Response to a letter of Dr. Brown addressed to Mrs. Kohrs

19th October 2020

Dear Dr. Brown

the environmental association Hamburger Energietisch e. V. (HET), which is officially recognised by the German Federal Environment Agency, has asked me to write to you in response to your letter of the 12th October 2020 addressed to Mrs. Bertchen Kohrs and the Namibian environmental association Earthlife Namibia, regarding the export of bushwood from Namibia for the purpose of energetic use in Hamburg.

The HET understands, that your letter to Mrs. Kohrs has been widely circulated to members of the Namibian Chamber of Environment and thus has to be understood not as a private communication, but as a public matter. In this letter, you refer directly and indirectly to an expert report that I wrote commissioned by HET. I am pleased to comply with the request of HET, especially because a public discussion that has been going on in Hamburg for several months about the import of bushwood from Namibia for the purpose of energetic use has apparently now also started in Namibia.

I kindly ask you to make my letter publicly available to all NCE members and all others who received your own letter of the 12th October 2020.

I am taking up some of the points made in your letter to ask questions or to add comments and explanations.

1. You write under point 8:

" An important aspect to consider is the carbon footprint of the bush biomass when it reaches Germany. It may surprise you to learn that specific carbon assessments for the project show that it is actually carbon negative. It is thus immediately 100%+ better than both the existing coal and the natural gas which it is being compared to."

I am too very surprised by your assertion. I would be very grateful if you could make these "specific carbon assessments for the project" available for review to me as soon as possible.

When preparing my report (Rabenstein 2020) and the <u>English summary</u>, I was aware of the <u>report by the forestry consultancy UNIQUE</u> (Seebauer et al., 2019) and a <u>summary by UNIQUE</u>. As all these studies do not correspond to your announcement, I am very curious about your new source.

You can certainly not refer to UNIQUE's report, which only records greenhouse gas (GHG) emissions as far as the gate of a biomass power plant in Namibia (Seebauer 2019, p. 66), i.e. not as far as Germany, as you write. A supplementation of GHG emissions to include fuel conditioning and transport to Germany was made in my report.

2. You write under point 6:

"For example, the concerns about land use change ..."

I suspect from context, that you here are not referring to the calculation of GHG emissions to be taken into account for land-use change according to the rules described by the IPCC.

The recovery of pasture land for livestock or tourism, by removing or thinning out scrubland, is obviously a process that has to be accounted in the AFOLU (Agriculture, Forestry and Other Land Use) sector in current greenhouse gas balances – e.g. under the UNFCCC National Determined Contributions (NDC). The Intergovernmental Panel on Climate Change (IPCC) has written a separate chapter 11 for this in its Fifth World Climate Report. According to this chapter, the AFOLU land use sector is responsible for almost a quarter of anthropogenic greenhouse gas emissions, which are mainly caused by deforestation and agricultural emissions from livestock, soil and nutrient management. Clearly corresponding standard methodology is to be applied here.

3. In the part of my report, in which I review the UNIQUE study (Seebauer et al., 2019), a crucial error in the assessment of the emissions balance from land use changes was identified (Rabenstein 2020, p. 25 & 45 ff): The underlying assumptions from literature for calculating effects on soil organic carbon are incomplete, outdated and flawed. Instead of a postulated soil carbon sink, a transformation of bushland to grassland in most cases will produce not only net emissions from reduced above ground biomass but also additional emissions from carbon depleting soil.

Lead author Mr. Seebauer has acknowledged and explained this important shortcoming of his study in personal E-Mails to me. With a key assumption of the UNIQUE report proven to be invalid the environmental and development policy associations, which published the <u>Joint statement</u> on 9th October 2020, expect that GIZ withdraws the flawed UNIQUE report. If you would like a more detailed account of the shortcomings of the UNIQUE study, please let me know.

4. Further, on 5th of August 2020, the GIZ-BCBU Project Advisor for Climate Change, Mr. Johannes Beck, gave a presentation on the content of the UNIQUE expert report (Seebauer et al., 2019) at an event at the Namibia University for Science and Technology (NUST). From Klaus Schade (Namibia) I received a copy of the presentation of Mr. Beck. Upon my request, Mr. Beck confirmed, that my report has been made available to him before his presentation.

In sum it seems fair to assume, that my critical review and conclusions were concealed deliberately and that the audience was negligently or purposely misled in an act that damages the reputation of the important Namibian scientific institution NUST. The suppression of inconvenient new findings and a professional debate is not compatible with the internationally recognised and binding principles of scientific ethics. According to the behaviour of those responsible for the GIZ project in an email exchange with me, I must assume that the misleading was made deliberately.

5. You write under point 3:

"The city of Hamburg wishes to exit from using coal (much imported from South Africa) for carbon reasons. They are looking at options. The most obvious option is gas, from Russia. For geo-political reasons this is awkward. It would be worth looking at whether opponents to the Namibia biomass option have any direct or indirect interests in the gas or coal sector, or whether they have any better solutions for transitioning from coal?"

According to information from Wärme Hamburg GmbH, the Tiefstack combined heat and power plant in Hamburg currently obtains 30 percent of its burned hard coal from South Africa. A law stipulates that the burning of coal in Hamburg must be stopped as soon as possible. The fact that many German companies, including Siemens, are involved in the construction of new coal-fired power stations in South Africa is strongly criticised by the German public.

I can assure you, that the environmental and development policy associations, which have come to the conclusion that the use of bushwood from Namibia for energetic use would in almost every respect violate the 2013 referendum, have no "direct or indirect interests in the gas or coal sector",

as you fear. They to the contrary belong to their loudest opponents. As a long-lasting member of the Hamburg Energy Network Advisory Council, I would be happy, to provide you more detailed information on better solutions for the transition from hard coal in Hamburg, if you wish so.

Dear Dr. Brown,

in your letter to Earthlife Namibia you shame the associations that signed the "Joint Statement" three times for being "populist" and in one case even for a "populist, perhaps selfish" behaviour.

I would kindly ask you to bear in mind, that among the signatories are renowned environmental institutes with exemplary achievements as well as several university institutes from Germany and Great Britain with specialist expertise. Also, an internationally renowned professor belonging to the NUST is among the supporters. Since the publication of this joint statement, the number of supporters has been growing continuously.

In my own correspondence with scientists and professionals from Namibia, I have only found correct conduct and courteous behaviour, even if there were differences in opinions.

Since you have an academic education, I would like to ask you to refrain from further derogatory insinuations. Differing opinions and a factual debate are the fuel and motor of the production of scientific knowledge. I am ready to continue our communication candidly as an open-result discussion to the benefit of the Namibian people as well as climate and environment protection.

Sincerely seeing forward to your answer,

Prof. Dr. Dietrich Rabenstein

Member of the HafenCity University Hamburg