



# Little Crow

*Solar Park*

*Little Crow Solar Park, Scunthorpe*

## **APPLICANT'S RESPONSE TO EXQ3 QUESTION 3.1.3**

### **DEADLINE 6**

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# **APPLICANT'S RESPONSE TO EXQ3 QUESTION 3.1.3**

**ON BEHALF OF INRG SOLAR (LITTLE CROW) LTD**

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## 1. INTRODUCTION

### Purpose of Document

- 1.1 This Policy Note is submitted by INRG Solar (Little Crow) Ltd ("the Applicant") and contains the Applicant's response to the Examining Authority's written question Q3.1.3 (ExQ3) issued on Monday 16 August 2021. It also responds to the Examining Authority's request during ISH2 that the Applicant undertake a review of the background documents and to present an updated note which draws upon the most up to date statistical data and emerging policy relating to the decarbonisation and expansion of electricity generation in the United Kingdom.
- 1.2 This Policy Note is supported by technical appendices which present as 'Examination documents' of all the policy documents referred to in this Note.
- 1.3 This Note discusses the most up to date statistical data and emerging policy relating to the decarbonisation and expansion of electricity generation in the United Kingdom. This Note supplements and should be read with paragraphs 5.4-5.21 of the Planning Statement (Document Reference 9.1A LC OTH, PINS Ref REP5-017) and Statement of Need (Document Reference 3.4 LC OTH, PINS Ref APP-049). Those documents remain as material and relevant to the determination of the application.
- 1.4 The Applicant considers that for the purpose of S105(2)(c) of the Planning Act 2008, the body of recent energy and climate change law, policy and guidance, as identified below, are matters which are both important and relevant to the Secretary of State decision.
- 1.5 The documents discussed in this Note are: -

<b>Document</b>	<b>Technical Appendices</b>
Government's Energy White Paper 'Powering our Net Zero Future' of December 2020	Appendix A
The Climate Change Act	Appendix B
the Climate Change Act 2008 (2050 Target Amendment) Order 2019	Appendix C
Energy and Emissions Projections	Appendix D
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**Government’s Energy White Paper ‘Powering our Net Zero Future’ of December 2020 (Document provided at Appendix A)**

- 1.6 The Energy White Paper (“EWP”) was presented to Parliament on 14 December 2020<sup>1</sup> and builds upon the Prime Minister’s Ten Point plan for a Green Industrial Revolution (which is discussed below).
- 1.7 The EWP sets out ambitious plans offering support for a variety of technologies and committing funds to support the growth of low-carbon green-technologies. It is intended to entirely reshape British industry and the economy. At the core of the EWP is the commitment to achieve Net Zero and tackle climate change. The application will deliver towards both these requirements.
- 1.8 In the introduction to the EWP (pages 2 and 3), the former Secretary of State for Business, Energy and Industrial Strategy, Alok Sharma MP, states (inter alia): -

*"The government presents this white paper at a time of unprecedented peacetime challenge to our country. Coronavirus has taken a heavy toll on our society and on our economy. But we will overcome COVID-19 and rebuild our economy, building back better and levelling up the country. As we do so, we must address the intergenerational challenge of climate change. Unchecked, the impact of rising global temperatures represents an existential threat to the planet. So, building back better means building back greener."*

<sup>1</sup> The Little Crow Solar Park application was made on the 4 December 2020, before the EWP was published.

*This white paper puts net zero and our effort to fight climate change at its core, following the Prime Minister's Ten Point Plan for a Green Industrial Revolution. The Ten Point Plan sets out how government investment will leverage billions of pounds more of private investment and support up to 250,000 jobs by 2030.*

*The way we produce and use energy is therefore at the heart of this. Our success will rest on a decisive shift away from fossil fuels to using clean energy for heat and industrial processes, as much as for electricity generation.*

*These are more than academic considerations; the shift to net zero will affect us all. This white paper presents a vision of how we make the transition to clean energy by 2050 and what this will mean for us as consumers of energy in our homes and places of work, or for how businesses use energy to produce goods and services.”.*

1.9 The EWP seeks to put in place a strategy for the wider energy system that transforms energy and supports a green recovery (page 4).

1.10 Page 5 of the EWP sets out the Government's 'Compelling case for tackling climate change'. The salient points presented by Government are (inter alia): -

- *We need to act urgently. The future impacts of climate change depend upon how much we can hold down the rising global temperature. To minimise the risk of dangerous climate change, the landmark Paris Agreement of 2015 aims to halt global warming at well below 2°C, while pursuing efforts to limit it to 1.5°C, increasing measures to adapt to climate change, and aligning financial systems to these goals.*
- *At the global scale, however, we are not presently on track to reach the temperature goal of the Paris Agreement. Based on current national pledges, and assuming the level of ambition does not change, the world is heading for around 3°C of warming by the end of the century.*
- *The cost of inaction is too high. We can expect to see severe impacts under 3°C of warming. Globally, the chances of there being a major heatwave in any given year would increase to about 79 per cent, compared to a five per*

*cent chance now. Many regions of the world would see what is now considered a 1-in-100-year drought happening every two to five years.*

- To meet the temperature goal of the Paris Agreement, the world must collectively and rapidly reduce global emissions to net zero over the next 30 years. Success will mean we are less exposed to flood and heat risks and preserve our national security, our prosperity, and our natural world which are threatened by the global disruption of climate change.*

1.11 The Government recognises how decarbonising the energy system over the next thirty years means replacing, as far as it is possible to do so, fossil fuels with clean energy technology such as renewables (EWP Introduction, page 9). The EWP identifies how clean energy will become the predominant form of energy, entailing in a potential doubling of electricity demand and consequently a fourfold increase in low-carbon electricity generation (EWP Introduction, page 10). Government recognise that growing and supporting green jobs across the country in green industries will also support a green recovery from Covid-19 (page 16).

1.12 The EWP, at page 43, identifies how the Government envisages that (inter alia) *"While we are not planning for any specific technology solution, we can discern some key characteristics of the future generation mix. A low-cost, net zero consistent system is likely to be composed of predominantly wind and solar. But ensuring the system is also reliable, means intermittent renewables need to be complemented by technologies which provide power, or reduce demand, when the wind is not blowing, or the sun does not shine"*. Page 43 goes on to identify batteries as such a technology that can contribute towards the demand side response. Page 45 identifies how *"Onshore wind and solar will be key building blocks of the future generation mix, along with offshore wind"*. It goes on to state how the Government recognised that sustained growth in the capacity of these sectors is needed over the next decade to ensure that we are on a pathway that allows us to meet net zero emissions in all demand scenarios.

**The Climate Change Act and the Climate Change Act 2008 (2050 Target Amendment) Order 2019 / net zero by 2050 (Documents provided at Appendices B & C)**

1.13 The Climate Change Act 2008 is the basis for the UK's approach to tackling and responding to climate change. It requires that emissions of carbon dioxide and

other greenhouse gases are reduced and that climate change risks are adapted to. The Act also establishes the framework to deliver on these requirements. The Act supports the UK's commitment to urgent international action to tackle climate change.

1.14 The Climate Change Act 2008 set in legislation the UK's approach to tackling and responding to climate change. It introduced the UK's long-term legally binding 2050 target to reduce greenhouse gas emissions by at least 80% relative to 1990 levels. It also introduced 'carbon budgets', which cap emissions over successive five-year periods and must be set 12 years in advance. The Act also established the Committee on Climate Change (CCC), the independent statutory body that provides expert advice to the UK government on climate change mitigation and adaptation. Policies and proposals for mitigating climate change go through an established development process. As the development is completed, the impact of policies is quantified in updated Energy and Emissions Projections (EEP), which are published by the UK government annually. This is a continuous process and the latest EEP, published in October 2020, provides the updated energy and emissions projections from 2019 to 2040, this is discussed below

1.15 On 27 June 2019, the UK government set a legally binding target to achieve net zero greenhouse gas emissions from across the UK economy by 2050, via an amendment to the Climate Change Act. This is known as a net zero target because some emissions can remain if they are offset by removal from the atmosphere and/or by trading in carbon units.

**Energy and Emissions Projections (EEP) (Document provided at Appendix D)**

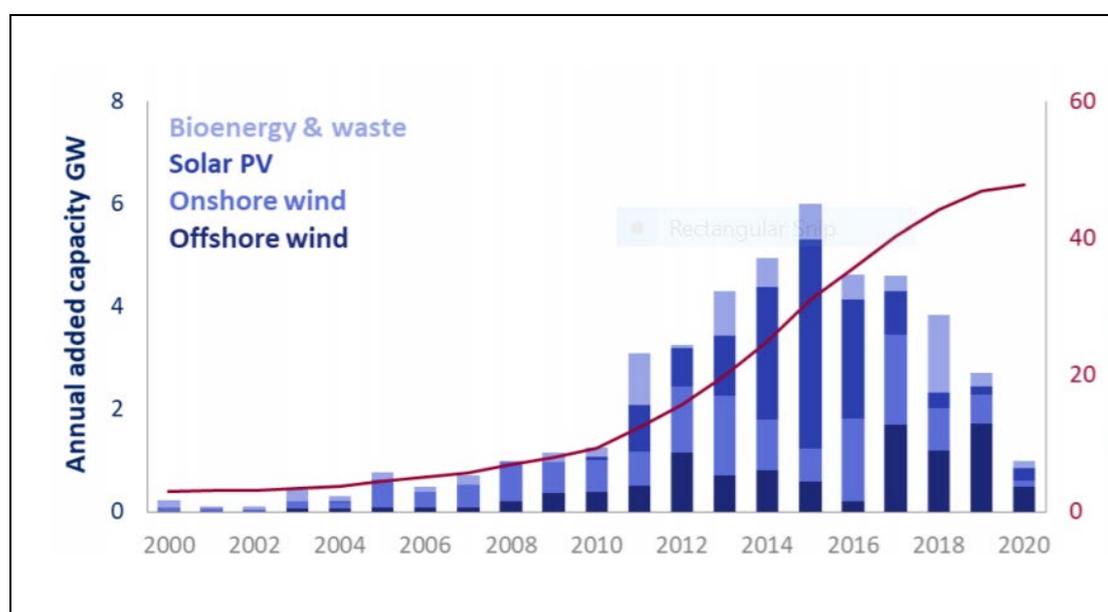
1.16 The Energy and Emissions Projections (EEP) is one way which Government monitor progress towards the UK's legislated targets. The October 2020 publication identifies how the projected shortfall between performance and carbon budget targets has risen since EEP 2018.

**Digest of UK Energy Statistics (DUKES) (JULY) 2021 (Document provided at Appendix E)**

1.17 The Digest of United Kingdom Energy Statistics (DUKES) is the annual energy statistics publication produced by BEIS. It provides a detailed and comprehensive

picture on the production and consumption of individual fuels and of energy as a whole.

1.18 DUKES 2021 notes (at page 36) that growth in new renewable capacity has continued to slow with just 1.0 GW added in 2020, the lowest since 2007. The document advises that Covid-19 restrictions are likely to have contributed to the slowdown in growth in 2020 but at just 2.1 per cent, this is the slowest growth rate since 2002. Chart 6.3 of DUKES 2021 shows the annual added capacity from 2000 to 2020. It shows a clear decline in provision of renewables since 2015, see chart below.



1.19 DUKES 2021 (at page 43) discusses how progress in the growth of renewable energy as a proportion of final consumption was separately monitored as part of a European Union Directive, the Renewable Energy Directive (RED). The RED set the UK a target to derive 15 per cent of total energy consumption by 2020 from renewable sources. The overall target covered electricity, heat, and transport, there was a separate target for transport to derive 10 per cent from renewable sources, including liquid biofuels and renewable electricity. The final outturn for the RED was 13.6 per cent against the 15 per cent, this only represents an 11 percentage point increase since 2008.

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**UK's National Energy and Climate Plan (NECP) (Document provided at Appendix F)**

1.20 The Department for Business, Energy and Industrial Strategy published the UK's National Energy and Climate Plan (NECP) for 2021 to 2030, on 7 June 2021, in order to uphold the Government commitments under the Withdrawal Commitments<sup>2</sup>. The NECP (at page 30) identifies how the EU has a target under the Renewable Energy Directive of 32% of energy coming from renewable sources in 2030, with Member States required to set their own non-binding contributions to collectively achieve the EU target. As of 31 January 2020, the UK has left the EU and will therefore not contribute to EU targets or be bound by the Renewable Energy Directive after the Transition Period ends. However, to comply with Government commitments under the Withdrawal Agreement with respect to the NECP, the UK has set out a proportion of renewables in final energy consumption in 2030 of between 22%-29%. This represents a significant challenge as RED progress in 2020 is only 13.6 per cent.

**Climate Change Committee 2021 Progress Report to Parliament (Documents provided at Appendices G, H and I)**

1.21 This double report – Progress in Reducing Emissions and Progress in Adapting to Climate Change provides a comprehensive overview of the UK Government's progress to date on reducing emissions and adapting to climate change. Together, the assessment offers more than 200 policy recommendations covering every part of Government.

1.22 In the latest progress report published by the Climate Change Committee, released in June 2021, they have identified that progress towards achieving Net Zero is not yet in step with the urgency of the challenge<sup>3</sup>.

1.23 The Climate Change Committee identify that a rapid build-out of renewables (particularly solar) would enable net zero emission from the power sector to be reached by 2035, however, the increase in 2020 of renewable energy projects was at a much slower rate than the last 5 years<sup>4</sup>.

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<sup>2</sup> On 31 January 2020, the UK left the European Union (EU) and the Withdrawal Agreement the Government concluded with the EU entered into force.

<sup>3</sup> Progress in reducing emissions 2021 Report to Parliament, page 16

<sup>4</sup> Progress in reducing emissions 2021 Report to Parliament, page 20

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**Net Zero - Opportunities for the Power Sector (Document provided at Appendix J)**

- 1.24 The National Infrastructure Commission (NIC)<sup>5</sup>, official advisor to the Government on Infrastructure, has published a report (Net Zero - Opportunities for the Power Sector, March 2020) setting out the key infrastructure requirements needed to meet the UK's 2050 net-zero target, including the amount of renewable energy development that would need to be deployed.
- 1.25 The NIC recommends that in meeting these targets, the UK's energy mix needs to be made up of around 90% renewables. At page 18 of the report, it is recommended that across all scenarios, significant levels of solar, onshore wind and offshore wind, will need to be deployed in order to ensure that between 129 – 237 GW (gigawatts) of renewable energy capacity is in operation by 2050. To achieve this, the report recommends the following split:
- 56-121 GW of solar;
  - 18-27 GW of onshore wind; and
  - 54-86 GW of offshore wind.
- 1.26 To achieve the above targets would require a significant increase in installed capacity across the UK, including over nine times the current installed capacity of solar technologies in the UK, which as of October 2020 is around 13.4GW according to the Department for Business, Energy & Industrial Strategy (BEIS)<sup>6</sup>.

**Clean Growth Strategy – Leading the way to a low carbon future (2017) (Document provided at Appendix K)**

- 1.27 The Clean Growth Strategy, published in October 2017, sets out comprehensive set of policies and proposals that aim to accelerate the pace of “clean growth”, i.e. deliver increased economic growth and decreased emissions. The Executive Summary (page 9) confirms that for the UK to achieve its fourth and fifth carbon budgets (2023 - 2027 and 2028 - 2032) it will be necessary to drive a significant acceleration in the pace of decarbonisation.

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<sup>5</sup> Paragraph 6 of the NPPF states how the endorsed recommendations of the National Infrastructure Commission may be material when deciding applications.

<sup>6</sup> <https://www.gov.uk/government/statistics/solar-photovoltaics-deployment>.

1.28 To achieve the clean growth, the Government identifies how the UK will need to nurture low carbon technologies, processes and systems that are as cheap as possible, this includes subsidy free ground mounted solar parks as achieved by this development proposal. The Government places significant emphasis on securing increased investment across the energy systems whilst minimising, as much as possible, the public costs for securing such investments and makes multiple references to how they are seeking the delivery of solar without subsidy. Moreover, page 99 specifically states how the 'Government want to see more people investing in solar without government support'. It estimates that the low carbon economy could grow 11% per year between 2015 and 2030, four times faster than the projected growth of the economy as a whole. The application proposal would clearly contribute to the delivery of the Clean Growth Strategy.

**The Ten Point Plan for a Green Industrial Revolution (November 2020)  
(Document provided at Appendix L)**

1.29 'The Ten Point Plan for a Green Industrial Revolution – Building back better, supporting green jobs, and accelerating our path to net zero', was published on 18 November 2020 and is aimed at delivering a 'Green Industrial Revolution' in the UK, with the foreword by the Prime Minister stating that the Ten Point Plan will aim to mobilise £12 billion of government investment and potentially three times as much from the private sector, to create and support up to 250,000 green jobs. The Ten Point Plan is followed on from and built on by the EWP. Point ten seek to accelerate the commercialisation of innovative low-carbon technologies, systems and processes in the power. It specifically identifies energy storage as a priority area.

**National Infrastructure Plan (HM Treasury, 2014) (Document provided at Appendix M)**

1.30 The National Infrastructure Plan (NIP) 2014 presents an overview of the government's policies, investments and record on infrastructure delivery since 2010 and details the government's approach to ensuring that the Top 40 priority investments remain on track to deliver.

1.31 The report confirms an future pipeline investment of £80bn in energy infrastructure.

1.32 The stated objectives (paragraph 8.1) with regard to energy are to:

- ensure power, heat and transport are affordable for households and businesses
- provide energy security to facilitate day-to-day activities and support economic growth
- reduce carbon emissions in order to mitigate climate change and meet its legally binding targets

**National Infrastructure Assessment (The National Infrastructure Commission, 2018) (Document provided at Appendix N)**

1.33 The first National Infrastructure Assessment (NIA) set out the Commission's plan of action for the country's infrastructure over the next 10-30 years.

1.34 The NIA sets out a number of recommendations to a pathway for the UK's economic infrastructure:

- nationwide full fibre broadband by 2033
- half of the UK's power provided by renewables by 2030
- three quarters of plastic packaging recycled by 2030
- £43 billion of stable long term transport funding for regional cities
- preparing for 100 per cent electric vehicle sales by 2030
- ensuring resilience to extreme drought
- a national standard of flood resilience for all communities by 2050.

**National Infrastructure Strategy: Fairer, faster, greener (HM Treasury, 2020) (Document provided at Appendix O)**

1.35 The National Infrastructure Strategy (NIS) was published on 25 November 2020, a week after the Prime Minister's Ten Point Plan. The NIS sets out the Government's plans to deliver an infrastructure revolution in the UK, while "levelling the country up" and achieving its Net Zero target by 2050.

- 1.36 The Strategy sets out the government's plans to improve infrastructure, and responds to the National Infrastructure Commission's 2018 assessment of the country's infrastructure needs.
- 1.37 Page of the National Infrastructure Strategy sets out the government's plans to transform the UK's infrastructure networks. It is based around three central objectives: economic recovery; levelling up and strengthening the Union; and meeting the UK's net zero emissions target by 2050.
- 1.38 Page 51 confirms (inter alia) *"To deliver net zero, the share of generation from renewables needs to dramatically increase. While the UK leads the world in the deployment of offshore wind, greater generation capacity will need to come from onshore wind and solar as well"*.
- 1.39 Chapter 4 (page 68) recognises how historic levels of investment will be required in the UK infrastructure in the coming years to meet the government's objectives for economic growth and decarbonisation. It goes on to state how the government remains strongly committed to supporting private investment and maintaining the UK's status as a leading global destination for private investment.
- 1.40 Chapter 5 (page 78) of the NIS deals with the need to accelerate and improving delivery. It states (inter alia) *"The government wants to deliver infrastructure projects better, greener and faster. That means addressing longstanding challenges such as complex planning processes, slow decision-making, and low productivity in the construction sector"*

**Net Zero Review: Interim report (December 2020) (Document provided at Appendix P)**

- 1.41 HM Treasury's interim Net Zero Review (NZR) - the first of its kind from a finance ministry - was published on 17 December 2020 to inform next steps in the UK's transition to net zero by 2050. The NZR supports the government's work in maximising opportunities and benefits for the UK over the next 30 years as we transition to net zero, and help to ensure an equitable balance of contributions between households, businesses and the taxpayer. The interim report contains initial analysis, rather than policy recommendations, which will guide further work ahead of the publication of the Review's final report next year.

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- 1.42 The NZR (page 24) considers the potential changes in energy process for business and households and states (inter alia) *"Costs of wind and solar energy have already seen significant falls, and some forms of renewable electricity generation in the UK, such as onshore wind, are expected to have lower estimated costs per unit than electricity derived from fossil fuels. Lower long-run energy costs and greater energy efficiency could benefit both businesses and households. One of the priorities of the Energy White Paper is keeping energy bills affordable as the UK decarbonises, especially for the most vulnerable households. Analysis by the National Infrastructure Commission further suggests that household energy bills could be potentially lower or equal to current levels after switching to clean energy"*
- 1.43 The NZR (page 56) identifies how solar is a proven technology where market institutions are well established and the technology is commercially viable.

