

considered. However, it is imperative that these international studies be considered in context and with utmost circumspection. Context is critical and generalizability of results should be viewed with extreme caution in an EIA for obvious reasons, not least because of differences in tourism product, differences in tourism market, distance from turbines, design of turbines, etc. The truth is that we don't know what the impacts of WEFs are on nature based or eco-tourism facilities and no attempt was made in the Draft EIA Report to deal with this issue in any meaningful and scientifically valid way.

- *"No evidence has transpired to demonstrate or support the assertion that any wind farm development overseas has resulted in any adverse impact on tourism".* This is a false generalisation based on a rather dated report on the tourism impact of wind farms in Scotland (Aitchison, 2012). Much of the argumentation in the socio-economic study seems to be from this single source, which in itself is problematic. It would have been more accurate to acknowledge that internationally there is an ongoing debate on this issue with basically three camps (by the way - none of them argue 'no' tourism impact!), namely i) those who argue limited impact on tourism, ii) those who argue more meaningful impacts on tourism and iii) those who seem to present more circumspect results, pointing out the nuanced nature of the issue, to be carefully considered within context (see for example Etherington 2010; Jerpasen and Larsen, 2011; Munday et al., 2011; Aitchison, 2012; O'Keeffe and Haggett 2012; Jaber, 2013; Karydis, 2013; Westerberg, et al., 2013; Reddington et al 2014; Rudolph, 2014; De Sousa and Kastenholtz, 2015; Silva and Delicado, 2017).
- *"None of the local private game farms that have been consulted and are visually affected by existing wind farms have experienced negative economic impacts".* This is a highly questionable conclusion based on an unverifiable method and results. Important conclusions such as these should be based on robust verifiable and peer reviewed research. Where such research does not exist (as in this case) two options are open. The first option would be to acknowledge a high level of uncertainty and seek to apply 'avoidance' as a mitigation option. Best practice EIAs avoid potentially significant impacts with high levels of uncertainty. In this instance avoidance is a perfectly reasonable option. The second option will be to conduct the research required to answer the question. However, we suspect the time and resources it will take to address the question in a scientifically valid way will be too resource and time consuming considering the development timeframe, which guide us back to the first option of avoidance.
- *"It is however not prudent to claim that there would be no negative impact on tourism as aesthetic and visual impacts (proximity to turbines) are strong influences on individuals'*

attitudes towards wind power projects". So this statement is true but somewhat confusing and contradictory to the second bullet statement above where reference is clearly made to "*... resulted in any adverse impact on tourism*". There will indeed be an impact, but how significant that impact will be is the question to be answered. As stated above, this issue is unresolved in the Draft EIA Report.

- "*Proximity to turbines and their localities (visual impacts on lodges and strategic viewpoints on the game farms) could be the determining factors for visitor satisfaction and impacts on visitor volumes*". This again acknowledges that there could be impact, which we agree with. However, these impacts do not seem to be addressed or mitigated in any way in the Draft EIA Report.

3.1.4 Review Area 4: Public Participation

It is difficult to evaluate the overall success of the public participation process by only reviewing report content. However, based purely on the content of the EIA Report the review results suggest an overall 'B' rating ("*Generally satisfactory and complete, only minor omissions and inadequacies*"). We raise the following important point as a particular weakness at this stage of the EIA process:

- **Omission of comments and response section in Draft EIA Report:** Clearly the development is viewed as controversial by various IAPs - as reflected in the extensive comments and response table included in the Final Scoping Report. It is however, highly questionable why an updated version of the comments and response table is not included in the Draft EIA Report – to explain to IAPs how the various comments were addressed. To expect the IAPs to wade through the Draft EIA Report to determine for themselves if their comments were addressed does not seem reasonable. So clearly as a minimum the updated comments and response table should have been included in the Draft EIA Report. We suspect the public will not take kindly to this omission.

3.1.5 Review Area 5: Dealing with Mitigation

The review results suggest an overall 'E' rating ("*Not satisfactory, significant omissions or inadequacies*") for Review Area 5: Determining with Mitigation. We highlight the following key weaknesses:

- **Conflating reversibility and mitigation:** Conflating these two concepts is conceptually and methodologically flawed because reversibility deals with the lower tiers in the mitigation hierarchy together with restoration and rehabilitation considerations (see section 10 of the

Final Scoping Report and Appendix C of the Draft EIA Report). So, to conclude that the same impacts are both easy to mitigate and reverse makes no sense. Mitigation needs to systematically consider first avoidance, then minimization, then restoration (reversibility could fit here) and then compensation / offsets - in this particular order (see next point).

- **Failure to apply the mitigation hierarchy:** Mitigation options need to be systematically considered for each impact – i.e. to what extent can a particular impact be avoided, minimised, restored / reversed or compensated / offset? No proof could be found where the mitigation hierarchy was actually applied. For example:
 - No attempt seemed to have been made to ‘avoid’ impacts on sensitive viewpoints – either by relocating or reducing the number of turbines, even though this option is explicitly recommended by the socio-economic specialist study and the Draft EIA Report (see page 110). The contradictory statement in the socio-economic specialist study that *“No mitigation is possible as turbines cannot be screened ...”* seems to suggest that avoidance is not considered a form of mitigation.
 - The sensitivity map provides the location of high sensitive / constraint zones with little thought seemingly to avoiding these sensitive locations – and where they can’t be avoided to consider other reasonable mitigation options. The impression is that the geographical sensitivity was mapped and then the location of the turbines ignored it.

3.2 DETAILED REVIEW RESULTS

This section presents the detailed review results per Review Area and specific criteria. Table 3.2 summarises the results and provide brief justification for the review scores. The results reflect the combined views of the two reviewers.

Table 3.2: Detailed review results for the Draft EIA report (Albany WEF)

Reference	Review Areas and Criteria	Evaluation Symbols							Review Comments and Justification	
		A	B	C	D	E	F	N/A		
Review Area 1: General Aspects										
GNR 982 Appendix 3(3)(a)(i)(ii)	1.1 Were the details of the EAP who prepared the report; and the expertise of the EAP, including a curriculum vitae included?		X							See section 1.4 and Appendix B However, the report indicates Alan Carter as the EAP and the BID shows Caroline Evans as the EAP.
GNR 982 Appendix 3(3)(b)(i)(ii)(iii)	1.2 Was the location of the activity, including the 21 digit Surveyor General code of each cadastral land parcel included, and where available, the physical address and farm name?	X								See p.vii
GNR 982 Appendix 3(3)(c)(i)(ii)	1.3 Was a plan included which locates the proposed activity or activities applied for at an appropriate scale, or, if it is a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or on land where the property has not been defined, the coordinates within which the activity is to be undertaken?	X								See p.x to xii
GNR 982 Appendix 3(3)(d)	1.4 Was a description of the scope of the proposed activity provided, including a description of all listed and specified activities triggered; and/or a description of the activities to be undertaken, including associated structures and infrastructure?				X					See section 2 <ul style="list-style-type: none"> - The project description changed from BID to the Scoping to the Draft EIA Report for example: the BID documents explicitly refers to 66 turbines to be reduced after the assessment while the Draft EIA Report talks about 90 turbines to be reduced to 66 – the location of the 90 turbine alternative (1) is nowhere provided in the report generation capacity per turbine changed from 4,5 MW in BID and Scoping Report to 6 MW in Draft EIA Report. - On p90 reference is made to a desktop screening that was done by and for the proponent for a 90 turbine development option. However, this screening did not form part of the EIA process and the rationale behind the screening is not reflected in the content of the Draft EIA Report. - On p96 of the Draft EIA it is clearly stated that the specialists were tasked to assess the 90 turbine option (layout alternative 1) – while the content of the specialist studies confirm that they only assessed the 66 turbine option? It is therefore not possible to understand the rationale behind the decision to go with the 66 turbine option – and therefore the content of the report does not satisfy the requirements of the EIA Regulations. - Power line and substations excluded from the Draft EIA Report

									and some specialist studies.
GNR 982 Appendix 3(3)(e)	1.5 Was a description provided of the policy and legislative context within which the development is proposed, and an explanation provided of how the proposed development complies with and responds to the legislation and policy context?						X		See sections 3 and 4 <ul style="list-style-type: none"> - The Draft EIA Report discuss the national and provincial policy context at length. However, no reflection on the local development and policy context i.e. IDPs, SDFs, etc. is provided. Section 4.18 of the SIA mentions the SDF and IDP but there is no attempt to incorporate this into the Draft EIA Report. Also, there is no contemporaneous reference to the SDF being approved by the Municipality in Nov 2019.
GNR 982 Appendix 3(3)(f)	1.6 Was the need and desirability of the proposed activity motivated, including the need and desirability of the activity in the context of the preferred location?						X		See section 3 <ul style="list-style-type: none"> - EIAs must have regard for any guideline published in terms of section 24J of NEMA and any minimum information requirements. This includes the updated 2017 Need and Desirability Guideline which has clearly not been consulted by the EAP. If the EAP did consult the 2017 Guideline this is not in any way evident from the Draft EIA Report. The Guideline sets out a list of questions which should have been answered and addressed when considering need and desirability of a proposed development. These are divided into questions that relate to ecological sustainability and justifiable economic and social development. The questions that relate to ecological sustainability include how the development may impact ecosystems and biological diversity; pollution; and renewable and non-renewable resources. When considering how the development may affect or promote justifiable economic and social development, the relevant spatial plans must be considered, including Municipal IDPs and SDFs. As the SDF and IDP have not been analysed in the Draft EIA Report the policy / legislative assessment is incomplete. The result is that the need and desirability in the DEIR is heavily skewed towards favouring renewable energy above other relevant policy / societal considerations - there is no balanced consideration / evaluation of the various (other) factors that are relevant to a balanced / neutral assessment into need and desirability - Section 3.2 emphasises the stimulation of new business opportunities and job creation as a main contribution of the Albany WEF, even though the outcome of the assessment shows this to be of low significance? We therefore conclude that the local economic benefits are overplayed and overemphasised in relation to need and desirability - and inconsistent with the actual outcome of the assessment itself.

GNR 982 Appendix 3(3)(s)	1.7 Is there evidence of an undertaking under oath or affirmation by the EAP in relation to: (i) the correctness of the information provided in the reports; (ii) the inclusion of comments and inputs from stakeholders and I&APs; (iii) the inclusion of inputs and recommendations from the specialist reports where relevant; and (iv) any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties?	X							See section 1.4 and Appendix E
Review Area 2: Conformance to the Plan of Study									
GNR 982 Appendix 3(1)(1)	2.1 Was the environmental impact assessment process undertaken in line with the approved plan of study for environmental impact assessment?						X		See comments below.
GNR 982 Appendix 2(2)(i)(i)	2.2 Is there conformance to the environmental impact assessment process described in the Plan of Study, including the consideration of alternatives to be considered and assessed within the preferred site?						X		See section 10 of the Final Scoping Report - No indication is given in the Plan of Study which alternatives (or project description) will be assessed. The only clue to this is provided on p96 of the Draft EIA Report – which suggest 90 turbines i.e. layout alternative 1 (however 90 turbine layout not provided nor assessed in the EIA phase).
GNR 982 Appendix 2(2)(i)(ii)	2.3 Were the aspects to be assessed as indicted in the Plan of Study, ultimately addressed in the environmental impact assessment process?						X		The conformance of the specialist studies with the TOR described in the Plan of Study was not reviewed in detail. We rather focussed on the key issues raised by IAPs and to what extent they were addressed. The following are examples of important key issue not addressed in the Draft EIA Report: - The visual and socio-economic impact of the proposed WEF on sensitive visual receptors (game farms and nature reserves) and tourism in the area. The commitment was made in the Scoping Report to various IAPs that the visual and socio-economic impacts of the WEF on each affected landowner will be assessed. We could not find evidence that this was done – the outcome of the Draft EIA Report on this issue is inconclusive and speculative at best (also see Review Area 3). Therefore, the issue seems unresolved. - The impact of the WEF on land values was also explicitly raised by IAPs. In response, the socio-economic study acknowledged this issue but considered it outside of its scope – and rather recommended that it should be investigated and rated separately by a Land Valuer / Economist. This was not done.

GNR 982 Appendix 3(3)(g)	3.2 Is a motivation provided for the preferred development footprint within the approved site?				X			See Table 2-1 The transmission line and transformers are not included in the footprint calculation which makes little sense because the development is subject to this infrastructure being provided.
GNR 982 Appendix 3(3)(h)	3.3 Is a full description provided of the process followed to reach the proposed development footprint within the approved site?				X			See Table 2-1 and previous comment.
GNR 982 Appendix 3(3)(i)	3.4 Is a full description provided of the process undertaken to identify, assess and rank the impacts the activity and associated structures and infrastructure will impose on the preferred location through the life of the activity?					X		See section 10 of the Final Scoping Report and section 9 of Draft EIA Report. See comments under criterion 3.1 above.
GNR 982 Appendix 3(3)(i)(i)	3.5 Is a description provided of all environmental issues and risks identified during the environmental impact assessment process?			X				See section 10 of the Final Scoping Report and section 9 of Draft EIA Report. The main issues to be considered have been identified during the scoping process, but see findings below in relation to the substance of the actual assessment.
GNR 982 Appendix 3(3)(i)(ii)	3.6 Was an assessment conducted of the significance of each issue and risk and an indication provided of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures?					X		See section 10 of the Final Scoping Report and section 9 of Draft EIA Report. The assessment did deal with significance of impacts pre and post mitigation. However, this review raises serious limitations in terms of how mitigation was dealt with - as discussed in more detail under review area 5 below.
GNR 982 Appendix 3(3)(j)(i)	3.7 Was an assessment conducted of each identified potentially significant impact and risk, including cumulative impacts?					X		See section 10 of the Final Scoping Report and section 9 of Draft EIA Report. In section 9.1 cumulative impacts are defined although no method is described on how to deal with the cumulative impacts and therefore difficult to understand the rationale behind the cumulative rankings.
GNR 982 Appendix 3(3)(j)(ii)	3.8 Was an assessment conducted of each identified potentially significant impact and risk, including the nature, significance and consequences of the impact and risk?					X		Consequence is included in the PS but not dealt with in the Draft EIA Report. Moreover, as already indicated under criterion 3.1 the methodology used for dealing with significance is non-compliant to the EIA Regulations.
GNR 982 Appendix 3(3)(j)(iii)	3.9 Was an assessment conducted of each identified potentially significant impact and risk, including the extent and duration of the impact and risk?				X			Extent and duration is covered in the significance ratings but it is unclear how this relates to overall significance. Until this relation is clarified it will not be possible for the competent authority to make a rationale decision based on the overall significance ratings.

GNR 982 Appendix 3(3)(j)(iv)	3.10 Was an assessment conducted of each identified potentially significant impact and risk, including the probability of the impact and risk occurring?				X			Probability is covered in the significance ratings but unclear how this relates to overall significance. Until this relation is clarified it will not be possible for the competent authority to make a rationale decision based on the overall significance ratings.
GNR 982 Appendix 3(3)(j)(v)	3.11 Was an assessment conducted of each identified potentially significant impact and risk, including the degree to which the impact and risk can be reversed?					X		<p>The reversibility is covered in the significance ratings but unclear how this relates to overall significance. Until this relation is clarified it will not be possible for the competent authority to make a rationale decision based on the overall significance ratings. For this type of development reversibility is particularly important to be considered in view of potential decommissioning of the facility in 25 years.</p> <p>Combining reversibility with mitigation results is a fundamentally flawed assessment approach and methodology.</p>
GNR 982 Appendix 3(3)(j)(vi)	3.12 Was an assessment conducted of each identified potentially significant impact and risk, including the degree to which the impact and risk may cause irreplaceable loss of resources?						X	Irreplaceability is not dealt with in the context of the significance methodology – see for example Appendix C.
GNR 982 Appendix 3(3)(j)(vii)	3.13 Was an assessment conducted of each identified potentially significant impact and risk, including the degree to which the impact and risk can be mitigated?						X	<p>See section 10 of the Final Scoping Report and section 9 of Draft EIA Report.</p> <p>Mitigation options need to be systematically considered for each impact – i.e. to what extent can a particular impact be avoided, minimised, restored / reversed or compensated / offset? No proof could be found where the mitigation hierarchy was actually applied. For example:</p> <ul style="list-style-type: none"> - No attempt has been made to ‘avoid’ impacts on sensitive viewpoints – either by relocating or reducing the number of turbines, even though this option is explicitly recommended by the socio-economic specialist study and the Draft EIA Report (see page 110). The contradictory statement in the socio-economic specialist study that “<i>No mitigation is possible as turbines cannot be screened ...</i>” seems to suggest that avoidance is not considered a form of mitigation. - The sensitivity map provides the location of high sensitive / constraint zones with little thought seemingly on avoiding these sensitive locations – and where they can’t be avoided to consider other reasonable mitigation options. The impression is that the geographical sensitivity was mapped and then the location of the turbines plainly ignored it.

Review Area 4: Public Participation								
GNR 982 Appendix 2(2)(i)(vi)	4.1	Was an indication provided of the stages at which the competent authority were consulted?		X				See section 11
GNR 982 Appendix 2(2)(i)(vii) GNR 982 Appendix 3(1)(h)(ii)	4.2	Were particulars of the public participation process conducted during the environmental impact assessment process provided?		X				See section 11 The public participation process is clearly described. However, a procedural issue might be the project description and EAP details which were provided in the initial BID, and which have since changed. Not sure if this might be a procedural non-compliance from a public participation perspective?
GNR 982 Appendix 3(1)(h)(iii)	4.3	Was a summary of the issues raised by interested and affected parties provided as well as an indication of the manner in which the issues were incorporated / addressed?				X		See section 11 It is highly problematic that the issues raised by the public have not been incorporated into the Draft EIA Report because the EAP made various commitments during the PPP to address issues in the Draft EIA Report – but then failed to include this in the report? IAPs have the right and expectation to understand how the issues they already raised were addressed in the EIR. The failure to clearly explain how the issues raised during scoping have been dealt with by the EAP and incorporated in the Draft EIR Report is a very serious defect.
Review Area 5: Dealing with Mitigation								
GNR 982 Appendix 3(1)(2)	5.1	Were the environmental impacts, mitigation and closure outcomes as well as the residual risks of the proposed activity set out in the environmental impact assessment report?				X		See sections 8 to 12 – and Appendix C The mitigation failures constitute a fatal flaw for the EIA at this point. This view is based on the following: <ul style="list-style-type: none"> - Conflating reversibility and mitigation is flawed EIA methodology. - The mitigation hierarchy was not systematically and explicitly applied. For example, the failure to seriously consider avoidance of what seems to be the most significant potential impact of the WEF on eco-based tourism is inexplicable. In view of the high level of uncertainty around the latter impact avoidance of significant adverse impacts (and precautionary approach) seems to be the methodologically correct and reasonable option – although there is no indication that this was attempted by either the visual impact assessment or SIA – contradicting clear statements in both reports that this should be done i.e. <i>“It is however suggested that turbines, as far as possible, not be erected in direct view of lodges</i>

									<p>obvious reasons, not least because of differences in tourism product, differences in tourism market, distance from turbines, design of turbines, etc. The truth is that we don't know what the impacts of WEFs are on nature based or eco-tourism facilities and no attempt was made in the Draft EIA Report to deal with this issue in any meaningful and scientifically valid way.</p> <ul style="list-style-type: none"> - <i>"No evidence has transpired to demonstrate or support the assertion that any wind farm development overseas has resulted in any adverse impact on tourism"</i>. This is a false generalisation based on a rather dated report on the tourism impact of wind farms in Scotland (Aitchison, 2012). Much of the argumentation in the socio-economic study seems to be from this single source, which in itself is problematic. It would have been more accurate to acknowledge that internationally there is a ongoing debate on this issue with basically three camps (by the way - none of them argue 'no' tourism impact!), namely i) those who argue limited impact on tourism, ii) those who argue more meaningful impacts and iii) those who seem to present more circumspect results, pointing out the nuanced nature of the issue to be carefully considered in more detail within context (see for example Etherington 2010; Jerpasen and Larsen, 2011; Munday et al., 2011; Aitchison, 2012; O'Keeffe and Haggett 2012; Jaber, 2013; Karydis, 2013; Westerberg, et al., 2013; Reddington et al 2014; Rudolph, 2014; De Sousa and Kastenholz, 2015; Silva and Delicado, 2017). - <i>"None of the local private game farms that have been consulted and are visually affected by existing wind farms have experienced negative economic impacts"</i>. This is a highly questionable conclusion based on an unverifiable method and results. Important conclusions such as these should be based on robust verifiable and peer reviewed research. Where such research does not exist (as in this case) two options are open. The first option would be to acknowledge a high level of uncertainty and seek to apply 'avoidance' as a mitigation option. Best practice EIAs avoid potentially significant impacts with high levels of uncertainty. In this instance avoidance is a perfectly reasonable option. The second option will be to conduct the research required to answer the question. However, we suspect the time and resources it will take to address the question in a scientifically valid way will be too resource and time consuming considering the development timeframe, which guide us back to the first option.
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REFERENCES

- Alberts, R., **Retief, F.**, Roos, C., Cilliers, D. and M. Arakele. (2019) 'Re-thinking the fundamentals of EIA through the identification of key assumptions for evaluation', *Impact Assessment and Project Appraisal*, <https://doi.org/10.1080/14615517.2019.1676069>
- Aitchison C. (2012) The tourism impact of wind farms - submitted to Renewables Inquiry Scottish Government, The University of Edinburgh, Edinburgh.
- Bond, A., **Retief, F.**, Cave, B., Fundingsland Tetlow, M., Duinker, P. N., Verheem R. and Brown, A. L. (2018) 'A contribution to the conceptualisation of quality in impact assessment', *Environmental Impact Assessment Review*, vol 68, pp49-58
- De Sousa A.G.D. and Kastenholz E. (2015) Wind farms and the rural tourism experience – problem or possible productive integration? The views of visitors and residents of a Portuguese village, *Journal of Sustainable Tourism*, 23:8-9, 1236-1256
- Etherington J. (2010), *The Wind Farm Scam: an ecologist's evaluation*, Stacy International, London.
- Hallat, T., **Retief, F.** and Sandham, L. (2015) 'A critical evaluation of the quality of biodiversity inputs to EIA in areas with high biodiversity value – experience from the Cape Floristic Region, South Africa', *Journal of Environmental Assessment Policy and Management*, DOI: 10.1142/S1464333215500258
- Jaber S. (2013) Environmental Impacts of Wind Energy *Journal of Clean Energy Technologies*, Vol. 1(3), pp251-253
- Jerpasen G.B. and Larsen K.C. (2011) Visual impact of wind farms of cultural heritage, *Environmental Impact Assessment Review*, vol 31, pp206-215
- Karydis, M. (2013) Public attitudes and environmental impacts of wind farms: a review, *Global NEST Journal*, Vol 15, No 4, pp 581-600
- Kidd, M. **Retief, F.** and Alberts, R (2018) 'Integrated Environmental Impact Assessment and Management'. in King, N., Strydom, H. and **Retief, F.** (eds) *Environmental Management in South Africa 3rd edition*, Juta Publishing, Cape Town.

- Lee, N. and Colley, R. (1992) *Review of the Quality of Environmental Statements, Occasional Paper Number 24, 2nd edition*, EIA Centre, University of Manchester, Manchester.
- Munday, M., Bristow J. and Cowell R. (2011) Wind farms in rural areas: How far do community benefits from wind farms represent a local economic development opportunity? *Journal of Rural Studies*, vol 27, pp1-12
- O'Keeffe A. and Haggett C. (2012) An investigation into the potential barriers facing the development of offshore wind energy in Scotland: Case study – Firth of Forth offshore wind farm, *Renewable and Sustainable Energy Reviews*, vol 16, pp 3711– 3721
- Retief, F.**, Welman, C. and Sandham, L. A. (2011) 'Performance of Environmental Impact Assessment (EIA) screening in South Africa: a comparative analysis between the 1997 and 2006 EIA regimes', *South African Geographical Journal*, vol 93(2), pp 1-18
- Retief, F.**, Fischer, T.B., Alberts, R., Roos, C. and Cilliers D. (2020) 'An administrative justice perspective on improving EIA effectiveness', *Impact Assessment and Project Appraisal*, <https://doi.org/10.1080/14615517.2019.1680042>
- Reddington, G., McArthur, D., Harrison, T. & Gibson, H. (2010) Assessing the economic impact of wind farms on tourism in Scotland: GIS surveys and policy outcomes, *International Journal of Tourism Research*, vol. 12, no.3, pp. 237–252
- David Rudolph (2014) The Resurgent Conflict Between Offshore Wind Farms and Tourism: Underlying Storylines, *Scottish Geographical Journal*, 130:3, 168-187
- Sandham, L., Hoffman, A and **Retief, F.** (2008a) 'Reflections on the quality of mining EIA reports in South-Africa', *The Journal of The Southern African Institute of Mining and Metallurgy*, Vol 108, pp701-706
- Sandham, L., Moloto, M. and **Retief, F.** (2008b) 'The quality of environmental impact assessment reports for projects with the potential of affecting wetlands' *Water SA*, Vol 34(2), pp155-162
- Sandham, L., Carrol, T and **Retief, F.** (2010) 'The contribution of Environmental Impact Assessment (EIA) to decision making for biological pest control in South Africa – the case of *Lantana camara*', *Biological Control*, vol 55, pp 141-149

- Sandham, L., Van Heerden, A., Jones, C., **Retief, F.**, and Morrison-Saunders, A. (2012) 'Does Enhanced Regulation Improve EIA report Quality? Lessons from South Africa', *Environmental Impact Assessment Review*, vol 38, pp 155-162
- Sandham, L., Van der Vyver, F., and **Retief, F.** (2013) 'Performance of environmental impact assessment in the explosives manufacturing industry in South Africa', *Journal of Environmental Assessment Policy and Management*, vol 15(3), pp 1-18
- Sandham L.A., Huysamen C., **Retief F.P.**, Pope J., Morrison-Saunders A., Bond A.J. and Alberts R.C. (2020) 'Evaluating Environmental Impact Assessment (EIA) report quality in South African National Parks', *Koedoe – Protected Area Science and Management*, (submitted / under review)
- Swanepoel, F., **Retief, F.**, Bond, A., Pope, J., Morrison-Saunders, A., Hauptfleisch, M. and Fundingsland, M. (2019) 'Explanations for the quality of biodiversity inputs to Environmental Impact Assessments (EIA) in areas with high biodiversity value', *Journal of Environmental Assessment, Policy and Management*, vol 21(2), DOI: 10.1142/S1464333219500091
- Solva A. and Delicado, A. (2017) Wind farms and rural tourism: A Portuguese case study of residents' and visitors' perceptions and attitude, *Moravian Geographical Reports*, vol 25(4): pp 248–256.
- Westerberg, V., Jacobsen, J. B. & Lifran, R. (2013) The case for offshore wind farms artificial reefs and sustainable tourism in the French Mediterranean, *Tourism Management*, vol. 34, pp. 172–183

ANNEXURE A: CV SUMMARIES OF REVIEWERS

CURRICULUM VITAE



Personal Details:

Name: Prof Francois P Retief
Date of birth: 8 Nov 1974
Nationality: RSA
Experience: 20+ years

Position:

Professor in Environmental
Management with
specialisation in Environmental
Assessment

Director: Global Green
Environmental Consultants

Highest Academic Qualification:

PhD – University of
Manchester, UK



NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

Main Qualifications:

- **2005: Doctor of Philosophy (Ph.D), School of Environment and Development, University of Manchester, United Kingdom**
- 2001: Masters in Environmental Management (M.EM), University of the Free State (UFS), South Africa
- 1998: Masters in Town and Regional Planning (M.TRP), University of the Free State (UFS), South Africa
- 1996: Baccalaureus Artium, Geography and Economics, University of the Free State (UFS), South Africa

EXPERIENCE

Prof Retief completed his PhD at the University of Manchester on the quality and effectiveness of environmental assessment. He then joined the North West University as senior lecturer and was promoted to Associate Professor in 2008. Between 2009 and 2011 he served as Subject Chair for Geography and Environmental Management and between 2012 and 2015 as the first School Director of the newly established School of Geo and Spatial Sciences. In March 2015, he was promoted to Professor and took up a new position within the Research Unit for Environmental Science and Management responsible for managing taught master's programmes.

He has contributed numerous peer reviewed papers (62), book chapters (20) and conference presentations (>80). Recently he co-authored the 2018 edition of the 'Environmental Management in South Africa' handbook. Prof Retief has a 'C1' research rating from the NRF and a Scopus *h-index* of 18. To date he has successfully supervised >50 Masters and PhDs. Prof Retief serves on the editorial boards of all three leading international environmental assessment journals (EIA Review, JEAPM and IAPA) and between 2009 and 2014 he also acted as co-editor of one of these journals namely, Impact Assessment and Project Appraisal (IAPA). He received both the '*Outstanding Service to IAIA Award*' in 2015 and the '*IAIA Individual Award*' in 2020 in recognition of his sustained contributions to the theory and practice of impact assessment at an international level. Overall, Prof Retief is acknowledged as a leading scholar and researcher in the field of environmental assessment.

In terms of EIA practice he has, as director of 'Global Green Environmental Consultants' conducted >100 EIAs under different South African EIA regimes since 1999. During this time, he has also externally reviewed numerous high profile EIAs against international best practice, minimum legal requirements and IFC and World Bank Standards. In 2018 he was appointed by the Department of Performance Management and Evaluation (DPME) and the then Department of Environmental Affairs (DEA) to lead the national EIA System evaluation.

CURRICULUM VITAE



Personal Details:

Name: Me Charlotte Cilliers
Date of birth: 14 Oct 1987
Nationality: RSA
Experience: 8 years

Position with Global Green:

Director

Highest Academic Qualification:

Masters in Environmental
Management – *cum laude*



GLOBAL GREEN
Environmental Consultants

P.O. Box 2629, Potchefstroom, 2520
Tel: 072 573 8962 - Fax: 086 402 2610

Main Qualifications:

- **2016: Masters in Environmental Management, North West University, Potchefstroom campus – *cum laude***
- 2012: BSc Town and Regional Planning, North West University, Potchefstroom campus

Professional Registrations:

- EAPASA (Reg. No.2019/1418)

EXPERIENCE

Me Cilliers started her professional career as a town and regional planner. She has been working in the field of environmental assessment since joining Global Green in 2012. Under the supervision of Prof Retief, she completed her Masters in Environmental Management (*cum laude*) at the North West University (NWU) focussing on the capacity of local government to deliver on their environmental management mandate.

Over the past five years she has been involved in a wide range of impact assessments in the following sectors:

- Housing,
- Agriculture,
- Energy,
- Bulk services infrastructure,
- Waste management,
- Tourism.

She has also been involved in EIA external review projects and therefore is experienced in EIA evaluation and review methodologies.

KWANDWE PRIVATE GAME RESERVE - CLIENT SURVEY ON POTENTIAL RENEWABLE ENERGY DEVELOPMENTS NEAR KWANDWE PRIVATE GAME RESERVE

The following three (3) questions were posed to Kwandwe's client base:

1. **Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?**
2. **Would being able to see a wind farm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?**
3. **How would the visibility of wind farms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?**

Several clients simply answered yes to all three questions and confirmed that they would no longer visit Kwandwe Private Game Reserve. The bulk of the responses where individuals responded in more detail are set out below (please note that the personal information of clients have been redacted in conformity with the Protection of Personal Information Act):

Some of the responses Kwandwe received to Question 1 include:

"Yes it would - the reason for visiting the Reserve is to escape to nature and to "provide a unique wilderness tourism experience.""

"Absolutely. The natural vegetation, away from any development, is what makes visiting Kwandwe so wonderful. Having big visible wind turbines would be a constant reminder of the very things that one is trying to escape from."

*"After visiting Kwandwe and having a wonderful all around experience I believe that having visibility of a windfarm nearby will detract from the experience for potential visitors... We believe that when a person decides to visit a game farm, part of the reason for choosing that kind of destination is to be immersed in nature and to be able to escape the reality of the built world. Therefore, any reminders of modern technology detract from that notion of being in the wilderness.
Yes"*

"Whilst one has to be open to economic development I feel saddened by the turbines. When on safari one really doesn't want any reminders of outside civilization creeping in. Seeing turbines would certainly be a reminder of the outside world and would damage Kwandwe wild feel. I would definitely feel that Kwandwe is more close to civilization if they were around the flashing red lights at night are weird and would ruin the feeling of getting away from it all. Perhaps thought should be given to more central areas doing this and try to keep it away from areas where one is going precisely to try and get away from it all."

"It is rather disturbing to hear that they want to build a wind farm right next to Kwandwe I hope they will reconsider this.. Firstly these wind turbines from my experience can be seen from kilometers away, this will definitely have an impact on the fauna in the area as well as the visual impact to tourists that visit Kwandwe. I visited Kwandwe to experience nature and get away from the city, by building turbines it will ruin this. I believe tourism brings in enormous revenue into our province and we need to look after it by preserving tourist spots such as Kwandwe. I am not against wind farms , but feel they can be build on areas where they do not impact on tourism"

The responses Kwandwe received to Question 2 include:

“Yes it would impact negatively - we would prefer to go to a destination without being able to see or hear wind turbines.”

“Yes, I’m afraid it would. If offered the choice of getting away from it all, to go back to nature, I think I’d choose somewhere with no visual reminders of development, electricity shortages, etc.”

“Being able to see a windfarm at Kwandwe both day and night would definitely be a reason for thinking twice about visiting Kwandwe.”

“It would depend on how close the wind farm is as the noise and visual pollution could interfere with trying to spot animals, falling asleep as well as bird watching.”

“Yes 100 % I am coming for the wildlife, pure nature without a windfarm”

“Thank you for your inquiry from Kwandwe and appreciate your taking time to consider the opinions of visitors to the reserve.

In a nutshell I would like to take the opportunity to voice that for me personally, the large turbines do somewhat detract from the pristine nature of the bush.

Humans have taken more than their fair share of the earth already.

Simultaneously sighting wind farms and wild animals are a reminder of this status quo.

Our family and I have so enjoyed escaping to Kwandwe.

This would definitely add a scar to your environment.”

The responses Kwandwe received to Question 3 include:

“It would impact my decision negatively as I would prefer to visit a Big 5 Private Reserve where no Wind Farms are visible.”

“I’d probably choose not to visit Kwandwe, I’m sorry to say. I have been thinking of Kwandwe so much during lockdown, wishing I was there. I do hope that the powers that be find some other windy place and leave your precious reserve and views therefrom in their natural state. I’m sure the animals would agree.”

“Whilst one would applaud the decision to erect renewable non-carbon emitting power infrastructure rather than a coal burning power station, we believe that to position them near a nature reserve where they would be visible would impact our decision to visit Kwandwe.”

“I would still visit Kwandwe regardless :)”

“I find it sad for you as an organisation but to be honest I would prefer a different wildlife location. It is unimaginable that such a plan will be realized”

Other responses received in connection with the spot survey are copied below (with the respondents’ text being in red font).

“1. Yes, I would find it less enjoyable and natural to see wind turbines while on the game reserve

2. Yes, I would probably choose another destination that was wind turbine free.

3. Yes. I would go somewhere else if wind turbines were put up near Kwandwe.”

- 1. Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? *Yes it would. You visit Kwandwe for a game experience, not commercial infrastructure viewing!***
- 2. Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? *It would be a consideration, especially if you could see the turbines from many view points. If it was only visible from a very very small view point, the impact would be minimal.***
- 3. How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? *I would wonder if Game Rangers would start to visit parts of the reserve where visibility of the wind turbines is less to none thus lessening the opportunity to view game and all parts of the reserve and one would miss out on certain aspects of the reserve. Would certain Lodges see them more than others. One would then rather stay in a lodge where the turbines are not visible. Kwandwe is still such a special place I would come back!***

I unfortunately would not visit Kwandwe. It would be ridiculous to erect these wind turbines in eye view of the beautiful Kwandwe reserve

“We were most concerned to receive your recent email regarding the proposal to construct a wind energy facility in the vicinity of, and quite clearly within view of, Kwandwe Private Game Reserve. This seems a very short sighted proposal that seems at odds with the important needs of balancing the local economy by way of generating jobs and improving livelihoods through established tourist related activities such as those at Kwandwe and other private game reserves.

We first went on safari to Kwandwe in 2018 based on recommendation from colleagues. Both couples travelled to and stayed at Kwandwe from the United Kingdom, just as we did. Both couples hold the same views as those expressed here regarding the proposed wind energy facility.

We made the journey to Kwandwe because it is a malaria free, high end game reserve. It is also a ‘cultivated’ wilderness emulating a pristine environment; visitors go there because it is a place to escape from every day life. Committed travellers who go on such safaris, and are prepared to pay a reasonable sum of money to do so, do not wish to see the “industry” of man when they stay in such an environment. They can see that in their own backyard. Guests are seeking something more special which to date Kwandwe has offered. Our intention to keep visiting Kwandwe would be adversely affected if the soft contours of the natural environment was interrupted day and night by the turbines. Visual impact is very important. What a mistake and disappointment that would be.

Wild animals are protected and Kwandwe presents as a wilderness environment. We do not wish to see man made structures – it goes against the very essence of what safari and game reserves are about. We would not elect to safari in such an environment. We could get that in many countries without travelling so far. This proposal is in our opinion, a serious error of judgement and would impact negatively on Kwandwe by the visual impact of unsightly wind turbines. Tourists would vote with their feet and go elsewhere.

To date, we have travelled to the Eastern Cape to enjoy malaria free safari. We contribute to the local economy in many ways – travelling to PE (by car or plane), staying in paid accommodation in Port Elizabeth, dining in restaurants. Many travellers undertake similar journeys and the local economies benefit. If the proposed wind facility goes ahead the negative impact would extend beyond the immediate Grahamstown region.

In summary:

- 1. The visual impact of wind turbines would adversely impact on our safari experience and might result in us travelling elsewhere to stay on other game reserves.*
- 2. Yes, the impact of seeing wind turbines day and night would influence our choice of game reserve. We wish to escape man's industry.*
- 3. We would have to think very carefully about staying at Kwandwe in future. We had undertaken a commitment to the staff and bought in to the concept of the game reserve as presented at Kwandwe during our previous stays. We had intended to return in October 2021 (deferred from August 2020 due to the Coronavirus pandemic).*

We politely request a re-consideration on the wind turbine project proposals to protect Kwandwe and other potentially affected game reserves.

We would be very interested in the outcome of the assessments being undertaken as this could influence our decision to visit Kwandwe in 2021 and beyond."

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? *It would be unfortunate.*

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? *No it would not impact my decision. I stay at a game farm quite often and it has windmills that are visual to us and it does not worry as much as I thought it would.*

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? *It would not impact my decision. I would still go and stay there. This is the future and if we want to improve the planet environmentally then this is what we have to accept. Travelling around Europe is the same.*

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

Yes, though wind turbines are not the worst thing to see. But will spoil the "getting away from it all" experience for sure.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

Yes, but see answer to 3

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe

Unlikely - Kwandwe experience would still make up for it.

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? *Yes, definitely.*

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?
Yes. Imagine trying to stare gaze at night with red flashing lights distracting you.

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? *With the tourism industry being so competitive it will make it easier for guests to find a similar product elsewhere that does not have any artificial eyesores.*

Q1- *It would have a very negative impact.*

Q2- *Yes, definitely.*

Q3- *We might not visit Kwandwe in the future.*

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

The reason for visiting wilderness areas like Kwandwe Private Game Reserve, is to get away from manmade structures and whatever reminds one of civilization.

We 'escape' to the bush to recharge, revitalize and disconnect from the world.

Therefore if there is any visibility of infrastructure, I would not go back to Kwandwe and choose another lodge where there is no visibility or sign of such infrastructure.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

My reply would be the same as with the first question and I will add that the evening experience of seeing the stars is one of the highlight of any visitor.

We truly live under the African sky of stars... nothing could spoil the experience more than a flashing red lights)

I would most certainly choose another destination without flashing red lights.

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

Again my answer would be the same as for question 1

When choosing a wilderness experience, a break from everyday life and you are willing to pay a premium for that, the absence of civilization and any sign of it is key.

The visibility of windfarms will most definatley spoil the experience and therefore impact negatively on a decision to visit Kwandwe.

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

Many people go to game parks and nature reserves to reduce stress and improve their well-being. Finding peace in nature is similar to practising mindfulness. A windfarm will definitely spoil the country side and the nature experience. It would enhance that which you are trying to leave behind.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

A windfarm will definitely impact on my choice of destinations. Wildlife tourists are more and more looking for "wilder destinations" and seeing a windfarm will take the park in the opposite direction.

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

I would not visit a Game Reserve where a windfarm is visible.

1. Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

Absolutely, yes. A major appeal of visiting any wildlife reserve is to escape from the urban setting and to be surrounded by the natural earth, free of the mark of humans as far as possible; to be transported into another world. Any sign of modern humans, including buildings, roads, power lines and wind turbines, detracts from that immensely.

2. Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

Yes. We choose our wildlife destinations primarily due to the sense of isolation that is felt when being there. The more natural the land and the outlook, the more appealing it is.

3. How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

Kwandwe has always been our first choice when visiting the Eastern Cape, but the more there is that detracts from the experience, the more likely we will explore alternatives. To be brutally honest, the owner's very prominent home is a blight on the landscape within Kwandwe and to a lesser extent, the large asphalt runway (which is less visible). It will be more difficult in future to stop development on the borders of the reserve when there is significant development with a high visual impact, within the reserve itself. Although it is too late to do much about that, we hope that you are able to keep Kwandwe as visually wild as possible.

1. Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? *yes*

2. Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? *yes*

3. How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? *negatively*
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1. Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? *Not really*

2. Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? *No - because we have been to Kwandwe several times and would always wish to return*

3. How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? **Not at all - see answer to question 2**

Please note that we are biased in favour of Kwandwe. What my wife and I are not sure of is the impact the development would have on the choice of people that have not already had the wonderful Kwandwe experience.

This is devastating news the wonderful thing about Kwandwe is the open views without seeing anything for miles... it would destroy the idea of being in the bush seeing those wind turbines!!! I know they effect nature all around them too with the non stop sound they give off!! Seeing the red lights would spoil being in nature!!! Seeing a wind farm would sadly make us choose somewhere else even though we are desperate to be back at Fort House in September please God let them open flights then!!!

*Thank you for your email. We are saddened to hear about the proposed wind farm and it's visual impact upon Kwandwe.
It is important to consider that Kwandwe is not just about the wild life there, but the whole wild life experience.
To be honest Kwandwe is not the best wild life park when it comes to game watching.
The beauty of Kwandwe is the unique feeling of being genuinely in the wilds and I'm afraid that a wind farm would seriously affect it's natural environment.
We have visited Kwandwe and returned because of it's unique situation but we would not come again if there was a wind farm with a high visual impact. Even worse ,at night, the presence of navigation lights would ruin the atmosphere
I would go as far to say that a wind farm would ruin what Kwandwe had to offer and could even mean the end of this beautiful reserve.
There must be other places to put the wind farm.*

1. Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? **We go to Kwandwe for the amazing African bush experience that Kwandwe offers – looking at very ugly wind turbines would hugely detract from this experience. We are horrified to learn of this potential development so close to the Kwandwe border.**
 2. Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? **Yes definitely, it would ruin the whole African bush experience.**
 3. How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? **I would hesitate to visit somewhere where my view would no longer be of the beautiful bush, but rather huge, ugly wind turbines.**
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Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?
YES , part of the experience is the lack of any "pollution" including infrastructure /buildings /lights and anything man made- nothing is currently visible apart from maybe some overhead electricity lines

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?
YES – the open space is wonderful as per my answer above and was considering the red lights on each unit as a real eyesore

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? *Once they are in place it may well impact our choice of destination sadly . To see wildlife as is currently viewed at Kwandwe makes it a very special natural experience .*

I am deeply disturbed at the news of a potential windfarm between Grahamstown and Kwandwe Game Reserve. I commend and support any efforts in managing the effects this proposed project might have on the Reserve.

My limited knowledge of wind turbines comes from six years as Deputy chairman of the South East Queensland Electricity Council, which reported to Energex, a Queensland government statutory body. Information from a number of Australian and overseas studies would indicate to me the deleterious effects turbines could have on the migration of birdlife to Kwandwe each year and to the wider animal population. Research reveals recordings detect what is commonly described as “a pulsating, thumping or rumbling sound”, technically known as amplitude modulation, which relates to a change in noise levels that occur approximately once per second as the turbine blades rotate. This is compounded in rural areas and documentation of such would be known to those carrying out an Environmental Impact Assessment for you.

To answer your questions:

1. The visual effects on the wildlife experience of the landscape these aesthetically polluting structures would present would be unfortunately, quite profound. Viewing wildlife in Kwandwe at present allows for the anticipation of never knowing what you’ll find on any given game drive, on any day. This participation in the daily lives of animals in the reserve is the absolute drawcard for our visits. The presence of turbines would completely destroy the feeling of being in natural habitat.

2. If potential visitors to Kwandwe Game Reserve were aware “the hand of man” would reveal windfarm sightings during the day and flashing electronic aviation warnings on turbines at night, I would be concerned it would greatly influence their decision to visit. Visitors to South Africa are looking for genuine wildlife experiences and Kwandwe Game Reserve currently enjoys well documented recommendations in this regard. If turbines were visible, both the wildlife tourist experience and the magic of safari would be severely diminished.

3. Because my husband and I have been visiting Kwandwe since 2010, we will still visit. (Indeed we are booked for October again next year, having to postpone our October 2020 visit due to the COVID-19 lockdown). However, being able to see a windfarm during the day and its prescribed aviation lighting on turbines at night, would have have a huge impact on the wonderful wildlife experiences that continue to draw us back to Kwandwe.

We have visited many Reserves within South Africa since 2007, but in the past few years have made our stays at Kwandwe and just one other Reserve in the north. This has been a conscious decision based on the unique way the entire Kwandwe team manage the Reserve. Every aspect of that management of a variety of wildlife, together with the preservation of the land that supports them, is reflected in an unforgettable wildlife/safari experience.

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

Yes. It would affect the perception of being in true wilderness if the wind farm is visible.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

It would somewhat affect. Frankly I probably would not have known about the wind farm when making a decision to return to Kwandwe. But it may affect somewhat my decision to return after seeing the wind farms on site. I say "somewhat" because the overall Kwandwe experience is so positive that there are still many reasons to come back to Kwandwe for.

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

Same as above.

"Part of the lure of going on a safari is the remoteness, being away from civilization. A wind farm would definitely take away from the visit and most likely would make me choose another location"

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? **NO**

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? **NOT IN THE SLIGHTEST**

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe? **NOT AT ALL**

1. Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

**I would not want to see wind turbines*

2. Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

**Wind Turbines would ruin the natural & wild environment.*

3. How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

**We would look for other options.*

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? *It is my opinion that these wind turbines are not appropriately positioned anywhere close to Kwandwe. The beauty of the game reserve is the unparalleled view without seeing any lights or obstruction. That is the whole wildlife experience. These lodge are competing with the rest of the world specifically Africa where you have uninterrupted bush experiences. This would severely affect the bush experience and to my mind*

would be a short term decision potentially detracting from the huge investment that overseas investors have made into KwanDwe. These investments are not viable in the first place and to do anything to detract from their viability is selfish and potentially constitutionally challengeable to my mind.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?
The wind farm would be terrible specifically due to the electronic activation warning sign and during the day these beautiful unparalleled views would be spoilt. KwanDwe has spent hundreds of millions in regard to establishing Africa's most beautiful game reserve. The wind turbines can be put in thousands of different places in South Africa and to do anything to impact this investment would not be appropriate.

How would the visibility of windfarms from within KwanDwe Game Reserve impact on your decision to visit KwanDwe?
It would definitely impact my decision to visit KwanDwe specifically with overseas guests that I bring there. Overseas guests are used to a certain standard and their standard is determined and comparable to what they have gone and seen in Africa. We are competing with Africa and specifically after covid the competition would be greater so this decision should not happen.

Would the nature and type of infrastructure that is visible from KwanDwe be of relevance to your visual / aesthetic experience of the landscape?

I have visited game reserves that have visible infrastructure before, one example is Riverbend at Addo which has huge power lines crossing the reserve. From a visual perspective I don't like it at all as it spoils the purpose of my visit – to be in the wilderness, away from it all. Infrastructure is a constant reminder of our lack of wilderness areas.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?
Yes it does impact the decisions I make when choosing a Game Reserve, it is a part of the reason why we have always loved KwanDwe so much. There are some places I have been and I am not keen to go back for that exact reason, either they have a national road, a railway line, power lines or lights from towns at night. For my family we prefer to choose a destination away from all, where the sky is pitch black and the stars jump out, where there is no traffic or rail noise and where there is no infrastructure to spoil our views.

How would the visibility of windfarms from within KwanDwe Game Reserve impact on your decision to visit KwanDwe?

I believe I have spoken to this as well, but there is another more important issue. We love our birds and are part of the Eastern Cape Birding Group, we have heard horror stories about how birds have been killed by wind turbines and this really upsets me. Viewing the birds is as important as the wildlife and wilderness and as much as wind turbines are green energy, which is good, they are in my view incompatible with wilderness areas.

Would the nature and type of infrastructure that is visible from KwanDwe be of relevance to your visual / aesthetic experience of the landscape?

Yes it would

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

Yes definitely - negatively

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

Would choose a game farm with uninterrupted sky views to enjoy the whole nature experience

We both feel that the visual impact of the wind turbines so close to the boundary of Kwandwe would have an impact on the visual/aesthetic experience of the landscape. For us, the charm of Kwandwe is that once you are on the reserve you are not impacted in anyway by general civilisation. With the exception of the very soft light from Grahamstown which you can see at night the fact that you only see the vast expanse of the sky, and at night the stars, is a great feature of Kwandwe. Kwandwe also went to great expense to bury all the overground lines and cables for electricity and phones in order that these did not impact on the true safari experience we get there and it would be a great pity to have this spoiled.

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

No provided game rangers were really aware of them and positioned vehicles so you don't have the turbines in the background of the photo

No problem at all

Said it would be very sad to see the turbines but understands the need for clean energy.

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?

No

no

Yes he would prefer to be where he could not see wind farms.

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

No real impact

No impact

Would impact his decision,

That said I think it would be more about where they are positioned around the reserve, how visible will they actually be and how visible will they be from the lodges.

In terms of Germany where I have travelled extensively, there are very few places left where there are no wind turbines. All the quaint little villages in the countryside are littered with turbines.

So not sure if that would concern overseas tourists or not. They mostly live with them all the time

So in all very indecisive.

I think the project needs to appreciate the inherent beauty of our country without infrastructure and should be doing everything possible to preserve that beauty so if the windfarm can be repositioned they should be looking at that.

However on the flip side as a nation we will only survive if we can get this economy to grow and that needs a bigger more reliable electricity infrastructure.

1. We have been visiting Kwandwe many times since its inception almost 20 years ago. The uniqueness of this special place is that you feel like hundreds of kilometres away from civilisation and it gives you the impression of a remote secluded gem. The hills in and around the resort is what makes this place so special apart from the experience as such. One can't go without the other.

2. Definitely. We are visiting Kwandwe for many reasons but one particular one is the quietness and also the open space without any pollution of signs of civilisation. The thought of having to see countless windturbines and seeing red instead of stars on a sky without light pollution will impact our decision for sure. This would have a very severe impact on the economic benefits such a big game farm must contribute to the local community.

3. The visibility of such a farm would impact our decision and we would seriously consider our choice of where to spend our money for a wilderness experience.

Sadly I have to say that I do not believe I would ever want to visit a game reserve that I consider to be part of the Bush... Only to have to see man made monstrosities near by. It would be such a shame as Kwandwe is such a beautiful place... I hope for your sake it does not go ahead

If they erect that wind farm then we would not come to Kwandwe again

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape?

Yes, very much so. I go on safari to be in the wilds and away from civilization. Seeing turbines would ruin the whole experience

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa?
Yes, for sure. I would go then to Londolozi or any other place, to be in the wilds

How would the visibility of windfarms from within Kwandwe Game Reserve impact on your decision to visit Kwandwe?

I won't return as it is not what I expect from a wild life experience.

Would the nature and type of infrastructure that is visible from Kwandwe be of relevance to your visual / aesthetic experience of the landscape? ***Most definitely – it would compromise entirely the experience of being in the wild***

Would being able to see a windfarm during both the day and the night (due to red electronic aviation warning lights) impact on your choice of destination for a wildlife tourist experience in South Africa? ***Indeed it would – the entire purpose of visiting Kwandwe, and its special appeal is that it***