

23 August 2022

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s 9(2)(a)

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by email

Kia ora Madeleine

- 1 We act for Waikato Solar Farms Limited (*WSFL*) in relation to its fast-track referral application for the Waiterimu Solar Farm (*Project*).
- 2 This letter responds to your request, dated 3 August 2022, for further information under section 22 of the COVID-19 Recovery (Fast-Track Consenting) Act 2020. In particular, your letter requested:

1. Additional information on whether the number of jobs created by the project include design, and engineering or whether they are related to construction, and information to support the contribution of \$170 million to GDP. This could take the form of an economic assessment; and

2. Are any Overseas Investment Office approval/s required for the project to proceed, given that the ultimate holding company for Waikato Solar Farms Limited is registered overseas? If so, please advise the status of the approval/s and comment on whether you anticipate this issue could potentially delay or otherwise impact on project delivery.

Request 1: Job classification and GDP contribution

- 3 WSFL commissioned an initial economic assessment to respond to this request, a copy of which is attached as **Appendix A** to this letter. It provides an additional breakdown of the anticipated construction costs and the relevant economic impact during the construction and operational phases of the project.

Request 2: Overseas investment approvals

- 4 WSFL has advised that it has a right to secure a leasehold interest in the Project Site, which would require Overseas Investment Office (*OIO*) consent, and has also agreed with the landowners that, if suitable, it may pursue the project via easements, which would not require OIO approval. WSFL understands easements have been proposed to enable other solar projects including those that have been pursued via Fast Track consenting.
- 5 WSFL has provided for both options within the project timeline set out in the Fast Track referral application. More specifically, any OIO consent processes are programmed to occur concurrently with detailed design and procurement requirements and will not affect the Project's commencement of construction.



- 6 Additionally, Chapman Tripp has had preliminary discussions with the OIO in relation to OIO consents related to the Project, which have been positive, and we are confident that any relevant OIO approval can be obtained within the project timeline.

Ngā mihi nui

Alana Lampitt / Nicola de Wit

Partner / Senior Associate



APPENDIX A – INITIAL ECONOMIC REPORT

**INITIAL ASSESSMENT OF ECONOMIC EFFECTS OF THE PROPOSED WAITERIMU
SOLAR FARM**

Prepared for Waikato Solar Farms Limited

**Mike Copeland
Brown Copeland & Co Ltd**

22 August, 2022

INTRODUCTION

1. The purpose of this report is to provide an initial assessment of the economic effects of the proposed Waiterimu Solar Farm (the Project) during its construction and operational phases.
2. Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the RMA. In particular, Part II section 5(2) refers to enabling “*people and communities to provide for their ... economic ... well-being*” as a part of the meaning of “*sustainable management*”, the promotion of which is the purpose of the RMA. Also Part II section 7(b) of the RMA notes that in achieving the purpose of the Act, all persons “*shall have particular regard to ... the efficient use and development of natural and physical resources*” which includes the economic concept of efficiency.
3. An essential first step in carrying out an evaluation of the positive and negative economic effects of a development proposal is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically a city (district) or wider regional viewpoint is adopted and sometimes even a nationwide viewpoint might be considered appropriate.
4. For the proposed Waiterimu Solar Farm Project the primary beneficiaries will be the businesses and residents of the Waikato District. There will also be economic benefits for residents and businesses of the wider Waikato Region and for New Zealand generally. These economic benefits are discussed later in this report.
5. There are also private or financial costs and benefits associated with the proposed Project. If consents are granted allowing the Project's construction and operation, then it can be assumed that the private or financial costs and benefits have been responsibly and properly analysed and that from the viewpoint of Waikato Solar Farms Limited (WSFL) which has money at risk, the expected financial benefits exceed the expected costs. Accountability for the accuracy of the financial analysis clearly rests with WSFL and ultimately the net financial benefits it might receive from the proposal are not directly relevant to the assessment of effects under the RMA.

6. Therefore the focus of this report is on the wider economic effects on parties other than WSFL. Economists refer to such effects as “externalities”.¹
7. This report addresses the economic effects² of granting consents enabling the construction and operation of the Project. Non-economic effects (e.g. landscape, ecology and cultural effects) are covered elsewhere in the Application.

THE WAIKATO DISTRICT ECONOMY

8. The key economic drivers of the Waikato District economy are the agriculture, forestry and fishing sector and the manufacturing sector. In the year to 31 March 2021, agriculture forestry and fishing accounted for 18.2% of the District’s gross domestic product (GDP) and manufacturing accounted for 9.4%. The electricity, gas, water and waste services accounted for only 4.2% of the District’s GDP.³

THE ECONOMIC BENEFITS OF THE PROPOSED WAITERIMU SOLAR FARM

Additional Employment, Incomes, Expenditure and GDP During Project Construction⁴

9. Upon the granting of resource consents, a 15-18 month construction programme would commence. The total construction cost of the Project over this 15-18 month period is estimated to be [REDACTED] s 9(2)(b)(ii). Of this s 9(2)(b)(ii) [REDACTED] is expected to be spent within the Waikato District and s 9(2)(b)(ii) [REDACTED] within the Waikato region (including the Waikato District). During the construction period a total of 49-60 full-time equivalent (FTE) jobs will be created within the Waikato District and 105-127 FTE jobs within the Waikato region (including the Waikato District). Wages and salaries over the 15-18 month period to Waikato District employees are estimated at s 9(2)(b)(ii) [REDACTED] and within the Waikato region s 9(2)(b)(ii) [REDACTED]⁶ Therefore the expenditure on other goods and services (i.e. other than labour) over the 15-18 month construction period is s 9(2)(b)(ii) [REDACTED] within the Waikato District and s 9(2)(b)(ii) [REDACTED] within the

¹Defined as the side effects of the production or use of a good or service, which affects third parties, other than just the buyer and seller.

²Sometimes economic effects can have a social dimension – e.g. employment and income effects.

³Source: Waikato District Economic Profile; Infometrics; 2021.
(<https://ecoprofile.infometrics.co.nz/Waikato%20District>)

⁴ Unless stated otherwise data in this section provided by WSFL.

⁵ The range for the Project cost estimate reflects no decision has yet been taken as to whether a battery will be installed and if so the size of the battery that will be installed as part of the Project. A decision on this will depend upon the economics of New Zealand’s electricity market nearer the time of Project construction.

⁶ Assumes average construction wage of \$80,000 per annum. The ranges for District and region construction wages and salaries reflect the 15-18 month estimated construction period and the size of battery, if one is installed.

Waikato region. The types of local businesses within the Waikato District to benefit from this expenditure from the Project's construction include civil engineering service providers, mechanical and electrical service providers, landscapers and nurseries.

10. These jobs, incomes and expenditure within the Waikato District and the Waikato region are the direct economic impacts of the Project on the local economies. However, in addition there are 'indirect' (or 'multiplier') impacts as a result of:
 - a. The effects on suppliers of goods and services provided to the Project from within the local Waikato District and Waikato regional economies (i.e. the "forward and backward linkage" effects); and
 - b. The supply of goods and services from within the local economies to construction employees at the Project and to those engaged in supplying goods and services to it (i.e. the "induced" effects). For example, there will be the additional jobs and incomes for employees of supermarkets, restaurants, and bars as a consequence of the expenditure by construction employees.

11. Multipliers can be estimated to gauge the size of these indirect effects. The size of the multipliers is a function of the extent to which an area's economy is self-sufficient in the provision of a full range of goods and services and the area's proximity to alternative sources of supply. Multipliers typically fall in the range of 1.5 to 2.0 and it might be reasonable to take the lower end of this range (i.e. 1.5) for the local Waikato District economy and the upper end of this range (i.e. 2.0) for the Waikato region, which would include Hamilton City. However given the uncertainty about multiplier effects at times of low unemployment and limited surplus capacity within the construction industry no quantification of indirect effects has been undertaken for this report. Therefore the direct economic effects identified above are taken to be conservative estimates of the Project's construction on the Waikato District and Waikato regional economies.

12. GDP per employed person in the Waikato District construction industry is given as \$83,840 per annum in Infometrics 2021 Waikato District Economic Profile. Therefore the Project's construction will contribute around \$5-8 million to the Waikato District's GDP over the 15-18 month construction period.

Additional Employment, Incomes, Expenditure and GDP During Project Operation⁷

⁷ Unless stated otherwise data in this section provided by WSFL.

13. Once operational, the proposed Waiterimu Solar Farm is expected to generate 6-7 FTE jobs within the Waikato District and 7-8 FTE jobs within the Waikato region (including the Waikato District). Wages and salaries to Waikato District employees are estimated at $\text{\$ } 9(2)(b)(ii)$ per annum and within the Waikato region $\text{\$ } 9(2)(b)(ii)$ per annum.⁸ Total operating expenditure within the District is estimated at $\text{\$ } 9(2)(b)(ii)$ per annum and in the region $\text{\$ } 9(2)(b)(ii)$ per annum. Therefore estimated operational expenditure on other goods and services (i.e. other than labour) is estimated at $\text{\$ } 9(2)(b)(ii)$ per annum within the Waikato District and $\text{\$ } 9(2)(b)(ii)$ per annum within the Waikato region. The types of local businesses within the Waikato District to benefit from this expenditure from the Project's operation will be providers of haulage, logistics and electrical engineering services.
14. Again these jobs, incomes and expenditure within the Waikato District and the Waikato region are the direct economic impacts of the Project's operation on the local economies. There will be additional 'indirect' (or 'multiplier') impacts.
15. GDP per employed person in the Waikato District electricity, gas, water and waste water services industry sector is given as $\text{\$ } 456,526$ in Infometrics 2021 Waikato District Economic Profile. The GDP per employed person is much higher for this industry group as compared to construction because the sector is much more capital intensive. Therefore the Project's operation will contribute around $\text{\$ } 9(2)(b)(ii)$ per annum to the Waikato District's GDP.
16. As indicators of levels of economic activity, economic impacts in terms of increased expenditure, incomes, employment and GDP within the local economy are not in themselves measures of improvements in economic welfare or economic wellbeing. However, there are economic welfare enhancing benefits associated with increasing levels of economic activity. These relate to one or more of:
- 1.1 Increased economies of scale: Businesses and public sector agencies are able to provide increased amounts of outputs with lower unit costs, hence increasing profitability or lowering prices;
 - 1.2 Increased competition: Increases in the demand for goods and services allow a greater number of providers of goods and services in markets and there are efficiency benefits from increased levels of competition;

⁸ Assumes average operating workforce wage of $\text{\$ } 9(2)(b)(ii)$ per annum.

- 1.3 Reduced unemployment and underemployment⁹ of resources: To the extent resources (including labour) would be otherwise unemployed or underemployed, higher levels of economic activity can bring efficiency benefits when there is a reduction in unemployment and underemployment; and
- 1.4 Increased quality of central government provided services: Sometimes the quality of services provided by central government such as education and health care are a function of population levels and the breadth and quality of such services in a community is higher with higher levels of economic activity, particularly to the extent they lead to or maintain higher levels of population.

Other Economic Benefits

17. The Project will bring additional competition to New Zealand's wholesale and retail electricity markets and help restrain electricity prices for consumers. It will add some diversity to the local Waikato District economy and increase the rates income for the Waikato District Council.

POTENTIAL ECONOMIC COSTS OF THE PROPOSED WAITERIMU SOLAR FARM

Alternative Land Uses

18. The current use of the site is pastoral farming. The Project will impact on current land use only to a minimal extent – see Part 7 of the Application. Also because WSFL will pay the market price for the land, the use of the land for the Project is the best use of the site in economic terms, as judged by the market. The cost of the land is incorporated within the Project's cost structure and there is no associated economic externality cost.

Public Infrastructure Costs

19. Externality costs can arise when utilities provided by central or local government (e.g. water supply, storm water and flood control systems and wastewater disposal) are not appropriately priced. In the case of the Project no such externality costs will arise. The

⁹Underemployment differs from unemployment in that resources are employed but not at their maximum worth; e.g. in the case of labour, it can be employed at a higher skill and/or productivity level, reflected in higher wage rates.

Project will be self-sufficient with respect to water supply and stormwater control and no waste water disposal from the site will be required. – see Part 7 of the Application.

Road Congestion Costs

20. The Project will not give rise to road congestion costs – see Part 7 of the Application.

Property Value Effects

21. Property value effects are a reflection of, not in addition to, adverse effects (if any) from the Project for nearby residents. Any such adverse effects for nearby residents are assessed elsewhere in the Application.