Submission to the Hills of Gold wind farm DA – Social and Economic Impacts.

When wind farm social and economic ledgers are considered impartially, there is little net positive impact for the wider community.

Appendix P of the EIS, "Socio-Economic Impact Assessment", should have been rejected outright, in particular for its extensive bias, instead of the Department deciding it was ready for exhibition.

With regard to Social and Economic issues, the EP&A Act 1979 states in section 4.15 Evaluation:

"(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application.

(a)

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and **social and economic impacts** in the **locality**," (bolding added)

The Department, in the SEARs, slightly rewrote the Act as follows - "Locality" became "region and the State as a whole":

"Social & Economic – the EIS must include an assessment of the **social and economic impacts** and benefits of the project for the **region and the State as a whole**, including consideration of any increase in demand for community infrastructure services and impacts to tourism." (bolding added)

This geographical expansion does offer the urban dwellers the opportunity to indulge their fantasies that this wind farm may have some positive impact on Climate Change.

For clarity, the Department in the SEARs also nominated "social and economic impacts and benefits" instead of just "social and economic impacts" from the Act encouraging a balanced approach to the issues. They must be disappointed.

The EIS attempts to address Social and Economic issues in Chapter 19 of the Main Report and in Appendix P.

Appendix P contains a document entitled SOCIO ECONOMIC IMPACT ASSESSMENT

(If the drafters of the Act, revised multiple times since 1979, and the authors of the SEARs with its hundreds of variants wanted an EIS to focus on "Socio Economic" factors rather than "social and economic impacts" and "social and economic impacts and benefits" respectively, they would have said so.)

The experts who authored the Socio Economic Impact Assessment are unknown. No names or signatures appear therein. No certification appears, so the first question is whether Mr Murray Curtis, the senior ERM signatory to the EIS takes responsibility for the content, not just of Chapter 19, but of Appendix P. He has to, doesn't he?

Mr Curtis states in the EIS certification in the main report:

We declare that the contents of this EIS has been prepared in accordance with the Environmental Planning and Assessment Act 1979, Schedule 2 of the Environmental Planning and Assessment Regulation 2000 and the Department of Planning and Environment Secretary's Environmental Assessment Requirements issued for the development dated 22 November 2018. The information contained in this EIS, to the best of our knowledge, contains all available information that is relevant to the environmental assessment of the development and the information provided is neither false nor misleading"

(there is nothing in the Act or the Regulations that enables the certifier to hide behind the qualifier "to the best of our knowledge". Even if that qualifier was acceptable, what does it say about the knowledge level of the EIS authors and certifiers) By the end of this submission, we should hopefully agree that the EIS Chapter 19 and Appendix P do not contain all available information that is relevant to the social and economic assessment of the development and the certifiers could not possibly claim that the information provided is neither false nor misleading.

To claim as much is an offence, which could attract a penalty not exceeding \$250,000 for individuals and \$1,000,000 for corporations.

This is not the first time that ERM and/or Mr Murray Curtis have provided "information in connection with a planning matter that the person knows, or ought reasonably to know, is false or misleading in a material particular"

(We'd start, of course, with examples from the Jupiter wind farm preliminary EIS).

The Environmental Defenders Office (EDO - a keen wind farm supporter) in their very recent submission to the Department's draft Social Impact Assessments (SIA) told the Department once again the SIA system has unavoidable inbuilt biases.

Please see Attachment A.

Back to the Hills of Gold wind farm EIS, specifically Appendix P

Executive Summary

Table 1 in the Executive Summary and its equivalent, Table 15 in Chapter 7, Summary of Impacts reviews the Social and Economic benefits and impacts of the Hills of Gold wind farm (HOGwf). The experts are telling you that this table is **key**. Not only is it included in the two key chapters of the Socio Economic Impact Assessment, the Executive Summary and the Summary of Impacts, it is also included as Table 19.1 and Table 19.2 in the specific Social and Economic Impacts chapter (Chapter 19) in the EIS Main Report.

Let me summarise the results as highlighted in these tables

Firstly, social impacts on both Health and Visual were deemed "perceived" and not rated. (additionally Health impacts are described as subjective.)

How about that.

Of the remaining 15 components chosen by the experts as requiring assessment for Social or Economic Impact, only <u>one</u> didn't have a neutral or higher positive benefits rating either before or after the developer had performed their mitigation strategies.

So, apart from "Impact on the local natural environment" which, after mitigation, was deemed to have a "low (negative)" social impact, the experts determined that the Hills of Gold wind farm would have no other negative social or economic impacts.

A review of the following Chapters.

Chapter 1 - "Introduction"

Apart from the expected summary of the development, the anonymous authors managed to insert a reference to the two pro-developer "bribes"

"The development includes a funding commitment for the Community Enhancement Fund. The fund is \$2,500 per wind turbine per year installed and operating, over an expected 25-year period. The fund will be established to support local residents close to the development area for opportunities and lifestyle enhancement. Furthermore, a voluntary Neighbour Benefit Sharing Program will be established. Annual payments will range from \$1,500 to \$6,000. The aim of this program is to share the financial benefits of the development with neighbouring land holders that do not host a wind turbine on their property. Neighbours within 5km are eligible for the voluntary program"

Regarding the Community Enhancement Fund (CEF), one new lifestyler arriving every few years, buying and establishing their property, would have positive economic impacts greater than the CEF. The evidence is incontrovertible. I and many, many others have done it over the last decades just in the

shadows of the defunct Jupiter wind farm. We also know that this significant lifestyler development stops in the impending or actual presence of a wind farm.

The Neighbour Benefit Sharing Program (NBSP) would need to be far more successful than the Jupiter equivalent to have any claim to being an economic benefit.

As expected, no reference in this chapter was made to any social or economic negative impact.

Chapter 2 - "Socio-Economic profile"

gives the anonymous authors the opportunity to delve into ABS statistics and produce 13 pages of irrelevant statistics and another 30 pages in Appendices 1 and 2. So we learn, for instance, that:

The largest ancestry in the Tamworth Regional LGA is British (48.38%), followed by Australian (37.35%), Irish (6.49%), Western European (2.16%) and Chinese Asian (0.96%). and similarly for the other two LGAs. Highly irrelevant, one would think, to the social and economic impacts of the Hills of Gold wind farm, as are the rest of the 43 pages.

Chapter 3 – "Policy Context"

The RET will be exceeded long before the HOGwf produces a kilowatt hour of electricity so on that policy measure the HOGwf is not required.

The Clean Energy Council, the wind farm developers union, cannot be expected to deliver an unbiased opinion, nor can those that quote them.

Re State Policy:

"Renewable energy has been identified for some jurisdictions as an opportunity area" We assume that by jurisdictions you mean Renewable Energy Zones. **HOGwf is not in one**.

For the New England North West Regional Plan, we are told:

"For the Tamworth Regional area (this includes Nundle) key priorities include promoting wind energy production opportunities"

the very last priority of eight listed for the Tamworth Regional Area is

"Identify and promote wind, solar and other renewable energy production opportunities" As expected it is a much higher priority in other Regional Areas of the New England North West Regional Plan.

From the policy document <u>A 20-Year Economic Vision for Regional NSW</u> we are advised that the short term action item is:

"Investigation 0-5 years: the potential for energy zones..."

They've investigated, nominated the first three energy zones, and **HOGwf is not in one**.

Had the <u>Tamworth Regional Council Community Strategic Plan 2017-2027</u> or the <u>Tamworth Regional Council Sustainability Strategy 2017 – 2021</u> or <u>Tamworth Tomorrow Driving the Tamworth's Region Economic Growth</u> supported local wind farms, the anonymous authors of Appendix P would have trumpeted those quotes. They didn't so they couldn't.

What this whole chapter has to do with social and economic benefits and impacts is unclear.

Chapter 4 – "Literature Review"

What strikes you in this chapter is the inability of the unidentified independent experts to find and review literature that supports the negative economic and social impacts of wind farms or, except on very rare occasions, to quote from more balanced literature these negative impacts instead of just the positive impacts.

What also strikes you in this chapter is the number of references to multiple publications attributed to the Centre for Sustainable Energy (UK) and locally to one CSIRO publication.

The Centre for Sustainable Energy's vision:

'is a world where sustainability is second nature, carbon emissions have been cut to safe levels and fuel poverty has been replaced by energy justice."

As is predictable, their publications reek of bias and so do the sections of the EIS that rely on them.

Our once great CSIRO published a paper (2012)

"Exploring community acceptance of rural wind farms in Australia: a snapshot".

The unidentified independent experts referred to it over 10 times.

The Department is fully aware of the complete failings of this study. I refer you to the submission "FATAL DEFECTS IN LIVERPOOL RANGE WIND FARM ENVIRONMENTAL ASSESSMENT" made by Dr Michael Crawford, specifically "Appendix B. The Fatuous CSIRO Report "Exploring Community Acceptance of Rural Wind Farms in Australia"

As the Department in its current version of the Major Projects Register has disappeared a whole batch of Liverpool Range WF submissions, including this one, I attach it as Appendix B below.

Let me just quote a paragraph from Dr Crawford's submission. The CSIRO study:

"interviewed 27 people. You can almost count them on both hands and feet.

Were they chosen at random? No! Were they chosen in a way that might give the slightest semblance of community representativeness? No!

So who were these luminaries upon whose views the report could base its very definitive conclusions? They were:

- 9 representatives of wind farm companies
- 4 turbine hosts
- 3 community members known to be supportive of wind farms
- 4 local government representatives
- 4 community members known to be opposed to wind farms (in certain localities)
- 3 others"

The unidentified independent experts on multiple occasions plucked quotes in the CSIRO report from these people. With that interview sample, there can be no defensible claim that the "Socio-Economic Impact Assessment" is unbiased.

Chapter 5 – "Community Engagement"

11 Community members were interviewed by phone.

In more than one place, we are told:

Several participants are Community Consultative Committee (CCC) members and <u>some</u> <u>additional participants were independently selected by SGS</u> to broaden the sample.

(or similar)

Could you please explain the underlined phrase above. Until you do so, I picture Someva's Jamie Chivers putting a short list of hosts and their supporters on the table and SGS selecting a few of them.

As you would expect when you interview a group, some of whom are vehemently opposed to the project and some who just as vehemently support it, you will get diametrically opposing opinions on just about every social and economic topic raised.

Let us move on.

The last page of this chapter has two photos highlighting "Friends of the wind farm" I didn't see an equivalent page highlighting opponents of the wind farm. (Who paid for the signs, by the way?)

Chapter 6 - Economic Impact

There is no question that there will be significant capital investment, some of it locally. There is no attempt to balance this against the capital that won't be invested because of the wind farm.

The first sentence of this chapter reads:

"In essence, the economic impact is trying to quantify the number of jobs and the value of wages and profits (referred to as gross value added) that is generated from the project.

Are you saying there are no other major economic impacts other than those attached to the positive side of jobs?

What about the impact on electricity prices? What about the financial impact of grid failure? What about the loss of investment as mentioned above? etc

Since you raised the topic of jobs,

- What is your expert opinion of the job numbers put forward by the developer?
- Do you really believe that the operational jobs can be categorised:

"Ongoing employment is estimated to increase by 84 ongoing FTE jobs in the professional, scientific and technical industry sector."?

That's nonsense as well, isn't it? Or are you claiming that in addition to these 84 professional, scientific and technical jobs, there are other more mundane operations jobs, both direct and indirect?

- Are they net new jobs or gross, both locally and in broader NSW?
- What about the impact of job losses in the wider energy industry?
- Would some of these jobs exist without the wind farm eg weed control?
- Will some of these jobs be in a different state or country. eg SCADA turbine control during operations?
- Aren't some of these jobs due to rescheduling? (a bulldozer only needs one driver)
- How many construction jobs are offset by the loss of an equivalent number from a recently completed NSW wind farm?
- How many net new jobs will be in Nundle and immediate surrounds over the operations and maintenance period? Remember, this jobs benefit swayed the community towards support starting in the very early days.
- I'm not an economist, so I have trouble grasping the concept that the wages, predominantly, from an average new operations job can fund 1.77 additional flow-on new full-time operational jobs.

Chapter 7 – "Summary Of Impacts"

Please refer to my comments above on the conclusions in Table 15, specifically:

"apart from "Impact on the local natural environment" which, after mitigation, was deemed to have a "low (negative)" social impact, the experts determined that the Hills of Gold wind farm would have no other negative social or economic impacts."

Appendix 1 - Broad Industry Categories (BIC) Definition

No comment.

Appendix 2 – Socio-Economic Profiling

As highlighted in my comments on Chapter 2 above, in my opinion, irrelevant to the task at hand.

Appendix 3 – Community Engagement Notes

I'm happy to accept this as a summary of comments from 11 locals on local issues. However, some of the questions asked of them were surely false. eg question 10:

"Would you have a more positive or negative opinion if I told you that new employment from this project in the region would be: +200 FTE jobs during construction and 100-150 FTE permanent jobs supporting operations (+\$15m/year)?" (Bolding Added)

The estimate of 84 operations jobs is not defendable. What chance has 150?

Appendix 4 – Regional I/O Table

I defy any interested party, including the departmental Assessment team, to read this appendix and draw any conclusions regarding the social and economic impacts and benefits of the HOGwf.

So, in summary.

We expect "independent experts" to show some mild favoritism to those that pay their invoices but the unknown authors of Appendix P go far beyond that.

The SEARs called for the social and economic <u>impacts</u> on tourism (tourism <u>benefits</u> were not mentioned. Maybe the Department agrees with us that tourism declines in the presence of a wind farm). Tourism benefits can only be realized in a town like Nundle, which relies heavily on tourists, if the community works together. They used to, but the wind farm proposal has damaged community cohesion.

The EIS has failed to address the impact on tourism as required by the SEARs. Others should cover that in more detail.

Also, the theme of bias is not restricted to Appendix P as others will point out.

In its Assessment, the departmental assessors surely cannot write anything positive about EIS Chapter 19 and Appendix P and must condemn the whole section on Social and Economic Impacts.

Anthony Gardner – January 2021

Attachment A.

EDO submission to the draft Social Impact Assessment. Independent SIA Assessment section.

The draft SIA Guideline states that it is intended to give community confidence in the environmental assessment process and build social licence. There are a number of reasons why the draft SIA Guideline will fail to achieve that objective.

A key issue is the fact that SIAs are done by proponents and applicants. This inherently creates a bias in the process. There is significant community concern about proponent-led engagement and whether this results in appropriate and objective consideration of community issues. This includes presentation of technical assessment information, but also relates to the assessment process where the proponent controls how community input, submissions and concerns (and responses to them) are expressed. Proponents should bear the costs of engagement, but they must not be able to compromise its

objectivity. There must be safeguards in the system so that community members feel respected and can trust the process.

EDO has written extensively about the need for genuine independence in appointing consultants that are engaged to prepare assessment materials for development applications, and strongly recommends a system whereby the Department, rather than a proponent is responsible for independently allocating consultants to major projects. This is necessary to reduce the potential risk of proponent pressure on consultants to develop more favourable assessments and to reduce public perceptions of bias. Perceptions of bias are also obvious in the draft SIA Guideline with the language used focussed on project approval rather than genuine assessment that may lead to refusal of a project, including on social impact grounds.

The lack of a clear independent review process for SIAs conducted as part of assessments for state significant projects is also problematic. Unlike other areas of environmental assessment such as air or water pollution where the Department can seek specialist advice from specialist Government agencies or branches, the Department's review of SIAs will only be informed by an independent review if a project is one of a small number that can be referred to the single internal staff member responsible for SIA, or if an external peer review is conducted. To date, there has been little evidence of meaningful peer review of SIA's by Government prior to the consultation on and determinations of project applications. This places the burden of assessing the adequacy of a SIA on communities. Independent consultants engaged by communities have regularly identified significant flaws in SIAs provided to support applications for state significant projects. There must be a clear process for assessing the independence and adequacy of SIAs submitted as part of assessment of state significant projects. Community members regularly raise concerns with EDO that mitigation strategies proposed during state significant project assessment processes are not tangible, deliverable by the proponent, durably effective, or directly related to the respective impact - requirements which are acknowledged by the Department to be important for effective mitigation of social impacts. There is no evidence that the Department plays a role in ensuring that these requirements are achieved and, in the absence of independent assessment or meaningful peer review, there is nothing in the draft SIA Guideline that is likely to change this situation.

Attachment B.

The Fatuous CSIRO Report "Exploring Community

Acceptance of Rural Wind Farms in Australia" (submission to the Liverpool Range wind farm by Dr Michael Crawford)

The CSIRO report *Exploring Community Acceptance of Rural Wind Farms in Australia* is a fatuous document that ignores objective data contrary to its conclusions and which is based on a minute sample (27 people) carefully selected to predominantly favour wind farm interests.

It is rampant advocacy masquerading as objective research. Its only saving grace is that its authors reveal how great is the gap between their headline conclusion and the data considered. The study concluded:

"There is strong community support for the development of wind farms, including support from rural residents who do not seek media attention or political engagement to express their views."

This is a very strong statement. Unfortunately, if you scour the report looking for quantitative evidence to back it up, you will find none. There are no hordes of retiring, unaligned, rural residents actually interviewed or polled to substantiate the conclusion. Given the lack of objective evidence offered, the conclusion can be regarded as nothing more than a fiction that fortuitously supported the needs of a part of the CSIRO committed to the growth of "renewable" energy and wind farms.

To be fair to the people whose names are on the paper, and who have described the data and skewed survey they used, it is always possible that the headline conclusion, which is totally unsupported by their data, may have been imposed by a CSIRO apparatchik who lacked any knowledge of scientific method and statistical analysis.

The 2010 NSW *Community Attitudes to Wind Farms Survey* did at least interview about 2,000 respondents. It had some basis for claiming to use a representative sample. Did the CSIRO study interview 2,000 respondents? No! 200? No! 100? No. **It interviewed 27 people**. You can almost count them on both hands and feet.

Were they chosen at random? No! Were they chosen in a way that might give the slightest semblance of community representativeness? No!

So who were these luminaries upon whose views the report could base its very definitive conclusions? They were:

- 9 representatives of wind farm companies
- 4 turbine hosts
- 3 community members known to be supportive of wind farms
- 4 local government representatives
- 4 community members known to be opposed to wind farms (in certain localities)
- 3 others

So 16 of the 27 (60%) were known supporters of wind farms, while only 4 were known opponents. 13 of the 27, ie just under half (wind farm company representatives and turbine hosts) had significant financial interests in wind farms.

This startling sample composition was not a chance event. The authors tell us that they set out to talk with wind farm company representatives, turbine hosts, other supporters, local government, and identified opponents. So they set out to interview a dramatically skewed selection from the community – and they definitely achieved it.

One third of their interviewees were representatives of wind farm companies. Think about that. What proportion of the rural population across NSW, SA and Victoria would be wind farm representatives? 1%? Doubtful. 0.1%? Maybe. Yet the authors end up with a sample in which wind farm representatives were 33%.

This sample has zero face validity to represent the population to which its conclusions are generalised. That's aside from the minute size of the sample. In any quality university, any postgraduate student that tried to base such a sweeping conclusion on such a small and obviously biased sample would be marked "FAIL" and advised to pursue a different career.

If there is one conclusion that legitimately might be based on the "data" in the report, it is:

"People who make money out of wind farms are in favour of wind farms."

The disjunction between the headline conclusion of the report and actual data has another problem. The authors did a "media analysis of articles published in popular national and state-based newspapers in the latter six months of 2010"6. This analysis found more articles rejecting wind farms (32) than supporting them (19). So the media analysis ran 63% / 37% against wind farms. Despite that, the authors were able to come to the very definite conclusion that:

"There is strong community support for the development of wind farms, including support from rural residents who do not seek media attention or political engagement to express their views."

This conclusion being based on interviews with 27 people, about half of whom had direct financial involvement with wind farms.

The study had one useful component. It did desk research on 9 wind farm developments and categorised the opposition that had been mounted towards each. The report concluded:

4 had faced high opposition

1 moderate opposition

4 low opposition

Again, this dataset is hardly consistent with the headline conclusion presented by the report.

But their data tells us more than that. Of the 4 low opposition wind farms, 2 were quite small with 5 and 12 turbines respectively. When you take wind farms of industrial scale, opposition was 3 high

1 moderate

2 low

The 1 high opposition case that would now be seen as non-industrial scale was Crookwell which, when built in 1998, was a large industrial intrusion in its area.

So 2/3 of the industrial scale wind farms had moderate to high opposition and, nonetheless, the report's authors were able to claim there is strong community support for wind farms.

Given that the report is so explicit about the evidence considered, there can be no dispute that its headline conclusion is wholly without support.

Anyone with the faintest knowledge of statistical analysis understands you cannot generalize from a sample of 27 to a population of millions, most particularly when you have deliberately selected a sample which, as the report makes clear and was discussed above, is grossly unrepresentative of the population to which you are generalising.

It is even more embarrassing when the only pieces of quantitative data included in the report, limited as they were, are clearly contrary to what is said to be the conclusion. This document may well have a future in research methodology classes about how not to do social science research. It has certainly not done the credibility of the CSIRO any good