

<sup>&</sup>lt;sup>11</sup> Effects of Eucalyptus sp. Plantations on Uruguay Natural Resources. Part II: Soils, Delgado, S.1; Alliaume, F.; García Préchac, F.; Hernández, J.

The ZDF report also suggests that controlled clearance in the project area releases  $CO_2$  that has already been 'sold' as credits. This is not the case. **The Verified Carbon Standard**<sup>12</sup> **sets out precise requirements for scheduled cutting to take place in afforestation projects.** In these cases, the  $CO_2$  released by the cutting must be included in the project's calculated emissions. A long-term average of the so-called 'GHG benefit' is calculated from the project's various growth phases (carbon sequestration through growth and existence as well as the release of  $CO_2$  by selective cutting). The number of credits available to a project may never exceed the long-term average. This way,  $CO_2$  released in the project cycle is taken into account on paper.

The project's additional certification by the Forest Stewardship Council (FSC) is evidence of its sustainable forestry. The FSC imposes additional forest management requirements with regard to sustainability, biodiversity and the protection of indigenous people.<sup>13</sup>

Furthermore, the more extensive information about the project confirms that the project has had a positive effect on the community and region.

The project not only generates carbon credits, but also has other positive effects. The use of the land in the region has traditionally been characterised by extensive cattle ranching, the hallmarks of which are a low level of productivity, very low employment, precarious employment contracts and poor opportunities for women and young people. For example, an independent report by the private investment and financial consulting firm EXANTE (www.exante.com.uy) shows that there are 17 employees per 1,000 hectares in forestry, compared to just seven per 1,000 hectares in cattle grazing.

Afforestation as part of the project, combined with controlled commercial use, will make it possible for family businesses to grow and other jobs to be created. <sup>14</sup> Internationally tradable products will also be produced, which will benefit the existing wood-processing enterprises in the country too.

Members of the community have also been trained as rangers to help prevent illegal activity in the project area. The new employment opportunities are helping to **eradicate rural poverty**. Moreover, forestry jobs are less affected by natural disasters such as drought and floods than the grazing jobs that were dominant before the project began.<sup>15</sup>

The geodata analysis also shows the transformation of grazing land into wooded areas empirically.

<sup>14</sup> Project Description (2012) GUANARÉ FOREST PLANTATIONS ON DEGRADED GRASSLANDS UNDER EXTENSIVE GRAZING, page 22

<sup>&</sup>lt;sup>12</sup> VCS Standard v.4.2 Section 3.2.21 (January 2022; previously published in the VCS AFOLU Requirements) (https://verra.org/wp-content/uploads/2022/02/VCS-Standard\_v4.2.pdf)

<sup>&</sup>lt;sup>13</sup> https://fsc.org/sites/default/files/2019-07/FSC-STD-01-001%20V5-2%20EN\_web\_version.pdf

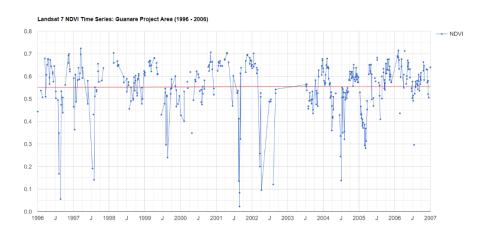
<sup>&</sup>lt;sup>15</sup> SCS Global Services. Verification Report for the 'Guanaré forest plantations on degraded grasslands under extensive grazing' project. Published on 5 April 2021. Page 30-31



Image 1 Project area before the start of the project (December 2006)

This is a high-resolution image of the Guanaré project area before the start of the project. It is clear that the area solely consisted of open grazing land with no trees in 2006. We compared the information above with the normalized difference vegetation index (NDVI), which is shown in the following image.

#### Eligibility of the project for support before the start date



The NDVI is an index which shows the reaction of leaves to certain wavelengths of light in relation to the presence of vegetation cover on the surface of the land. As we are able to measure the indices, we can categorise the land into various classes of ground cover. Before we launched the project, we examined the suitability of the project area over the past ten years between 1996 and 2007 to make sure that no woods or forests were present. The margin of 0.55 shown above in the average line (in red) is a typical indicator of grazing land.<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> A Zaitunah et al 2018 IOP Conf. Ser.: Earth Environ. Sci. **126** 012112
Ünal et al 2014 Assessment of Rangeland Vegetation Condition from Time Series NDVI Data <a href="https://legacy.rma.usda.gov/policies/pasturerangeforage/">https://legacy.rma.usda.gov/policies/pasturerangeforage/</a> 2014 Vegetation Index Pasture, Rangeland and Forage

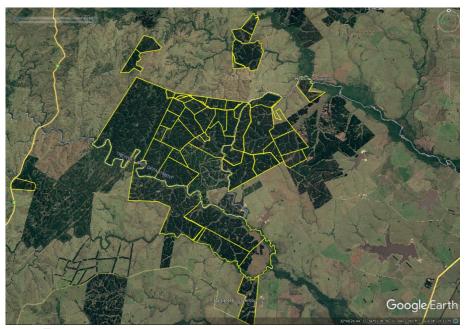
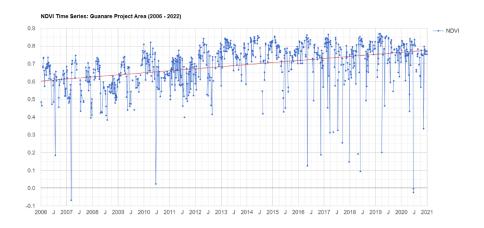


Image 2 Project area after the start of the project (November 2021)

To make it possible to compare the work of the project with regard to afforestation and reforestation, we took a high-resolution image of the same site showing the massive transformation of the open area observed in 2006 into a wooded area in 2021.

#### Project work in 2021



In the NDVI diagram above, we clearly see the transformation of the land from grazing land in 2006 into a forest over the last 15 years of the project being implemented. The red average line shows that the NDVI value in the diagram has gradually risen from 0.6 for grazing land in 2006 to over 0.75, a typical indicator of a wooded area. $^{16}$ 

## 5. Claim (by Foodwatch): The project uses pesticides and is destroying biodiversity as a result

- This allegation is unspecific and erroneous.
- According to the project monitoring report, pesticides are used minimally and in a way that benefits the carbon offset project. Where possible, they are not used.

According to the monitoring report<sup>17</sup>, pesticides are only used during the planting period, in the first year and half of life of the plantation, and then every eight to ten years thereafter.

The FSC verification report on the wooded area confirms the use of pesticides yet notes that other methods such as partial pasturing and other types of soil cultivation reduce the use of pesticides. All of the products used by the project are approved by the Ministry of Livestock, Agriculture, and Fisheries of Uruguay (MGAP) and are consistent with the national Code of Good Forestry Practices. It is also expressly confirmed that no products prohibited by the FSC are used.<sup>18</sup>

- 6. Claim (by Foodwatch): In a project video<sup>19</sup>, ClimatePartner would use euphemistic promotional messages and suggest that the project area in Uruguay contains natural forests.
  - The quotations have been taken out of context, rendering them inaccurate and misleading.

#### Statement 1:

'In a video, ClimatePartner refers to the project as "sustainably managed forests" (0:22) in spite of the use of pesticides.'

The project meets the sustainable forestry requirements set out by the Verified Carbon Standard. The local, minimal use of pesticides complies with the national regulations and the specifications of the FSC. According to the monitoring report, no negative effects on the environment, workers or local communities have been observed.

#### Statement 2:

'The company suggests that they are "Uruguay's natural forests (...) for a variety of native animal and plant species" (1:17)

This statement has been taken out of context. The full quotation in the video is as follows:

'Here, the population learns about forestry and gains insights into sustainable handling of nature. Uruguay's natural forests are habitat and food source for a variety of native animal and plant species. It is our goal to restore and preserve the biodiversity of these valuable areas. The project activities motivate the rural community to protect their ecosystem.'

Consequently, the statement regarding natural forests does not apply to the project area. Instead, it expresses that the project's activities involve training courses that enlighten the local population about sustainable forestry and raise awareness of the value of existing natural forests outside of the project area.

<sup>&</sup>lt;sup>17</sup> Monitoring report (2019) Guanaré Forest Plantations on Degraded Grasslands Under Extensive Grazing, page 90 <sup>18</sup> <a href="https://www.bosquesdeluruguay.com/media/2022/03/UYMVD-20130531-Grupo-AF-RC2020-AD-36-A-19.2-">https://www.bosquesdeluruguay.com/media/2022/03/UYMVD-20130531-Grupo-AF-RC2020-AD-36-A-19.2-</a>
<a href="https://www.bosquesdeluruguay.com/media/2022/UYMVD-20130531-Grupo-AF-RC2020-AD-36-A-19.2-</a>
<a href="https://www.bo

<sup>19</sup> https://fpm.climatepartner.com/project/details/1148/de

#### Statement 3:

'ClimatePartner is aware of the problems of afforestation projects because ClimatePartner writes: "[Other projects] can be better for biodiversity than a monoculture tree plantation project".'

This quotation too has been taken out of context. The complete version on our website is as follows:

'For example, high quality forest conservation that provides economic opportunities for the local population and avoids deforestation can be better for biodiversity than a monoculture tree plantation project.'<sup>20</sup>

The statement that forest conservation 'can' be better than afforestation with monocultures makes it clear that whichever solution is better suited (conservation or afforestation) depends on the circumstances in each case. In the case of the Guanaré carbon offset project (VCS 959), the project area was degraded land that had been used for cattle grazing. There were no forests in the project area that could have been protected by a forest conservation project. The reason why afforestation with eucalyptus is prudent is described in '2. Claim (by ZDF frontal and Foodwatch)' on page 6. With regard to biodiversity, the cattle grazing that took place before the project began must be used as a baseline, not a forest conservation project. The impartial auditors who were responsible for the second verification report have confirmed 'that the project has had net positive biodiversity impacts'.'<sup>21</sup>[66]

<sup>&</sup>lt;sup>20</sup> https://www.climatepartner.com/en/news/what-does-net-zero-really-mean

<sup>&</sup>lt;sup>21</sup> **Second verification report (2021, first submitted in 2020)**: CĆB & VCS Verification Report: CCB Version 3, VCS Version 3, Verification report for the "Guanaré" Forest Plantations on Degraded Grasslands under Extensive Grazing' Project, SCS Global Services, Francis Eaton and Scott Eaton, page 33.

### II. Statement regarding the Gold Standard stove project in Kumasi, Ghana

- 1. Claim (by ZDF frontal and Foodwatch): The new stoves would not replace open fires, but rather would replace gas stoves which are less environmentally harmful than the stoves that were distributed.
  - This claim is false and erroneous.
  - Due to their cost and availability, gas stoves are not an economical or practical
    alternative for most of the low-income households in the region. Consequently, the
    baseline certified by impartial auditors in accordance with the Gold Standard
    primarily takes into account the currently used traditional cooking techniques which
    usually involve an open fire.

The goal of the stove project in Ghana is to provide the regional population with affordable, efficient stoves, and it is **certified as such under the Gold Standard**.

According to the project design document, which is based on data from the Environmental Protection Agency in Ghana, households currently use charcoal and/or firewood as fuel to burn in inefficient open stoves. This initial situation is referred to as the baseline. For cost reasons, gas stoves are not a financially viable or practical alternative for most low-income households in this region.

According to a recent report<sup>22</sup> in 2020, the use of solid fuels is widespread in Ghana. **78 per cent of the population uses wood, charcoal and other emission-intensive fuels** which results in around 10,000 deaths each year, due largely to household air pollution. **The promotion of improved charcoal and wood stoves has the best benefit-cost ratio of all the interventions studied, including cooking with gas**.

Therefore, without a doubt, the predominant and **independently certified baseline** (the situation without the carbon offset project) **is the currently used traditional cooking method, normally on an open fire (a three-stone fire), which uses non-renewable biomass.<sup>23</sup>** 

The initial wood equivalent consumption value of 5.46 tonnes per household per year was calculated using conservative data. The improved cooking stove that was and is being introduced by this project is significantly more efficient than the basic stove – the open fire – and results in considerable fuel savings and therefore a reduction in emissions. This project would not have been realised without finance from carbon credits. This has been proven with all the key additionality requirements set out by the certification standard.

The statement issued by Gold Standard on 23 June 2022 sums this up as follows:

'(...) This claim materially misrepresents the methodology this project applies to quantify impact. This methodology takes into account the baseline scenario to calculate its emission factors. **This includes monitoring surveys to assess the changes in cooking practice/patterns**. In particular, pre-project device usage (sometimes called "stacking") is accounted for in emission reduction calculations.

It is essential to understand that having a gas stove does not necessarily mean it is used. There can be several barriers, including behavioural patterns, cooking preferences, and cost, which can inform the full adoption of different cooking solutions. That is why carbon credit projects feature

<sup>&</sup>lt;sup>22</sup> https://www.copenhagenconsensus.com/sites/default/files/gp\_a4\_lpg.pdf

<sup>&</sup>lt;sup>23</sup> Project Design Document (PDD) (2017) Component project activity design document form for small-scale CDM component project activities page 11 ff. available at <a href="https://registry.goldstandard.org/projects/details/306">https://registry.goldstandard.org/projects/details/306</a>

**ongoing monitoring and independent verification**, as this one does. Again, the methodology has provisions to address pre-project device use for emission reduction calculation  $(...)^{24}$ 

The report also suggests that every household in the *random sample* had a gas stove. However, **a** survey of five households cannot be seen as representative when 25,000 efficient stoves are set to be distributed and is an insufficient and erroneous means of evaluating the project.

### 2. Claim (by ZDF frontal and Foodwatch): The CO<sub>2</sub> reduction calculations could be manipulated.

- This claim is false and erroneous.
- All calculations are certified under the independent Gold Standard which was developed by the WWF and other environmental NGOs – and cannot be manipulated. The baseline calculation already factors in current and future fuels, which includes gas stoves

According to the **monitoring report**, the parameter  $\mathsf{EF}_{\mathsf{projected\_fossilfuel}}$  takes into account the scenario that the **mix of present and future fuels used** would consist of a solid fossil fuel (lowest in the ladder of fuel choices), a liquid fossil fuel (represents a progression over solid fuel in the ladder of fuel use) and a gaseous fuel (represents a progression over liquid fuel in the ladder of fuel use choices). Thus a 50% weight is assigned to coal as the alternative solid fossil fuel and a 25% weight is assigned to both liquid and gaseous fuels.

The statement issued by AERA (AERA Group, the project developer) on 23 June 2022 explains the calculation logic as follows:

'(...) The value of charcoal consumption per capita is provided by the Environmental Protection Agency (EPA, 2002) and is **conservative** compared to the one provided in the study from FAO (FAO, 2002). The Environmental Protection Agency estimated the value of charcoal consumption at 0.43 to 0.46 kg per capita per day thus a minimum of 157 kg to 168 kg of charcoal per year. The minimum range is taken. Moreover, it is conservative compared to the value provided in the study done by FAO (FAO, 2002), which has been estimated at 180 kg per capita per year. this value of 0.43 is multiplied by 6 (wood-to-charcoal factor), by the number of person/households 5.81 (from the survey) and finally by 365 days thus the 5.46 t of woody biomass. Therefore, yes, all the stoves in the VPA can use the same baseline as the baseline consumption is applicable to project boundaries. **These values have been found conservative and applicable to the project. The VPA successfully completed 7 issuances with these baselines without any concerns being raised by GS or DOE.**'

The interviewees said the same thing in the report: 'Gas has become far too expensive.' For this reason, in particular, the use of gas as a fuel for cooking is still relatively limited. When it becomes unaffordable, households fall back on the traditional open three-stone fire. Our certified carbon offset project makes it easier to access improved cooking solutions which make an important contribution to climate action and to the health of the local population.

Without the efficient stoves, more trees would be cut down in an unsustainable fashion and significantly more  $CO_2$  would be released.

AERA describes it succinctly in its statement dated 23 June 2022:

'People using our stoves would use inefficient charcoal stoves if the project was not implemented. Again, please note that **we replace inefficient stoves**, **not LPG stoves**. So,

<sup>&</sup>lt;sup>24</sup> Gold Standard <a href="https://www.goldstandard.org/blog-item/gold-standard-response-inaccuracies-zdf-report-aldi">https://www.goldstandard.org/blog-item/gold-standard-response-inaccuracies-zdf-report-aldi</a>

people using both LPG and traditional charcoal stoves will now use LPG and Improved cookstoves. Thus, the displacement is not made on LPG but on inefficient stoves. As you mentioned LPG is quite expensive, so what would be the alternative for people having LPG, but not able to purchase gas for everyday needs? Well, they will rely on inefficient cookstoves (3 stones, traditional charcoal), leading to higher emissions and consumption. So, by replacing these baseline inefficient stoves (efficiency ranging from 10% to 18%) with Man&Man (efficiency of 30.9%) stoves, we ensure less emission and biomass consumption. <sup>25</sup>

As part of the stove project, around 25,000 efficient cooking stoves are sold at affordable prices to low-income Ghanaian households which used to rely on old, inefficient, open fireplaces. Not only do these have a negative impact on the environment, but they also have a severe effect on health, especially the health of women and children. They are exposed to intense air pollution from smoke, which is one of the main causes of respiratory diseases such as pneumonia and lung cancer, as well as strokes and heart disease. In order to throw light on this, there are awareness-raising campaigns and trainings designed to replace traditional cooking methods and reduce the consumption of non-renewable biomass.<sup>26</sup>

The monitoring plan in the project description requires every directly sold stove to be traced from the manufacturer to the user with its unique ID.<sup>27</sup> Individual households are not the only target group for the project. Communities and small businesses also purchase stoves – more than one in most cases. The individual registered households are not the only way to monitor how the stoves are being used; they can be traced to the individual households that received them through communities and small businesses. This is also important for contractual maintenance and any necessary repairs.

<sup>&</sup>lt;sup>25</sup> E-mail from AERA to ClimatePartner, 23 June 2022

<sup>&</sup>lt;sup>26</sup> Project Design Document (PDD) (2017) page 2 ff.

<sup>&</sup>lt;sup>27</sup> **Project Design Document (PDD) (2017)** Component project activity design document form for small-scale CDM component project activities page 13, note 20

### **ANNEX**

CO2 CETHICALES

