

7000 Acres Additional Information for the Examining Authority on Health, Safety and Wellbeing.

Submission made for Deadline 5 – 25th February 2025

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1. Overview:

This document seeks to highlight the key issues around the quality of life and mental health impacts arising from the unprecedented scale of development of ground mounted solar around communities and the shortcomings of the Applicant's approach in this regard, particularly in light of there being no Issue Specific Hearing granted on the subject of Human Health and Wellbeing.

There main topics considered are

- The existing policy reference regarding Human Health and Wellbeing in the NPS.
- The existing guidance available for Applicants considering Human Health and Wellbeing in an EIA, as well as the known shortcomings of existing approaches.
- The unprecedented scale of development represented by the Tillbridge Solar and other NSIP-solar schemes in the area and the associated need for thorough health impact assessment.
- Reflections on the Applicant's approach to the topic of Human Health and Wellbeing.
- Reflections on discussions with the Applicant in SoCG meetings.

2. Health and Wellbeing consideration in EN-1

Within EN-1, there is a general position that the need case outweighs the residual effects "in all but the most exceptional circumstances", however, one of those circumstances is health. It is explicitly stated that "This presumption, however, does not apply to residual impacts which present an unacceptable risk to, or interference with, human health..."

As well as the "direct" health impacts, EN-1 highlights the potential for infrastructure projects to "affect the composition and size of the local population, and in doing so have indirect health impacts". 7000 Acres are concerned that the scale of (multiple) developments in the area will drive people away from the communities affected, and "hollow out" the local populations, impacting social and care networks and damaging health outcomes for the communities affected. This subject has not been addressed in the Applicant's submission.

EN-1 is also explicit that the Environmental Statement should identify "measures to avoid, reduce or compensate for these impacts as appropriate". Having not considered health sufficiently, no such measures have been proposed by the Applicant.

In terms of the level of detail to be explored, EN-1 also requires the consideration of health impacts on populations and sub-populations, stating that "Opportunities should be taken to mitigate indirect impacts, by promoting local improvements to encourage health and wellbeing, this includes potential impacts on vulnerable groups within society". Overall, therefore, 7000 Acres believe that the health and wellbeing assessment carried out by the Applicant has been insufficient against the requirements of EN-1 for the scale of development being proposed.

3. Guidance Available for Considering Health and Wellbeing

3.1 National Infrastructure Commission

The National Infrastructure Commission advises the Government on infrastructure needs and impacts, its four objectives cover sustainable economic growth, competitiveness, quality of life and response to climate change. The NIC issued a report into each of these objectives, and in 2022 published its report on Quality of Life¹.

In the report, the NIC defines Quality of Life as “an objective and subjective assessment of an individual’s overall wellbeing” and identify 6 “domains” that consider the effects of infrastructure:

- i. **Health:** The impacts of infrastructure services on physical and mental health
- ii. **Local and natural surroundings:** The impact of infrastructure design and operation on the local and natural environment
- iii. **Connections:** The physical connections (transport networks) and digital connections (fixed and mobile broadband) that link people, communities and businesses
- iv. **Affordability:** The distributional impact of the cost of infrastructure services that domestic consumers pay through bills or fares and the overall cost of infrastructure over time
- v. **Comfort and convenience:** Users’ experience with infrastructure services including the level of satisfaction derived from these services
- vi. **Employment:** How infrastructure acts as an enabler for patterns of economic activity and therefore access to jobs

As a part of this, the NIC has developed a framework to measure how infrastructure can improve quality of life outcomes, which could have been used to assess the impacts of such large-scale development as the Tillbridge scheme.

3.2 The Institute of Environmental Management and Assessment’s (IEMA) Guidance

The IEMA provide guidance on the development of Environmental Impact Assessments and give specific guidance on how to consider Human Health.

The guidance within Health in Environmental Impact Assessment² advises early engagement with health professionals and includes concepts such as “population health” and highlights the difference between the Health Impact Assessment (HIA) and Environmental Impact Assessment (EIA) processes.

For Population Health, the guidance refers to the Marmot Report from the Institute of Health Equity. The report was published in 2010³, and the Marmot Review 10 Years On⁴ was published in 2020. In its Key Messages section, it opens with the stark statement that “Since 2010 life expectancy in England has stalled; this has not happened since at least 1900. If health has stopped improving it is a sign that society has stopped improving”. The report highlighted key objectives to reduce health inequalities, including the creation and development healthy and sustainable places and communities.

■ [REDACTED]
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The applicant should therefore describe the relevant health issues that are likely and those that will have the potential to significantly affect population health. 7000 Acres has demonstrated issues in the applicant's documents to demonstrate that they have little knowledge and understanding around population health. Their scope should have differentiated between rural and urban health, which would have demonstrated an understanding of health issues relevant to both. This must take into account the local issues with evidence provided.

The guidance states clearly that the applicant needs to collate the effects identified for each determinant of health by populations or sub-populations. They should consider relevant determinants of health and their level of effect, including age, sex, individual lifestyle factors, social and community networks and finally general socio-economic, cultural and environmental conditions. The Applicant has not considered these perspectives for impact, and their report explore such populations and sub-populations, e.g those over 65 years of age, or carers. 7000 Acres has raised concerns that there is evidence that in rural settings, loneliness and isolation is increasing. Understanding sub-population data is important to identify, as the scheme itself may widen health inequalities and may lead over time to poorer health outcomes for particular groups, as communities become hollowed-out or fragmented. There is the potential for such an outcome and yet there is no consideration of this or provision for potential mitigation.

The IEMA guidance notes that "HIA and EIA are separate processes. HIA is defined as a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, programme or project on both the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects". Within the documentation provided by the Applicant for the Tillbridge Solar scheme, there is no evidence of having explored the health effects or distribution of those effects on the population.

The guide Effective Scoping of Human Health in Environmental Impact Assessment⁵ provides a list as a "starting point" for wider determinants of health that cover the issues commonly encountered in EIAs. The list includes, for example, elements of the Social Environment, such as open space, community identity, culture, resilience and influence, social participation, interaction and support. These elements have not been considered by the Applicant. It also provides guidance on the geographic scope of the assessment, which "should seek to identify where there are likely and potentially significant site and local area effects that differ from the wider effects". By using such broad study areas as West Lindsey and Bassetlaw combined, or a 60-minute travel area, the Applicant has failed to adequately consider the area immediately adjacent to and impacted by the development.

The guide also gives clear guidance that there should be "parity to physical health and mental health across the analysis of bio-physical, social, behavioural, economic and institutional influences on population health outcome". 7000 acres assessment of the EqlA and the Health and Wellbeing Document for Tillbridge, is that there has little consideration within the applicant's EIA document of physical health, nor a clear understanding how their scheme (and the others in the immediate region) will impact on mental health within our communities.

There is also guidance on how the in-combination effects of different health determinants should be considered, where, for each population or sub-population, a list of the relevant determinants of health and their level of effect should be explored. Again, the Applicant's documents do not consider populations and sub populations using the determinants of health. They reference "Professional judgement" as having been applied to determine the Zone of Influence for each ES topic". Had a

⁵ [REDACTED]

health professional been involved, there would be a clear understanding around the element of population health and the impact, which has therefore been omitted from the assessment.

The guidance is clear, that the combined public health effect is where a population is affected by multiple determinants of health and a large proportion of the same individuals within that population experience the combination effect e.g. lifestyle, community and activities due to large scale change. This should differentiate urban from rural e.g. a high proportion of retired pensioners who, out of choice move into rural areas for health gain and lifestyle, join walking groups and rural community groups for wellbeing. This group will take benefit from green open spaces, some for mental health reasons. For example, military veterans, who perhaps have post-traumatic stress disorder, would be impacted when their natural environment is altered at scale, worsening their health outcomes due to a deterioration in physical health. This development in combination with the others will increase our rural depression rates which are already projected to increase, therefore a poor outcome. These potential impacts should be assessed factored in when Lincolnshire NHS Integrated Care Board considers the Lincolnshire Joint Forward Plan.

The guidance states that a “business-as-usual coverage of population and human health in EIA runs the risk that EIA practice will be shaped with negligible input from public health”, which appears to be exactly the case with the Tillbridge scheme.

Furthermore, Volume 8 of the IEMA’s Impact Assessment Outlook Journal⁶ considers the implementation of Health Impact Assessment (HIA) as a part of EIA. Within the journal, an article acknowledges the shortfalls in existing EIA when considering impacts on human health and wellbeing. “When considering the broader scope of physical, mental and social wellbeing, it is clear that all topics have potential impacts. For example, loss of locally valued ecological habitat or locally valued heritage could cause or aggravate depression and deterioration of mental health of nearby residents. The value of these assets to residents’ mental wellbeing is unlikely to be assessed in the heritage or ecological chapters, which are designed to assess the impact against international and national species and habitats of concern, and/ or listed or designated assets. The same could be said for links between landscape and health, flooding and health, economics and health, traffic and health etc.” The volume concludes that “health and wellbeing needs to have much greater prominence in the planning process than has historically been the case. There is a growing body of support for much wider implementation of HIAs”.

The issues 7000 Acres have been raising regarding the shortfall in health assessment and the weakness in EIA in this regard are therefore well understood by industry professionals. This is of particular importance given the unprecedented scale of the development being proposed for the region.

3.3 Opportunities to Measure Health and Wellbeing Impacts

There are tools available to measure impact on mental health, for example, the Mental Wellbeing Impact Assessment (MWIA) Tool⁷ which advocates both quantitative and qualitative data.

Explaining the concept, the document states “Like HIA, MWIA focuses on population groups who may experience health inequalities and social injustice with a particular emphasis on those most at risk of poorer mental well-being. It also makes the link with social determinants, and can be adapted

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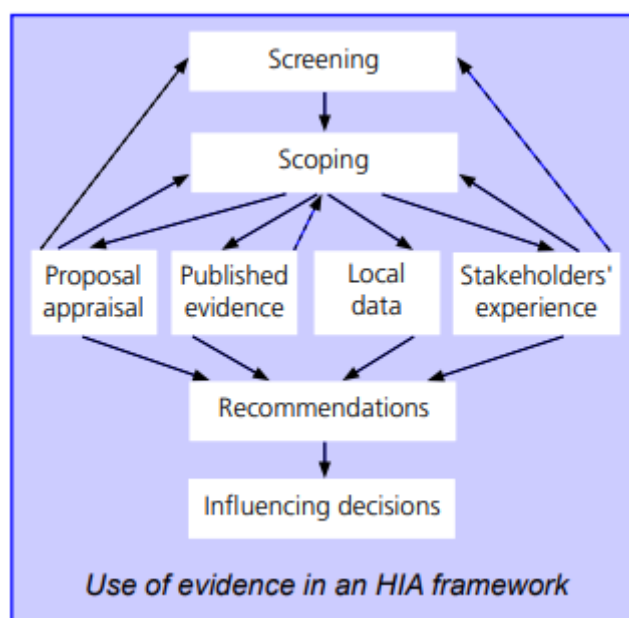
⁷

to be used alongside HIA or as a separate process. MWIA goes further in developing indicators to measure the actual impacts over time”.

7000 Acres notes that the Applicant feels that they could not add any additional information to use the Health Equity Assessment Tool⁸ (HEAT), which would have asked questions to systematically assess health inequalities, and that they have had no previous experience of using this tool. 7000 Acres has always been clear, by not doing a deep dive to obtain local health data and only using ONS/Census data for West Lindsey (which covers a very large area compared to that affected by the concentration of solar developments), one misses the crux of understanding what the baseline health issues are in the target area. This local data would inform the Heat Tool which would then identify whether there would be widening of health inequalities or not.

4. Developer's General Approach

The pre-application work on this subject was prepared from a desktop review by a general planner, in a format that does not take into consideration population health, consideration for social care nor does it identify significant impact around health inequalities. 7000 Acres has always stated that a deep dive into local data should have been carried out with the local statutory bodies' help. Such an approach is described in A Guide to Reviewing Evidence for use in Health Impact Assessment⁹, from which the diagram below is taken, showing the breadth of evidence that should have been considered.



Such evidence should have included a qualitative survey, asking people to comment on how these schemes make them feel, the effects on their own health and wellbeing including mental health, as well as to tease out social issues. This was not done. By contrast, the engagement with the community has resulted in limited awareness of the scale, nature and number of developments in Lincolnshire, and there has been no attempt to understand the health and wellbeing impacts of the Tillbridge scheme.

⁸ [Health Equity Assessment Tool \(HEAT\): what it is and how to use it - GOV.UK](#)

⁹ [A guide to reviewing evidence for use in HIA.pdf](#)

7000 Acres are concerned that the Environmental Impact Assessment should consider both the environment and the effect of people in equal measure, as advised in IEMA guidance. Due diligence and scrutiny should apply to both. 7000 Acres believe the scale in the case of Tillbridge and other developments within the immediate region is too large and the combined effect will have huge adverse consequences on the welfare of the local people, and it is unfair on any small area to be forced to host disproportionately more developments than elsewhere in the country, especially as these are forced upon rural communities.

7000 Acres did request a special hearing on health only to be advised that there will be no specific hearing on the subject, and within ISH3, the topic of health was on the agenda, and points were raised, however the applicant's expert was not available for questioning. Overall, 7000 Acres consider this to be an inadequate treatment of the topic. This approach and lack of scrutiny on this issue undermines the Examining Authorities credibility and any subsequent findings thereof.

The examiners themselves are not experts on this subject and a special hearing would bring in experts from local health statutory bodies to contribute to this discussion and fulfil the requirements. This is a significant failure of this planning process for Significant Infrastructure projects and is a serious omission. Both the Applicant's documents on the Equality Impact Assessment and the Environmental Impact Assessment are insufficient and do not follow the IEMA (Institute of Environmental Management and Assessment) Industry Guidelines which we have pointed out in our written submissions, including REP2-032¹⁰.

5. Expertise Engaged to Advise the Applicant.

The UK Government website "Environmental Impact Assessment"¹¹ provides Guidance on the EIA process. It states, "In order to ensure the completeness and quality of the environmental statement, the applicant must ensure that the environmental statement is prepared by competent experts and that it is accompanied by a statement from the applicant outlining the relevant expertise or qualifications of such experts".

In the case of the Tillbridge Solar Project, the Applicant's appears to have utilised a general planner who is not qualified in our view to evaluate the health impact. 7000 Acres believes this process should have been commissioned externally by people qualified to advise on the health impacts of the project. The Applicant's document also fails to state the qualification of the author and relevance of their expertise to this subject.

6. Regional Concerns

At present, there is a regional public health body group looking into the impact of solar farms and their impact on health and wellbeing. 7000 Acres believe it would be prudent for the Examining Authority and Applicant to engage with this work and to fully understand the outcomes before any further NSIP-scale solar developments are approved within the region. This work has been prompted by the proliferation of NSIP-scale solar schemes in Lincolnshire and concern that each of these schemes is on a scale that the country has never seen. The area impacted by development includes over 30 villages and many more isolated homes, where people live and work. At present, any solar development of such a scale worldwide has been in very sparsely populated areas, such as deserts, where the impact on communities is reduced (and where the benefits are greater, as the solar energy yield is so much greater – by 80% to 95%).

¹⁰ [EN010142-000751-7000 Acres - Written Representations.pdf](#)

¹¹ [Environmental Impact Assessment - GOV.UK](#)

7. Engagement with Statutory Bodies on the subject of health

The Institute of Environmental Management and Assessment's (IEMA) Guide "Effective Scoping of Human Health in Environmental Impact Assessment"¹² describes the "First points of contact for engagement (not exhaustive)" for engagement with health stakeholders.

7000 Acres believe health statutory bodies should have been informed in detail about the schemes, properly briefed about the developments and asked to provide expertise. These bodies should have included Lincolnshire Public Health, Lincolnshire Integrated Primary Board, United Lincolnshire Teaching Hospital (Acute Hospital and Community Trust), and Lincolnshire Partnership Foundation Trust (Mental Health Trust).

Scoping documents were sent only to the Lincolnshire CCG (now the Integrated Care Board). 7000 Acres feels this process was unsatisfactory, and that these organisations were not satisfactorily briefed as to their role in the process, nor did the Applicant seek experts to advise them.

That each scheme submits scoping documents individually would not have alerted statutory bodies to the cumulative impacts all these schemes would have. As a result, c.10,000 acres of wholesale development within a 6-mile radius, surrounding communities was not on their radar.

Government guidance on Nationally Significant Infrastructure Projects and the people and organisations involved in the process¹³ states "Statutory parties are organisations who are experts in their area" and "They can use their knowledge to advise applicants about different aspects of their project." As far as 7000 Acres has knowledge of, none of the local health statutory bodies have had input into the pre-application as advised by policy. IEMA industry guidelines advise early engagement with health professionals on screening and scoping to scrutinise the population and health scope, and recommends a steering group be formed to "facilitate governance of health stakeholder inputs and consensus building". The Applicant has therefore failed even to follow industry guidance, despite the nature of the scheme being of unprecedented scale. These statutory experts on health must be engaged to advise the Applicants and should be used as a resource within the examination process.

7000 Acres note that in the Applicant's documentation¹⁴, there is no formal statement of common ground with any health stakeholders, which demonstrates the lack of effective engagement on this topic and is a serious omission across multiple developments of the scale of Tillbridge solar.

8. Health within SoCG Discussions between 7000 Acres and the Applicant

In our discussions, the Applicant acknowledged that in assessing the cumulative impact, the standard processes have no methodology to assess the impact change at this scale may have on health and wellbeing. This is precisely why 7000 Acres have advocated for a health impact assessment which is a structured process and would have provided the knowledge to assess this impact. IEMA guidance is clear, "Health Impact Assessment and Environmental Impact Assessment are separate processes. The Health Impact Assessment is a method to systematically judge the potential and sometimes unintended effects of a policy plan, programme or project on both the health of the population and

¹² [iema-eia-guide-to-effective-scoping-of-human-health-nov-2022.pdf](#)

¹³ [Nationally Significant Infrastructure Projects and the people and organisations involved in the process - GOV.UK](#)

¹⁴ [EN010142-000749-9.4 Statement of Commonality - Clean.pdf](#)

the distribution of those effects within the population. It identifies appropriate actions to manage those effects. It drills down to population health management, identifies populations at risk as well as subpopulation groups and in particular identifies the impacts whether positive or negative on health inequality”.

Having a general planning consultant carry out this process and evaluating impact is unacceptable. Industry guidelines advocate this process should be done by an environmental health practitioner, and the Local Lincolnshire Plan also advocates for a Health Impact Assessment. It should not be acceptable for a National Infrastructure Project and the Secretary of State to assess these schemes without this being carried out.

9. Concluding Points:

On its own, the Tillbridge Solar scheme covers a huge land area, and will impact the quality of life of residents of the surrounding villages and isolated households swallowed up by development. 7000 Acres have attempted to raise this, and the impact multiple NSIP-scale schemes will have on people living and working in the area immediately around them. 7000 Acres have raised Mental Health as a major impact and are concerned that these schemes could fragment our communities, with implications on social care, isolation and levels of depression.

The pathways are clear; loss of green amenity and cherished landscapes, fragmentation of communities, reduced attractiveness of the region to retain populations, years of disruption during construction, periods of panel replacement and decommissioning are all likely to have a cumulative impact on the quality of life for communities affected.

The Applicant has considered a superficial desktop approach and standard EIA assessment tools and has not sought expertise from regional health professionals to look deeper into the health and wellbeing impacts of development at such an unprecedented scale.

Overall, the health and wellbeing impact of development have not been sufficiently explored by the Applicant or provided to the Examining Authority for consideration. 7000 Acres believe this is a serious omission and, subject to construction, would become a subject revisited in the future once the adverse mental health, wellbeing and social impacts highlighted come to bear.